

Canadian Nuclear  
Safety Commission



Commission canadienne  
de sûreté nucléaire

Minutes of the Canadian Nuclear Safety  
Commission (CNSC) Meeting held Thursday,  
April 4, 2013

Minutes of the Canadian Nuclear Safety Commission (CNSC) Meeting held Thursday, April 4, 2013 beginning at 9:44 a.m. at the Hilton Garden Inn, 90, 22nd Street East, Saskatoon, Saskatchewan.

Present:

M. Binder, President  
R.J. Barriault  
D.D. Tolgyesi  
M. J. McDill  
R. Velshi

K. McGee, Assistant Secretary  
L. Thiele, General Counsel  
M. Young, Recording Secretary

CNSC staff advisors were:

P. Elder, R. Stenson, M. Rinker, S. Demetor

Other contributors were:

**Saskatchewan Research Council:**

- J. Muldoon, Vice-President of Environment
- T. Yankovich, Project Manager for the Gunnar Remediation Project
- I. Wilson, Manager of the Remediation Project

**Saskatchewan Ministry of the Economy:**

- H. Sanders, Assistant Deputy Minister

Constitution

1. With the notice of meeting, CMD 13-M17, having been properly given and a quorum of Commission Members being present, the meeting was declared to be properly constituted. A Panel of the Commission was established, pursuant to section 22 of the *Nuclear Safety and Control Act*<sup>1</sup> (NSCA), to review the application for two regulatory decisions.

Since the meeting of the Commission held February 20 and 21, 2013, Commission Member Documents CMD 13-M18 and CMD 13-M19 were distributed to Members. These documents are further detailed in Appendix A of these minutes.

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<sup>1</sup> Statutes of Canada (S.C.) 1997, c. 9.

### Adoption of the Agenda

2. The revised agenda, CMD 13-M18.A, was adopted as presented.

### Chair and Secretary

3. The President chaired the meeting of the Commission, assisted by K. McGee, Assistant Secretary and M. Young, Recording Secretary.

### STATUS REPORT AND APPLICATION FOR TWO REGULATORY DECISIONS

*Saskatchewan Research Council (SRC): Status report on progress of the Environmental Assessment at the Gunnar Closed Mine Site, N. Saskatchewan*

4. With reference to CMD 13-M19, CNSC staff presented a status report on the progress of the Environmental Assessment (EA) at the Gunnar Closed Mine Site, Northern Saskatchewan (Gunnar site). The SRC also presented an update on the activities it has undertaken at the Gunnar site since the May 3, 2012 Commission Meeting. The SRC noted that it had submitted to the CNSC a revised Environmental Impact Statement (EIS) and draft licensing documentation, consistent with the Gunnar protocol that was established following the May 3, 2012 Commission Meeting.
5. The SRC described its progress on the EA for the Gunnar site, which would eventually allow the SRC to remediate the site in contemplation of eventual transfer to institutional control by the Province of Saskatchewan. CNSC staff stated that it, along with other federal departments, was currently reviewing the EIS.
6. CNSC staff also presented information regarding the September 2012 Gunnar protocol, which was signed by the SRC, the Saskatchewan Ministry of the Economy, Natural Resources Canada, Saskatchewan Environment and the CNSC. CNSC staff noted that the SRC has met all of the stipulated deadlines for deliverables and that all EA reviews to date had been completed on time. CNSC staff stated that the protocol was a good administrative tool for managing the timely completion and acceptance of project-related documents. CNSC staff further stated that the EA process was progressing in a manner consistent with the protocol.
7. CNSC staff stated that its assessment of safety at the site had not changed since the previous update to the Commission, noting that the Gunnar site continued to have incremental, localized impacts on the environment but that site safety had improved due to the removal of physical hazards.

8. CNSC staff also provided information regarding the Aboriginal engagement activities held since the previous update to the Commission, including activities in Uranium City, Saskatchewan and a tour of five communities. CNSC staff stated that it would continue to engage with Aboriginal groups and communities as the project continues.
9. The SRC requested that the Commission revoke the Commission Order issued to SRC, Order 10-1, which had been issued in July 2010<sup>2</sup> to address physical hazards on the Gunnar site, because it had completed the requirements of the Order. CNSC staff reported that the SRC had completed all of the conditions contained in Order 10-1 to the satisfaction of CNSC staff. As such, CNSC staff recommended that the Commission revoke Order 10-1. CNSC staff noted that it would continue to monitor site safety in consultation with Saskatchewan Environment and ensure that demolition debris would continue to be safely managed until a permanent solution can be implemented.
10. The SRC also applied for an extension of its exemption from the requirement to have a licence from the CNSC to possess, manage, and store nuclear substances at the Gunnar Site until December 31, 2016. The SRC noted that, in 2009, the Commission had, under section 7 of the NSCA, granted it an exemption from the requirement in section 26 of the NSCA to have a licence to possess, manage and store the nuclear substances at the Gunnar site, until April 30, 2013<sup>3</sup>. The SRC explained that an extension to the exemption was required as the completed EA would need to be approved before the SRC could obtain a licence. The SRC indicated its intention to apply for the licence upon the approval of the EA and noted that it anticipates receiving a licence by December 2015. The SRC representative explained, however, that the requested exemption date of December 31, 2016 was conservative and took into account possible delays in funding, delays in EA acceptance, and delays in timing for beginning the remediation work.
11. CNSC staff stated that, based on its assessment, granting the requested exemption pursuant to section 7 of the NSCA would meet the requirements of section 11 of the *General Nuclear Safety and Control Regulations*<sup>4</sup>, as it would not pose an unreasonable risk to the environment or the health and safety of persons; would

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<sup>2</sup> Refer to the *Record of Proceedings, Including Reasons for Decision* on the “Review by the Commission of the Designated Officer Order issued on June 18, 2010 with respect to the deterioration of the Gunnar Mine site in northern Saskatchewan”, hearing date July 5, 2010.

<sup>3</sup> Refer to the *Record of Proceedings, Including Reasons for Decision* on the “Application to extend the exemptions of the Gunnar and Lorado sites from the requirements of the *Nuclear Safety and Control Act*”, hearing date December 10, 2009.

<sup>4</sup> Statutory Orders and Regulations (SOR)/2000-202.

- not pose an unreasonable risk to national security; nor would it result in a failure to achieve conformity with measures or control and international obligations to which Canada has agreed. CNSC staff recommended that the Commission grant the requested exemption.
12. The Commission asked for more information concerning the timeline for the Gunnar site remediation project. A representative from the SRC responded that the timeline is conservative, as it is based on the availability of funding and depends on the “decision tree” approach used to determine mitigation measures for the project. The SRC representative noted the SRC’s preference to proceed in a timely manner. CNSC staff commented that they were in the process of reviewing the timeline but had not yet determined whether it could be accelerated. A representative from the Saskatchewan Ministry of the Economy discussed the funding for the project, noting that it had already exceeded the amount stipulated in its 2006 funding agreement with Natural Resources Canada. The representative from the Saskatchewan Ministry of the Economy expressed the Ministry’s desire for the site to be remediated and noted the challenge posed by the need to obtain and make decisions based on scientific information. The representative from the Saskatchewan Ministry of the Economy indicated that, depending on the status of the funding, the 2016 timeline may be optimistic.
  13. The Commission sought further information regarding the federal funding for the project. The representative from the Saskatchewan Ministry of the Economy provided information regarding the 2006 funding agreement with Natural Resources Canada and noted that the government of Saskatchewan had been covering the cost of the project since the original \$24.6 million budget of the funding agreement was exceeded. The representative from the Saskatchewan Ministry of the Economy further noted that the cost estimates for the project would be updated going forward.
  14. The Commission asked for more information regarding issues that could cause delays to the project. CNSC staff responded that the review of the revised EIS would determine whether the SRC would need to obtain any additional environmental data for the purpose of the EA. CNSC staff reiterated the role of the Gunnar protocol in managing the steps so that the review can be completed in a timely manner.
  15. The Commission asked if the SRC was responsible for any other mine sites, and whether the SRC is consulting with other mining companies, such as Cameco Corporation (Cameco). The SRC representative responded that it is responsible for 39 different sites. The SRC representative stated that the SRC is working with

- Cameco in order to develop a regional monitoring system, and that the two organizations, along with AREVA Resources Canada Inc., share best practices. The SRC representative further noted that the SRC conducts Aboriginal engagement activities in conjunction with Cameco.
16. The Commission sought further justification for the proposed extension of the exemption until December 31, 2016. The SRC representative responded that, in addition to funding and regulatory timelines, the mobilization of large equipment to the Gunnar site would be a key issue, due to the site's remote location.
  17. The Commission enquired about the expected final state of the Gunnar site. The SRC representative responded that the final site is expected to meet risk-based, site-specific remedial objectives. The SRC representative explained that, while it may not be possible to remove all contamination to levels below Canadian objectives, the levels can be reduced to levels that are safe for the environment at the site. The SRC representative noted that this was consistent with using the Canadian Council of Ministers of the Environment approach.
  18. The Commission asked for clarification regarding the water quality objectives to be used for the remediated site. A representative from the SRC responded that the Saskatchewan surface water quality objectives are based on those of the Canadian Council of Ministers of the Environment. The SRC representative noted that the standards are conservative, based on the most sensitive species at the most sensitive life stages during the highest possible exposure periods. The SRC representative noted that this is why the SRC suggested using site-specific remedial objectives, which are more realistic, based on the types of species and exposure conditions present at the Gunnar site. CNSC staff noted that it would be reviewing the approach proposed by the SRC, and would assess whether the remediated site would be protective of the environment and aquatic life. CNSC staff emphasized that even if the surface water quality were to be remediated to levels protective of the environment, it may not necessarily meet drinking water standards due to the differences in the requirements. The Commission stressed that it is important that the public be properly informed about the water quality.
  19. The Commission asked for more information regarding the regulatory oversight of the Gunnar site while it is exempt from the requirement to have a licence. CNSC staff responded that there would be no changes in this regard, and that CNSC staff would continue to provide regulatory oversight, conduct inspections and be able to enforce its mandate, such as with orders, if necessary. CNSC staff noted that the SRC would not be allowed to proceed

- with remediation work during an extended exemption period.
20. The Commission asked the SRC to describe the series of photographs appended to its submission and sought clarification regarding the safety and security of the site. A representative from the SRC described the photographs and confirmed that the site is secure. The SRC representative noted that some structures, including diesel tanks and trailers, were newly added and required to facilitate the work carried out at the site.
  21. The Commission asked for more information concerning the use of the site by the public, which had been a concern in the past. The SRC representative responded that casual access of the site is no longer a concern since all of the physical hazards and buildings were removed. The SRC representative noted that chemical hazards stored on site are in a fenced and signed area, and that SRC staff are on site during the months when any casual access would be likely. The SRC representative further noted that the airstrip near the site is still in use but there is a locked gate in place with access to the site blocked.
  22. The Commission enquired about the radiological risks to human health posed by the Gunnar site. CNSC staff stated that the radiological risk to the public was low. CNSC staff explained that there were no immediate risks to casual visitors to the site but noted that there would be an increased, albeit low, risk should a person camp on the tailings for a period of several months. CNSC staff noted that such a scenario would be unlikely because there are no visitors to the site during the winter and it would be prevented by the presence of SRC staff during other seasons. CNSC staff stated that the risk to the health and safety of humans or that of the environment would remain very low for the proposed exemption period based on the remoteness of the site, current land uses, the local residents' awareness of the site and the measures in place to mitigate hazards, including the installation and maintenance of fencing and signage at contaminated areas, the posting of advisory notices warning against consumption of untreated water and fish in certain water bodies, and the removal of all structures from site.
  23. The Commission asked for more information concerning the potential for acid generation on the site. A representative from the SRC responded that the SRC has identified a localized tailings area that was potentially acid generating. Another SRC representative noted that the SRC is looking into remediation options for the site and that the approach used to address gamma radiation in the tailings would also address acid generation.
  24. CNSC staff provided information regarding the next steps for the review, noting that the updated EIS from SRC needs to be

approved before the EA can proceed. CNSC staff noted that the Gunnar protocol has mechanisms for parties to raise issues to ensure that the review can proceed in a timely manner.

25. Based on the above information, the Commission is satisfied that the SRC has complied with all of the requirements of Order 10-1, issued to the SRC on July 23, 2010 and amended on January 19, 2011. Therefore, the Commission revokes Commission Order 10-1.

DECISION

26. Furthermore, based on the information presented by the SRC and CNSC staff regarding the safety and security of the site, the Commission concludes that granting the requested exemption meets the requirements of section 11 of the *General Nuclear Safety and Control Regulations*. Therefore, the Commission, pursuant to section 7 of the NSCA and section 11 of the *General Nuclear Safety and Control Regulations*, extends the temporary exemption from the requirement in section 26 of the NSCA for the SRC to have a licence for the possession, management and storage of the nuclear substances at the Gunnar site, until December 31, 2016.

DECISION

27. Although the Commission is satisfied that the risks to health, safety security and the environment posed by the Gunnar site in its current state are low, the Commission stresses the need to avoid any further delays. The Commission expects the EA process to progress as expeditiously as possible and directs CNSC staff to inform the Commission of any impediments to the SRC meeting the December 31, 2016 timeline. The Commission also directs CNSC staff to provide an update on the status of the Gunnar protocol at the May 2013 Commission meeting.

ACTION  
by May  
2013

28. In addition, the Commission directs CNSC staff to present the Commission with an annual update on the status of the Gunnar site as part of CNSC staff's annual *Performance of Canadian Uranium Fuel Cycle and Processing Facilities* report.

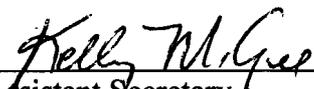
ACTION  
ongoing

Closure of the Public Meeting

29. The meeting closed at 11:21 a.m.

  
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Recording Secretary

May 15, 2013  
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Date

  
\_\_\_\_\_  
Assistant Secretary

15.05.13  
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Date

## APPENDIX A

CMD	DATE	File No
13-M17	2013-03-07	Edocs #4101407
Notice of Meeting of April 4, 2013		
13-M18	2013-03-20	Edocs #4107738
Agenda of the meeting of the Canadian Nuclear Safety Commission to be held on Wednesday and Thursday, April 4, 2013, at the Hilton Garden Inn, 90, 22 <sup>nd</sup> Street East, Saskatoon, Saskatchewan		
13-M18.A	2013-03-28	Edocs #4110397
Updated Agenda of the meeting of the Canadian Nuclear Safety Commission to be held on Wednesday and Thursday, April 4, 2013, at the Hilton Garden Inn, 90, 22 <sup>nd</sup> Street East, Saskatoon, Saskatchewan		
13-M19.1	2013-03-19	Edocs #4108100
Written Submission from Saskatchewan Research Council		
13-M19.1A	2013-03-27	Edocs #4110759
Presentation from Saskatchewan Research Council		
13-M19	2013-03-19	Edocs #4105517
CNSC Staff on Status report on progress of the Environmental Assessment at the Gunnar Closed Mine Site, N. Saskatchewan		
13-M19.A	2013-03-25	Edocs #4110255
Presentation from CNSC Staff on Gunnar Closed Mine Site, Exemption and Update		