



2016 July 27

Mr. Graham Smith, Senior Project Officer  
Nuclear Processing Facilities Division (NPPD)  
Directorate of Nuclear Cycle and Facilities Regulation (DNCFR)  
Canadian Nuclear Safety Commission  
280 Slater Street  
P.O. Box 1046, Station B  
Ottawa, ON K1P 5S9

4502-CNNO-16-0018-L  
SF-2016-041

Dear Mr. Smith:

**PORT GRANBY WASTE MANAGEMENT FACILITY QUARTERLY  
EFFLUENT MONITORING PROGRAM (2016 APRIL TO JUNE)**

The purpose of this letter is to submit to CNSC staff the 2016 second quarter results of the Canadian Nuclear Laboratories (CNL) effluent monitoring program at the Port Granby Waste Management Facility (PGWMF), in accordance with the requirements of the Waste Nuclear Substance Licence WNSL-W1-2311.01/2021.

Discharge Flow Characteristics:

Table 1 provides the parameters and limits for specified substances listed in Appendix B, Article 2 of the licence [1] and the measured results of samples drawn from the effluent discharge flow for the period 2016 April to 2016 June. All results are within the acceptable limits.

During onsite tree clearing activities on 2016 March 31, a break occurred in the secondary interceptor discharge pipe at the Port Granby Waste Management Facility [2]. Following this event, a new temporary effluent discharge pipe was installed to discharge directly to the total interceptor discharge from the Port Granby Waste Water Treatment Plant (WWTP) [2]. This work took place during the week of 2016 April 29 [2] and since that time, sampling results are reflective of discharge directly from the new WWTP.

Canadian Nuclear Laboratories

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**Table 1**

WNSL-W1-2311.01/2021 Appendix B.1 Phase 1 Release Limits for Liquid Effluent		Monthly Mean Concentration Results from Sample Analysis		
Parameter	Maximum Monthly Mean Concentration	2016 April <sup>1</sup>	2016 May <sup>2</sup>	2016 June <sup>1</sup>
Radium-226 (Becquerels per litre)	0.37	0.327 <sup>4</sup>	<0.14	<0.005
pH	Between 6.0 and 9.0	8.13	7.99	7.91
Toxicity Testing	Effluent cannot be toxic	PASS	PASS	PASS

- 1 - Radium-226 and pH results based on analyses of four samples
- 2 - Radium-226 and pH results based on analyses of three samples
- 3 - Toxicity testing results based on one sample
- 4 - April result includes the effluent collected at the TID following the pipe break [2]. The daily weighted average for the month is presented in this table.

If you have any questions or concerns, please feel free to contact me at 905-885-8830 ext. 41160.

Regards,

Sandra Faught, Manager, Programs & Compliance  
Port Hope Area Initiative Management Office

SF/BS/RB:la



**References:**

- [1] *Waste Nuclear Substance Licence Port Granby Long-Term Low-Level Radioactive Waste Management Project*: WNSL-W1-2311.01/2021. E-doc 4541235/4490416, 2014 October 22.
- [2] Letter *Re: 2016 April 15 Reportable Event at the CNL Port Granby Waste Management Facility*, 4502-CNNO-16-0013-L, 2016 May 6.

c.	K. Murthy (CNSC)	J. Thelen (CNSC)			
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