



Canadian Nuclear
Safety Commission

Commission canadienne
de sûreté nucléaire

Record of Proceedings, Including Reasons for Decision

In the Matter of

Proponent

Canadian Nuclear Safety Commission

Subject

Request for Exemption from Licensing the
Greyhawk and Agnew Lake Closed Uranium
Mines without Tailings

Hearing
Date

May 11, 2012

RECORD OF PROCEEDINGS

Proponent: Canadian Nuclear Safety Commission

Address/Location: 280 Slater St., Ottawa, Ontario, K1P 5S9

Purpose: Request for exemption from licensing the Greyhawk and Agnew Lake closed uranium mines without tailings

Application received: N/A

Date of hearing: May 11, 2012

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

Members present: M. Binder, Chair

Secretary: M. Leblanc
Recording Secretary: D. Carrière

Licences: Exempted

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Introduction

1. The Canadian Nuclear Safety Commission (CNSC) staff is recommending an exemption from licensing the Greyhawk and Agnew Lake closed uranium mines without tailings. The two mines are located in Bancroft and Sudbury, Ontario, respectively.
2. In order to deal with closed uranium mine sites without tailings that were not previously licensed under the *Atomic Energy Control Act* (AECA), but that are now subject to licensing under the *Nuclear Safety and Control Act*¹ (NSCA), CNSC staff previously recommended that 75 closed uranium mine sites be exempt from the requirement for licensing the possession, management and storage of nuclear substances. CNSC staff had assessed the physical status and risk to public or environmental safety associated with these sites and concluded that there is no significant radiological risk. CNSC staff had also recognised that these sites are, for all intents and purposes, indistinguishable from many other historic, conventional mines. The Commission granted the exemption during a Commission Meeting held on November 17, 2004 (CMD 04-M47) on the basis that the mine sites met the three following criteria:
 - i. the idle uranium mines without tailings are administered under provincial or federal mining or lands management legislation;
 - ii. the idle uranium mines without tailings are, in all physical and radiological characteristics, indistinguishable from conventional mines; and
 - iii. under any reasonable circumstance, a member of the public would not receive a dose greater than 10 percent of the public dose limit during unstructured use (<100 hours per year).
3. At the December 1, 2005 Commission Meeting (CMD 05-M74), the Commission granted an exemption for an additional mine that met the criteria stipulated above. The exemption list currently names 76 sites.
4. Recently, CNSC staff identified two more historic closed uranium mines that were not previously licensed under the AECA for inclusion on the existing list of mines exempted from the NSCA requirement for a licence to possess, manage and store nuclear substances.

¹ Statutes of Canada (S.C.) 1997, chapter (c.) 9.

Issue _____

5. In considering the request, pursuant to section 7 of the *Nuclear Safety and Control Act* and section 11 of the *General Nuclear Safety and Control Regulations*² (GNSCR), the Commission was required to decide if granting the exemptions:
- a) might pose an unreasonable risk to the environment or the health and safety of persons;
 - b) might pose an unreasonable risk to national security; or
 - c) could result in a failure to achieve conformity with measures of control and international obligations to which Canada has agreed.

Hearing _____

6. 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 May 11, 2012 in Ottawa, Ontario. During the hearing, the Commission considered CNSC staff's submission (CMD 12-H108).

Decision

7. Based on its consideration of the matter, as described in more detail in the following sections of this *Record of Proceedings*, the Commission concludes that the conditions of section 7 of the NSCA and section 11 of the GNSCR have been met. Therefore,

the Commission, pursuant to section 7 of the *Nuclear Safety and Control Act*, exempts the Greyhawk and Agnew Lake idle uranium mines without tailings from the requirement for licensing under section 26 of the *Nuclear Safety and Control Act*. The Commission adds the Greyhawk and Agnew Lake idle uranium mines without tailings to the current exemption list of idle uranium mines without tailings in Canada.

² Statutory Orders and Regulations (SOR)/2000-202

Issues and Commission Findings

8. In its submission, CNSC staff stated that two additional sites, which were accidentally omitted from the original exemption list, were identified during recent inspections. CNSC staff further stated that these two sites were known to CNSC staff and were assessed at the time of the original exemption of the 75 idle uranium mines without tailings on November 17, 2004 (CMD 04-M47).
9. CNSC staff explained that both mine sites are located in Ontario and are managed by the *Ontario Public Lands Act*³, which is administered by the Ontario Ministry of Northern Development, Mines and Forestry (MNDMF). CNSC staff has determined that since these two mines are subject to the *Ontario Mining Act*⁴, they meet the first of the three criteria of the original idle mines without tailings exemption (CMD 04-M47).
10. With regards to the second criteria of the original idle mines without tailings exemption, CNSC staff described the physical and radiological characteristics of both mines. CNSC staff stated that the Greyhawk Mine, which closed in 1959, is located in the Township of Faraday near Bancroft, Ontario. The Greyhawk mine shipped all of its ore to the Madawaska mill for processing and the tailings associated with Greyhawk mine are currently licensed under a CNSC licence issued to EWL Limited. The Greyhawk Mine has one shaft and a couple of raises, all of which were recapped within the last year (2010/11). CNSC staff also explained that the Greyhawk Mine site contains a 20 metre by 40 metre waste rock pile and stated that the mine did not process its ore onsite during its operation.
11. For the Agnew Lake Mine, which closed in 1983, CNSC staff stated that it is located in Hyman Township near Sudbury, Ontario. The Agnew Lake Mine processed its ore onsite and the resulting tailings are currently managed separately under a CNSC licence issued to the MNDMF. The mine site consists of a number of capped or sealed openings and the foundations for a number of buildings. Waste rock exists across the site and was used to fill holes and openings.
12. CNSC staff has determined that both mines have been decommissioned to the standards required under the *Ontario Mining Act* and that both mines have physical and radiological characteristics similar to some conventional mines administered under that *Act*.
13. With respect to the third criteria, CNSC staff also provided average gamma radiation readings for both mine sites. CNSC staff explained that the most conservatively calculated dose that could be received by a member of the public occupying the Greyhawk Mine site during unstructured use (100h/yr) is 30 microSievert per year, or 3% of the public dose limit.

³ Revised Statutes of Ontario (R.S.O.) 1990, Chapter P.43

⁴ R.S.O. 1990, Chapter M.14

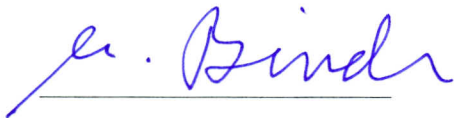
14. For the Agnew Lake Mine site, CNSC staff stated that the most conservatively calculated dose that could be received by a member of the public occupying the Agnew Lake Mine site during unstructured use (100h/yr) is 15 microSievert per year, or 1.5% of the public dose limit.
15. CNSC staff has determined that it is unlikely, under reasonable circumstances, that a member of the public would receive a dose greater than 10% of the public dose limit at any of these two mine sites.
16. With regards to the CNSC's duty to consult, CNSC staff has determined that the exemptions will have no adverse impact on potential or established Aboriginal or Treaty rights. CNSC staff stated that the duty to consult with Aboriginal groups does not arise in relation to the proposed licence exemptions.

Application of the *Canadian Environmental Assessment Act*

17. Before making a licensing decision, the Commission must be satisfied that all applicable requirements of the *Canadian Environmental Assessment Act*⁵ (CEAA) have been fulfilled.
18. CNSC staff reported that it had completed an Environmental Assessment (EA) determination. CNSC staff stated that there was no requirement for an EA pursuant to subsection 5(1) of the CEAA.

Conclusion

19. The Commission has considered CNSC staff's request and is satisfied that both the Greyhawk and Agnew Lake closed uranium mines without tailings meet the original exemption criteria. The Commission is satisfied that adding the two mine sites to the Idle Mines without Tailings Exemption List would not pose an unreasonable risk to the environment, the health and safety of persons, or to national security, and would not result in a failure to achieve conformity with measures of control and international obligations to which Canada has agreed.
20. The Commission is also satisfied that Aboriginal consultation is not necessary in relation to the proposed amendment and that all applicable requirements of the CEAA have been fulfilled.



Michael Binder
President,
Canadian Nuclear Safety Commission

MAY 11 2012

Date

⁵ S.C. 1992, c. 37.