Canadian Nuclear Safety Commission | Commission canadienne de sûreté nucléaire

CMD 23-M35.1

Date: 2023-10-30
File / dossier : 6.02.04
Edocs pdf : 7158510

Written submission from the Canadian Nuclear Society

Mémoire de la Société Nucléaire Canadienne

Regulatory Oversight Report for Uranium and Nuclear Substance Processing Facilities in Canada: 2022

Rapport de surveillance réglementaire des installations de traitement de l'uranium et des substances nucléaires au Canada : 2022

Commission Meeting

Réunion de la Commission

December 13-14, 2023

13-14 décembre 2023

Canada

Canadian Nuclear Society
Société Nucléaire Canadienne
1 Eglington Ave. E., Suite 705 Toronto ON M4P 3A1
https://www.cns-snc.ca Tel./Tél: 416-997-7620
E-mail/Courriel: cns_office@cns-snc.ca

Dear Sir or Madam,

The Canadian Nuclear Society (CNS) welcomes the opportunity to comment on the "Regulatory Oversight Report – Uranium and Nuclear Substance Processing Facilities" produced by the Canadian Nuclear Safety Commission (CNSC). The facilities covered by this report are uranium processing facilities including:

1. Blind River Refinery;
2. Port Hope Uranium Conversion Plant;
3. Cameco Fuel Manufacturing Plant; and
4. BWXT Nuclear Energy Canada.

The report also covers nuclear substances processing facilities including:

1. SRB Technologies;
2. Nordion Canada Inc.; and,
3. Best Theratronics Limited.

The CNS observes that CNSC concludes that all facilities have an effective, comprehensive regulatory compliance program. During 2022, the CNSC concluded:

1. Radiation doses to members of the public were well below the regulatory limit;
2. Radiation doses to members of the workforce were below regulatory limits;
3. Frequency and severity of non-radiological injuries were low;
4. No serious process failure occurred;
5. Radiological releases to the environment were below regulatory limits; and,
6. Licensees met all requirements related to Canada's international obligations.

These conclusions confirm that Canada's nuclear industry operates safely and effectively in the areas noted above. The CNS notes that Canada is a world leader in a host of nuclear products including medical and industrial radioisotopes. In recent years, Canada has been innovating in the production of various radioisotopes, such as Molybdenum-99. This is now done through inclusion of target materials in CANDU cores for the necessary irradiation. During the past couple of years, Bruce Power in collaboration with Isogen have developed methodology for the production of Lutetium-177 which is used in cancer treatment. It is important to also note that Canada remains a world-leading producer of Molybdenum-99 and Cobalt-60.

Canadian Nuclear Society
Société Nucléaire Canadienne
1 Eglington Ave. E., Suite 705 Toronto ON M4P 3A1
https://www.cns-snc.ca Tel./Tél: 416-997-7620
E-mail/Courriel: cns_office@cns-snc.ca

Another important innovation has been the development of methodology for the production of Actinium-225 by a joint project of the Canadian Nuclear Laboratories (CNL) and ITM Isotope Technology Munich SE. Actinium-225 is used as a targeted alpha emitter in specific types of cancer treatment.

We continue to benefit from such innovations in nuclear health sciences because the Canadian radioisotope industry maintains a flawless record in prevention of any significant accident or releases of radiation to the environment.

Yours truly,

Dr. Doddy Kastanya, P.Eng.
President, Canadian Nuclear Society