



October 04, 2017

VIA E-MAIL

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e-Doc 5344807

Mr. David Snopek  
Director, EHS & Regulatory  
BWXT Nuclear Energy Canada Inc.  
1060 Monaghan Road,  
Peterborough, Ontario  
K9J 0A8

**Subject: Request Pursuant to Subsection 12(2) of the *General Nuclear Safety and Control Regulations*: Beryllium Occupational Exposure Limit Exceedance**

Dear Mr. Snopek,

On September 21, 2017, BWXT Nuclear Energy Canada Inc. (BWXT) submitted a final event report to the Canadian Nuclear Safety Commission (CNSC) detailing root causes and corrective actions of a Beryllium Occupational Exposure Limit Exceedance discovered by BWXT as reported to the CNSC on August 23, 2017. In the original notification, BWXT indicated that the use of incorrect respirator cartridges/ filters for Powered Air Purifying Respirators (PAPR) was the root cause of a Beryllium Occupational Exposure Limit Exceedance.

In its final event report, BWXT indicated that during the conduct of investigation into the root causes for the reported event, BWXT discovered that the incorrect filters for PAPRs were used for a time period from December 4, 2015 to August 22, 2017. BWXT indicated that based on available air sampling data for that time period, a total of 15 instances of exposure to airborne beryllium were likely to have occurred. BWXT also indicated that two workers were impacted over this time period. Both workers were referred to the plant occupational health nurse and physician for follow up and have subsequently returned to normal duties.

CNCS staff has reviewed the final event report and while the report includes the root cause and provides the corrective actions to prevent a recurrence of this type of event, the report does not provide any information about the measures BWXT has or will be taking to minimize beryllium air concentrations in the affected area in the future.

Pursuant to my authority as a person authorized by the Commission for the purposes of subsection 12(2) of the *General Nuclear Safety and Control Regulations*, I request the following information in writing from BWXT by **October 31, 2017**:



1. Conduct an analysis of the usage of respirators by workers and confirm that this event was restricted to the use of PAPRs for non-routine beryllium work only.
2. Conduct an analysis of the available beryllium air sampling records and provide beryllium air concentration values from the affected room including the average and maximum possible occupational exposure levels from December 4, 2015 to August 23, 2017.
3. Conduct a test and provide a report on any potential protection a PAPR with the incorrect filters may have provided the two workers.
4. Conduct an analysis of existing procedures, facility design measures and defense-in-depth consideration and provide details on any measures taken or will be taken by BWXT to minimize beryllium air concentrations in the affected areas of the facility.

In accordance with sub-section 12(2)(a to e) of the *General Nuclear Safety and Control Regulations*, you are required to:

- (a) Confirm that you will or will not carry out the request or you will carry it out in part
- (b) Any action that you have taken to carry out the request or any part of it
- (c) Any reasons why the request or any part of it will not be carried out
- (d) Any proposed alternative means to achieve the objectives of the request
- (e) Any proposed alternative period within which you propose to carry out the request

Please contact Ms. Kavita Murthy, Director, Nuclear Processing Facilities Division, at 613-995-3620 or at [Kavita.Murthy@Canada.ca](mailto:Kavita.Murthy@Canada.ca) if you require any further information.

Yours truly,



Haidy Tadros, M.Sc.  
Director General  
Directorate of Nuclear Cycle  
and Facilities Regulation  
Telephone: (613) 943-8948  
E-mail: [Haidy.Tadros@canada.ca](mailto:Haidy.Tadros@canada.ca)

c.c.: Kavita Murthy, Julian Amalraj