

Record of Proceedings, Including Reasons for Decision

In the Matter of

Applicant Saskatchewan Research Council

Subject Environmental Assessment Track Report
Regarding SRC's Proposed Gunnar Mine Site
Rehabilitation Project

Hearing Date September 17, 2008

RECORD OF PROCEEDINGS

Applicant: Saskatchewan Research Council

Address/Location: 125 – 15 Innovation Blvd., Saskatoon, Saskatchewan S7N 2X8

Purpose: Environmental Assessment Track Report Regarding SRC's proposed Gunnar Mine site rehabilitation project

Application received: April 23, 2007

Date of hearing: September 17, 2008

Location: Delta Bessborough, 601 Spadina Crescent East, Saskatoon, Saskatchewan

Members present: M. Binder, Chair M. J. McDill
A.R. Graham A. Harvey
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Recording Secretary: M. Young

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Intervenors	Document Number
See appendix A	

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Introduction

1. Saskatchewan Research Council (SRC) notified the Canadian Nuclear Safety Commission¹ (CNSC) of its intent to decommission the former Gunnar Mine site located in northern Saskatchewan, near Lake Athabasca.
2. The Gunnar uranium deposit in northern Saskatchewan was discovered in July 1952. The Gunnar site officially closed in 1964 with little or no decommissioning of the facilities. During operations, the Gunnar Mine site consisted of:
 - an open pit mine;
 - an underground mine;
 - a uranium milling facility;
 - an acid plant;
 - tailings and disposal facilities; and
 - various additional support facilities including the mine dry building, geology building, maintenance shops, housing, etc.
3. After the site closed, the blasting of a narrow, relatively shallow trench between the pit and Lake Athabasca breached the narrow bedrock ridge that separated the open pit from Lake Athabasca. As a result, water from Lake Athabasca was allowed to flow directly into the open pit, eventually flooding the underground workings as well as the pit itself. The channel to the lake allowed the free movement of water between the lake and the flooded pit until 1966 when the channel was filled with waste rock.
4. The Government of Saskatchewan and the Government of Canada have signed a Memorandum of Agreement (MOA) to address the Cold War legacy uranium mine and mill sites in northern Saskatchewan. This agreement includes the rehabilitation of the former Gunnar Mining Limited mine site. Under the MOA, Saskatchewan Energy and Resources (SER) was assigned the responsibility to ensure that the project is carried out on behalf of the two governments. SER signed a contract with the Saskatchewan Research Council (SRC) to fulfil the role of project manager and designated agent to manage and perform the required environmental assessment requirements and rehabilitation activities.
5. SRC submitted a project description for the Former Gunnar Mine Site Rehabilitation Project. Its proposal includes the following components:
 - demolition of existing buildings, facilities and structures;
 - appropriate disposal of materials resulting from demolition;
 - installation of an appropriate cover on all or a portion of the exposed mill tailings;
 - rehabilitation of existing waste rock piles;

¹The *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.

- rehabilitation of additional risk(s) as warranted;
 - general site clean-up;
 - re-vegetation of areas of the rehabilitated site as required; and
 - appropriate monitoring during and after rehabilitation.
6. CNSC authorization of SRC's request would ultimately require the issuance of a licence. Before considering SRC's application for a licence under the *Nuclear Safety and Control Act*² (NSCA), the CNSC must determine the results of an environmental assessment (EA). This determination includes making a decision on the potential for the project to cause adverse environmental effects, and determining a subsequent course of action under the *Canadian Environmental Assessment Act*³ (CEAA).
 7. The CEAA requires that an EA be completed if there is both a "project" and a prescribed action by a federal authority (commonly referred to as a "trigger"). The proposal involves the decommissioning of a mine site. This is an undertaking in relation to a physical work and as such is a "project" for the purposes of the CEAA.
 8. The CNSC issues licences for activities involved in SRC's proposal under the authority of Section 24(2) of the NSCA, which is prescribed in the *Law List Regulations*⁴. Therefore, there is a "trigger" for an EA. The project is not of a type listed in the *Exclusion List Regulations*⁵ of the CEAA.
 9. As SRC's project falls within Part IV, subsection 19(a) of the *Comprehensive Study List Regulations*⁶ of the CEAA, the CNSC is required to submit an Environmental Assessment Track Report to the federal Minister of Environment which includes a Recommendation to the Minister of the Environment on the proposed track for the EA. These possible tracks are to either continue the EA as a comprehensive study or refer the EA to a review panel or mediator. The CNSC and Natural Resources Canada (NRCan) are the responsible authorities⁷ (RAs) for this EA.
 10. In carrying out this responsibility under the CEAA, the Commission must also determine the scope of the project and the scope of the assessment. To assist the Commission in this regard, CNSC staff prepared a draft Environmental Assessment Guidelines-Scoping Document (Guidelines-Scoping Document) in consultation with other government departments, the public, Aboriginal peoples and other stakeholders. The draft Guidelines-Scoping Document, *Project-Specific Guidelines and Comprehensive Study Scoping Document – Former Gunnar Mine Site Rehabilitation Project*, contains statements of scope for the approval of the Commission and is appended to the EA Track Report, *Environmental Assessment Track Report for the Former Gunnar Mine Site Rehabilitation Project*, included in CNSC staff's document Commission Member Document (CMD) 08-H17.

² S.C. 1997, c. 9.

³ S.C. 1992, c. 37.

⁴ S.O.R./94-636.

⁵ S.O.R./2007-108.

⁶ S.O.R./94-638.

⁷ Responsible Authority in relation to an EA is determined in accordance with subsection 11(1) of the CEAA.

Issues

11. In considering the Guidelines-Scoping Document, the Commission was required to decide, pursuant to subsections 15(1) and 16(3) of the CEAA respectively:
 - a) the scope of the project for which the EA is to be conducted; and
 - b) the scope of the factors to be taken into consideration in the conduct of the EA.
12. Pursuant to paragraph 21(2)(a) of the CEAA, the Commission was also required to report to the Minister of the Environment regarding
 - (i) the scope of the project, the factors to be considered in its assessment and the scope of those factors;
 - (ii) public concerns in relation to the project;
 - (iii) the potential of the project to cause adverse environmental effects; and
 - (iv) the ability of the comprehensive study to address issues relating to the project.
13. Pursuant to paragraph 21(2)(b) of the CEAA, the Commission was also required to recommend to the Minister of the Environment that CNSC continue with the EA by means of a comprehensive study, or to refer the project to a mediator or review panel.

Public Hearing

14. Pursuant to section 22 of the NSCA, the President of the Commission established a Panel of the Commission to hear this matter.
15. The Panel of the Commission (hereafter referred to as the Commission), in making its decision, considered information presented for a public hearing held on September 17, 2008 in Saskatoon, Saskatchewan. During the public hearing, the Commission received written submissions and heard oral presentations from CNSC staff (CMD 08-H17 and CMD 08-H17.A) and SRC (CMD 08-H17.1 and CMD 08-H17.1A). The Commission also considered oral and written submissions from four intervenors (see Appendix A for a detailed list of interventions).

Decision

16. Based on its consideration of the matter, as described in more detail in the following sections of this *Record of Proceedings*,

the Canadian Nuclear Safety Commission

- a) approves the Environmental Assessment Guidelines-Scoping Document set out in the EA Track Report and as modified in paragraph 17 of this *Record of Proceedings*; that is, the scope of the project and the scope of the assessment were appropriately determined in accordance with sections 15 and 16 of the CEEA;
- b) will submit to the Minister of the Environment the EA Track Report set out in CMD 08-H17 and as modified in CMD 08-H17.A, pursuant to paragraph 21(2)(a) of the CEEA; and
- c) will recommend to the Minister of the Environment to continue with the environmental assessment of the project as a comprehensive study, pursuant to paragraph 21(2)(b) of the CEEA.

17. The Commission modifies the Guidelines-Scoping Document as follows: under section 3.2.2, add a subsection so that the Scope of the Factors to be Considered includes traditional knowledge. In this regard, the proponent's Environmental Impact Statement will include a specific section on the incorporation of traditional knowledge.

Issues and Commission Findings

Application of the *Canadian Environmental Assessment Act*

Federal Coordination

18. Through application of the CEEA *Federal Coordination Regulations*⁸, Fisheries and Oceans Canada, Transport Canada, Indian and Northern Affairs Canada, Environment Canada, and Health Canada have been identified as Federal Authorities for providing expert assistance to the CNSC and NRCan during the EA.
19. The Commission inquired about the role of NRCan as an RA for the project. CNSC staff stated that NRCan is an RA because it is providing funding for the project. CNSC staff stated that the EA Track Report was jointly authored by the CNSC and NRCan, and as such, neither RA can unilaterally change the EA Track Report without the other's concurrence. CNSC staff noted that other federal authorities may become RAs as the project proceeds, depending on the level of involvement required.

⁸ SOR/97-181.

20. The Commission inquired about the funding arrangement by NRCan. CNSC staff responded that an agreement is in place between NRCan and the Government of Saskatchewan in terms of the provision of funding to deal with the abandoned uranium mining sites in northern Saskatchewan. SRC noted that an amount of \$24.6 million (M) has been established, with a clause that allows the amount to be revised if necessary.
21. CNSC staff reported that because the project is also being assessed by the Government of Saskatchewan, there are provincial EA requirements under the Saskatchewan *Environmental Assessment Act*⁹ that are applicable to the proposal.

Scope of the Project

22. CNSC staff presented to the Commission a proposed *Environmental Assessment Track Report for the Former Gunnar Mine Site Rehabilitation Project* (EA Track Report), which contains the draft Guidelines-Scoping Document. The draft Guidelines-Scoping Document contains information regarding the proposed scope of the project, proposed assessment factors and the scope of these factors, pursuant to sections 15 and 16 of the CEAA.
23. The scope of the project for the purpose of the EA, as established by the CNSC and NRCan, includes the physical works and activities associated with the decommissioning of the Gunnar Mine site. CNSC staff stated that the physical works are consistent with the project description from SRC, as follows:
 - demolition of existing buildings, facilities and structures;
 - appropriate disposal of materials resulting from demolition;
 - rehabilitation of existing waste rock piles;
 - rehabilitation of pit;
 - rehabilitation of mill tailings;
 - rehabilitation of additional risk(s) as warranted;
 - general site clean-up;
 - re-vegetation of areas of the rehabilitated site as required; and
 - appropriate monitoring during and after rehabilitation.
24. SRC provided an overview of the history of the Gunnar Mine site, including the dimensions of the open pit, the mill, and production statistics from 1956 to 1963.

⁹ S.S. 1979-1980, c. E-10.1.

25. SRC described the current site. SRC stated that the existing facilities and infrastructure are at various stages of dilapidation. SRC identified items that will require specific attention throughout the project, including the following:
- 8000 empty steel barrels in various locations that pose minimal environmental or safety risk;
 - fluorescent light ballasts, which may warrant the development of a strategy for safe disposal; and
 - asbestos, the removal of which must be considered in any planned activities at the site.
26. SRC stated that the total estimated volume of waste rock is 2,710,700 cubic metres (m³), which comprises both mine waste rock and overburden generated from surface stripping of the open pit. SRC stated that several measurements of the gamma radiation from the waste rock pile have been taken over the years, and that of the approximately 3000 measurements it took in 2004, 42 exceeded the benchmark of 2.50 microsieverts per hour (µSv/h). SRC explained that the benchmark was established at the time of the decommissioning of Eldorado Nuclear Limited's Beaverlodge mill and mines in 1983.
27. SRC stated that there are three tailings areas at the Gunnar Mine site: Gunnar Main Tailings, Gunnar Central Tailings and Langley Bay. SRC stated that several measurements regarding the water quality have been taken in the tailings areas. SRC noted that the surface water samples it took in 2004 met the Saskatchewan Surface Water Quality Objectives for all substances but Radium-226, which was 0.15 Becquerels per litre (Bq/L) compared to the objective of 0.11 Bq/L.
28. SRC provided further information regarding the flooded pit. SRC stated that there are elevated radionuclide levels in the water and sediments as well as low dissolved oxygen levels in the bottom half of the pit. SRC noted that the aquatic community of the pit did not show signs of deterioration after a 21-year period.
29. The Commission concludes that the scope of the project has been adequately determined for the purpose of the Guidelines-Scoping Document.

Scope of the Assessment

30. The draft Guidelines-Scoping Document prepared by CNSC staff identifies all the assessment factors to be considered pursuant to subsection 16(1) of the CEAA. The mandatory factors comprise the environmental effects of the project, including those that may be caused by malfunctions or accidents and any cumulative environmental effects with other projects; the significance of the effects identified above; comments from the public that are received in accordance with the CEAA and its regulations; and measures that are technically and economically feasible that would mitigate any significant adverse environmental effects of the project.

31. Since the proposed project falls within the *Comprehensive Study List Regulations* of the CEAA, subsection 16(2) of the CEAA requires that the following factors are also included for consideration: the purpose of the project; alternative means of carrying out the project that are technically and economically feasible and the environmental effects of any such alternative means; the need for, and the requirements of, any follow-up program with respect to the project; and the capacity of renewable resources that are likely to be significantly affected by the project to meet present and future needs.
32. CNSC staff has identified the environmental components that should be considered in the comprehensive study, which are most likely to be affected by the proposed project, and enumerated them in the draft Guidelines-Scoping Document.
33. CNSC staff has also identified valued ecosystem components and stated that they had been chosen through consultation with northern residents and incorporating traditional and local knowledge. CNSC staff noted that the Environmental Quality Committee (EQC) has actively contributed to the completion of the list of valued ecosystem components.
34. The Commission is satisfied that the proposed factors are appropriate and meet the requirements of the CEAA.
35. The Commission considered the scope of the factors to be assessed as proposed by CNSC staff in the Guidelines-Scoping Document. The Commission notes that, should the EA continue as a comprehensive study, the proponent will be required to prepare an Environmental Impact Statement (EIS) that follows the approved Guidelines-Scoping Document and is developed with input from both provincial and federal expert advisors, as well as members of the public, Aboriginal peoples and stakeholders. The EIS should contain a detailed description of activities and issues with respect to the scope of factors described in the following paragraphs.

Spatial and Temporal Boundaries of Assessment

36. CNSC staff identified the impacts with respect to spatial and temporal boundaries that should be considered within this assessment. The list includes timing/scheduling of project activities; natural variations of a component on the population of an environmental component; the time necessary for an effect to become evident, taking into account the frequency of the effect as well as the time required for recovery from an impact including the estimated degree of recovery; cumulative effects; comments from the public; and traditional knowledge and land use.
37. CNSC staff noted that the proponent is required to clearly define the spatial boundaries and rationale for their definition. These boundaries should be defined for each valued ecosystem component. The geographic scope of the investigations shall include those local areas directly impacted by the undertakings associated with the project and zones within which there may be environmental effects that are regional or global in their nature.

38. CNSC staff indicated that the temporal scale of the assessment should encompass the entire lifespan of the project, and will include construction, operation (including maintenance and/or modifications) and decommissioning, reclamation and abandonment and completion of the fish habitat compensation plan, if one is required.
39. Taking into consideration the comments from some intervenors, the Commission asked whether traditional knowledge should be allocated a separate part of the organizational structure of the EIS. CNSC staff responded that the EIS can be structured in such a manner to provide further emphasis on traditional knowledge.
40. The Commission asked if there had been any study of the health effects of the mine on workers during the mine's operation. CNSC staff responded that there have been studies of mine workers from that period and those studies have been used to set modern radiation protection standards and limits for current nuclear workers.

Project Description

41. CNSC staff noted that the main objective of the project description is to identify and characterize those specific components and activities that have the potential to interact with the surrounding environment under both normal operations and malfunctions and accidents.
42. CNSC staff indicated that the EIS should contain a comprehensive description of the conceptual elements of the Gunnar Mine site rehabilitation project, including the need for the project, the development of the rehabilitation plan, the implementation of the plan, the development of monitoring programs for the completed works and the identification of the mechanisms for final abandonment and return of the site to institutional control.
43. CNSC staff further stated that the EIS should contain information such as a description of project management; the integration of environmental, social and economic factors; occupational and public health and safety; public consultation; local and regional maps; and a comprehensive list of applicable federal and provincial legislation, regulations and guidelines.
44. The Commission sought clarification regarding the need for the project in the context of the EIS. SRC responded that the principal purpose and need for the project is to remove the risks to the health and safety of the public associated with the site. SRC noted that there are radiological risks and risks due to the abandoned buildings. SRC further stated that there is a need to remove the environmental risks associated with the pit, the waste rock piles and the tailings management areas. CNSC staff noted that under the CEAA, the purpose and need for the project is established by the proponent, and CNSC staff would review it upon receipt of the EIS.

45. In order to confirm that the project budget would not be a limiting factor in the rehabilitation of the Gunnar Mine site, the Commission asked how the established amount of funding would affect the project. CNSC staff responded that the proponent would assess the current level of impacts and investigate various options for conducting the project. CNSC staff explained that a number of criteria would be taken into consideration, including technical feasibility, cost, risk and social acceptability. CNSC staff stated that the option analysis would identify the best option, with the overall expectation being that the project would not cause significant environmental effects.
46. D. Lawson, in his intervention, presented options to be considered for the project going forward. To ensure that all potential, relevant options are considered, the Commission asked CNSC staff for its opinion regarding this intervention. CNSC staff responded that while the Guidelines-Scoping Document does not include any of the details provided by the intervenor, SRC is expected to go through the same process to identify options for the project. CNSC staff noted that the options identified by the intervenor would likely surface at that time.
47. The NSEQC, in its intervention, stated that the purpose of the project was not clear in terms of defining an end state objective. To ensure that there was a clear understanding, the Commission asked SRC to address this comment. SRC stated that the intent of the project is to rehabilitate the site to the greatest level possible and not to simply do the minimum amount of work. SRC stated that it intends to rehabilitate the site to a level that meets the requirements and needs of people from northern communities.

Description of the Existing Environment

48. CNSC staff explained that a description of the existing environment is needed to determine the likely interactions between the project and the surrounding environment. CNSC staff provided a list of environmental components that are typically described in the various study areas and a description of the human components of these environmental components. These include: climate, meteorology and air quality; geology/geomorphology; hydrogeology; surface hydrology; water quality; sediment quality; fish and fish habitat; navigation; soil quality; terrestrial ecology; and heritage resources. A description of the socio-economic environment should also be included.
49. SRC provided information regarding the radiological and safety hazards related to the Gunnar Mine site. SRC stated that an assessment of existing ecological and human health risks was conducted. SRC explained that a model was used to estimate exposure levels, using a range of ecological receptors in both aquatic and terrestrial environments. SRC stated that the results of the assessment highlighted that, in general, releases from the Gunnar Mine site do not pose any risk of adverse effects to aquatic biota, with the exception of aquatic plants. SRC noted that uranium exposure has the potential to result in adverse effects to aquatic species.

50. Regarding the exposure to terrestrial wildlife, SRC stated that there are no risks of adverse effects from radiation exposure; however, uranium is an issue for terrestrial animals with a large aquatic diet. SRC further stated that the dose estimates for hypothetical campers, who may spend three months per year at various locations on the site, were below the regulatory dose limit of 1 millisievert per year (mSv/y). SRC noted that the predicted doses were close to the limit, with gamma exposures accounting for the majority of the dose.
51. The Commission inquired about the level of contamination in the pit. SRC responded that the preliminary data it has indicates that the bottom of the pit has a level of contamination much higher than that at the top of the pit.
52. D. Lawson, in his intervention, provided extensive information concerning the state of the existing environment. The Commission expressed gratitude for the information provided by the intervenor and noted that it could be useful to the proponent during the later stages of the EA.
53. The Commission asked whether the extent of the studies done by the intervenor would be duplicated by SRC during the EA process. SRC responded that information such as that provided by the intervenor as well as historical data can be compared with new studies to understand how the site has changed over the years. CNSC staff noted that historical data cannot be relied upon to assess current conditions and, because of the changes in analytical methods, comparing information is often difficult. CNSC staff stated that new studies are recommended.

Conclusion on the Scope of the Assessment

54. The Commission is satisfied that the purpose of the project has been clearly defined by SRC.
55. Taking into consideration the information presented above, the Commission is satisfied that the assessment factors defined for this project and the scope of those factors have been adequately described in the Guidelines-Scoping Document appended to the EA Track Report included in CMD 08-H17.
56. The Commission modifies the Guidelines-Scoping Document so that the Environmental Impact Statement will include a specific section on the incorporation of traditional knowledge. With respect to identifying the valued ecosystem components of interest, the Commission notes that the consultation referred to in section 3.2.3 of the Guidelines-Scoping Document, Valued Ecosystem Components, should not be limited to the EQC.

Public Consultation

57. Pursuant to subsection 21(1) of the CEAA, the Commission is required to ensure public consultation with respect to the proposed scope of the project for the purposes of the environmental assessment, the factors proposed to be considered in its assessment, the proposed scope of those factors and the ability of the comprehensive study to address issues relating to the project.
58. CNSC staff informed the Commission that it has established a public registry for the assessment as required by section 55 of the CEAA and that the information about the EA has been posted on the Canadian Environmental Assessment Registry (CEAR).
59. CNSC staff noted that the comprehensive study process requires that the public and Aboriginal peoples be given an opportunity to participate in the review of the EA during the preparation of the scope of the EA, during the comprehensive study and during the comment period for the Comprehensive Study Report.
60. Jointly with the other RA and the Province of Saskatchewan, CNSC staff has solicited and received comments during the development of the Guidelines-Scoping Document. CNSC staff reported on the process of public participation, including participation from First Nations and the Métis Nation Saskatchewan (MN-S), in the EA Track Report. Appendix 4 of that document lists all the received comments, reviews how these comments have been addressed by staff from the joint RAs, and describes the revisions made to the Guidelines-Scoping Document as a result of this consultation.
61. CNSC staff reported on the general approach taken for stakeholder consultations during the EA process to date. CNSC staff stated that a 30-day public comment period on the Guidelines-Scoping Document was organized by the Environmental Assessment Branch of Saskatchewan Environment. Concurrently, an invitation for public comment was posted on the CNSC Web site and the CEAR Web site, and advertisements were placed in newspapers and broadcast on the radio. CNSC staff further stated that the Guidelines-Scoping Document and Frequently Asked Questions were made available at First Nations and Northern Hamlet offices in the Athabasca region.
62. CNSC staff reported that no member of the public or Aboriginal peoples requested a panel review for the project. CNSC staff remarked that the issues raised in the comments by members of the public and Aboriginal peoples could be addressed in a comprehensive study.
63. SRC presented its project public involvement plan to the Commission. SRC stated that this plan includes public consultations with the general public in local communities and the Athabasca sub-committee of the NSEQC. SRC outlined the various approaches it will take to appropriately involve the general public in the project. SRC stated that it will participate in a Project Review Committee, which is comprised of elected officials from local communities.

64. CNSC staff confirmed that the Guidelines-Scoping Document refers to the use of traditional knowledge and traditional ecological knowledge. CNSC staff stated that it is expected that SRC, through the conduct of technical studies, will seek to obtain that knowledge from the MN-S and other Aboriginal peoples who hold that knowledge.
65. The Commission sought further information regarding the extent to which the MN-S has been consulted to date. CNSC staff responded that there had been correspondence with the MN-S throughout the past year and a meeting was held in August 2008 to discuss how MN-S would like to participate in EAs. CNSC staff noted that it will be holding another meeting with the MN-S to discuss the Gunnar Mine site project in particular.
66. The MN-S, in its intervention, expressed concerns related to the level of consultation to date. The MN-S noted that the August 2008 meeting was a general meeting to discuss how the MN-S can get involved with the EA process and was not related to the Gunnar Mine site specifically. The MN-S stated that it felt that it had been insufficiently informed of the project, despite the Crown's duty to consult, according to section 35 of the *Constitution Act, 1982*¹⁰. The MN-S further stated that it feels ill-equipped to respond to the general and technical aspects of the Guidelines-Scoping Document and EA Track Report. The MN-S provided a framework to orientate future engagement and discussions regarding the EA process.
67. The Commission expressed concern regarding the points raised by the MN-S. The Commission stated that it expects SRC to improve its consultation activities regarding northern communities and the MN-S in particular. SRC stated that it would examine the methods it has used to date and make improvements. SRC further stated that it would work with the MN-S to address its concerns.
68. The Commission sought further information regarding the provision of funding for participants during the EA process. SRC stated that the funding for public consultations will be covered by the project. CNSC staff stated that funding to participate in the EA will be made available by the Canadian Environmental Assessment Agency.
69. The Commission is satisfied with the consultation process and that interested parties, stakeholders, Aboriginal peoples and the general public were adequately consulted on the scope of the assessment and the ability of the comprehensive study to address issues, as described in CMD 08-H17.
70. The Commission notes that it is satisfied with the level of consultation with the MN-S for the purpose of this stage of the EA, but expects that SRC and CNSC staff will continue to provide the MN-S with meaningful information and assistance through the next stages of the EA process.

¹⁰ being Schedule B to the *Canada Act 1982* (U.K.), 1982, c. 11.

71. Furthermore, as noted in paragraph 57 of this *Record of Proceedings*, the Commission expects that the proponent and CNSC staff will consult Aboriginal peoples with the intent to incorporate traditional knowledge when carrying out the EA process.

Recommendation to the Minister of the Environment

72. To make its recommendation to the Minister of the Environment on the continuation of the EA process going forward, the Commission considered the potential adverse environmental effects of the project, the public concerns in relation to the project and the ability of the comprehensive study to address issues related to the project. These considerations are described in the following paragraphs.

Potential of the Project to Cause Adverse Environmental Effects

73. CNSC staff stated that although the specific activities associated with the proposed project have not been defined, the RAs have developed a preliminary list of the potential adverse environmental effects that may need to be considered during the EA process. The RAs considered the project description and baseline information; public and Aboriginal input to date; input from the EA Team¹¹; and professional judgement.
74. CNSC staff presented a list of potential environmental effects related to the following specific environmental components:
- atmospheric environment;
 - groundwater;
 - surface water;
 - terrestrial environment;
 - human health;
 - land and resource use; and
 - physical and cultural heritage.
75. CNSC staff noted that these effects are examples of what could occur should mitigation measures not be put in place. CNSC staff explained that technically and economically feasible mitigation measures will be identified over the course of the EA. CNSC staff further stated that a follow-up program will be designed and implemented to ensure that the mitigation measures are effective and any necessary adaptive management actions are identified and implemented.
76. After consideration of the information presented in the material available for reference on the record, the Commission is satisfied that the potential of the project to cause adverse environmental effects has been properly addressed and adequately described in the EA Track Report included in CMD 08-H17 and as modified in CMD 08-H17.A.

¹¹ The term EA Team is used when the expert federal authorities are participating in the EA.

Public Concerns

77. As described in the Public Consultation section above, the Commission is satisfied that SRC and CNSC staff consulted appropriately with the public, First Nations, MN-S and other interested stakeholders. The Commission is therefore satisfied that the public had adequate opportunity to become informed about the project and express any concerns related to the project. The Commission thus considered the public concerns received during the consultations held by SRC and CNSC staff, as well as those submitted by the intervenors for this hearing.
78. D. Lawson, in his intervention, expressed the view that placing the debris from building demolition in the pit instead of the tailings would be a mistake. SRC stated that, based on the preliminary determination for funding, a significant portion of funds would be dedicated to the tailings management areas and the waste rock areas.
79. The NSEQC, in its intervention, expressed the need to honour the people who worked at the site through the preservation of certain elements of the operation. CNSC staff stated that it is aware of the desire to preserve or commemorate part of the site and, in order to address this, a revision to the Guidelines-Scoping Document requested that the proponent identify any historical artefacts that could be preserved to commemorate mining history.
80. The MN-S, in its intervention, expressed the need for improved public consultation. The MN-S noted that it feels that the NSEQC does not fully represent the needs of the MN-S, and as such, a panel review is appropriate to ensure proper consultation.
81. The MN-S also expressed concerns regarding the radiological hazards of the possible use of contaminated building materials removed from the site. The MN-S stressed the need to remove any contaminated materials from communities.
82. The Commission expects that the proponent will consider the intervenors' concerns in the next stages of the EA. With respect to the concerns raised by the MN-S, the Commission also expects CNSC staff and SRC to consult the MN-S to incorporate its traditional knowledge in the EA process.
83. The Commission is satisfied that the public concerns have been adequately described in the Guidelines-Scoping Document appended to the EA Track Report included in CMD 08-H17 and as modified in CMD 08-H17.A.

Ability of the Comprehensive Study to Address Issues Relating to the Project

84. The Commission considered the information submitted to determine the ability of the comprehensive study to address issues relating to the proposed project.

85. CNSC staff stated that, in evaluating the potential of the ability of the comprehensive study to fully address issues related to the project, the RAs considered the project description and baseline information; public and Aboriginal input to date; input from the EA Team; and professional judgement. CNSC staff informed the Commission that the public was consulted on the ability of a comprehensive study to address issues relating to the project. CNSC staff reported that no member of the public requested a referral for a panel review. CNSC staff further reported that no request for a referral to a panel review was made by the Northern Mines Monitoring Secretariat and the MN-S during the consultation process.
86. CNSC staff stated that the RAs are of the opinion that a comprehensive study can address the scientific and technical issues raised in relation to the project, based on the guidance provided to the proponent instructing the conduct of technical studies.
87. The Commission sought further information regarding the next stages of the EA process. CNSC staff responded that following the EA, the preferred option for conducting the project would be identified in the comprehensive study report. CNSC staff stated that the project would not come before the Commission for licensing until the preferred option is determined.
88. The Commission is satisfied that the information in the EA Track Report included in CMD 08-H17 adequately describes the ability of the comprehensive study to address issues relating to the project.

Recommendation to the Minister of the Environment

89. Pursuant to paragraph 21(2)(b) of the CEAA, the Canadian Nuclear Safety Commission recommends to the Minister of the Environment that the environmental assessment of the project continue as a comprehensive study, on the basis of the determinations made above.

Conclusion

90. The Commission has considered the information and submissions of the proponent, CNSC staff and the intervenors as presented for reference on the record for the public hearing.

91. The Commission, pursuant to sections 15 and 16 of the CEEA, approves the Guidelines-Scoping Document *Project-Specific Guidelines and Comprehensive Study Scoping Document – Former Gunnar Mine Site Rehabilitation Project* set out in the EA Track Report appended to CMD 08-H17 and as modified in paragraph 17 of this *Record of Proceedings*; that is, the scope of the project and the scope of the assessment were appropriately determined in accordance with sections 15 and 16 of the CEEA.
92. Pursuant to subsection 21(1) of the CEEA, the Commission is satisfied that the public has had adequate opportunity to express any concern with respect to the scope of the EA and the ability of the comprehensive study to address issues relating to the project.
93. The Commission is satisfied that the EA Track Report appended to CMD 08-H17 adequately describes the scope of project and the scope of the assessment, the public concerns in relation to the project, the potential of the project to cause adverse environmental effects and the ability of the comprehensive study to address issues relating to the project.
94. To fulfil its reporting requirements to the Minister of the Environment pursuant to paragraph 21(2)(a) of the CEEA, the Commission will submit the EA Track Report *Environmental Assessment Track Report for the Former Gunnar Mine Site Rehabilitation Project* to the Minister as set out in CMD 08-H17 and modified in CMD 08-H17.A. The Track Report will include the modified Guidelines-Scoping Document, as noted in paragraph 17 of this *Record of Proceedings*, to include traditional knowledge in the Scope of the Factors to be Considered.
95. Pursuant to paragraph 21(2)(a) of the CEEA, the Commission determines that the comprehensive study can adequately to address issues related to the project.
96. Thus, to fulfil its requirement to make a recommendation to the Minister of Environment pursuant to paragraph 21(2)(b) of the CEEA, the Commission recommends that the environmental assessment of the project continue as a comprehensive study.



Michael Binder
President,
Canadian Nuclear Safety Commission

OCT 27 2008

Date

Appendix A – Intervenors

Intervenors	Document Number
Dennis W. Lawson	CMD 08-H17.2 CMD 08-H17.2A
Northern Saskatchewan Environmental Quality Committee, represented by F. McDonald	CMD 08-H17.3
Metis Nation Saskatchewan, represented by D. Racine and R. Doucette	CMD 08-H17.4
Northern Saskatchewan Women's Network Incorporated	CMD 08-H17.5 CMD 08-H17.5A