

2017 Annual Compliance Report for Nuclear Power Demonstration Waste Facility (NPDWF)

EXECUTIVE SUMMARY

This Annual Compliance Report for the calendar year 2017 has been prepared as per Licence Condition 5.1 of the Prototype Waste Facilities Decommissioning Licence, WFDL-W4-332.01/2034 [1].

This annual report describes the present status of the Nuclear Power Demonstration Waste Facility (NPDWF) and the notable activities conducted within this facility for the 2017 calendar year reporting period. It includes the results of operations, the results of the monitoring programs, any changes made to key procedures, equipment, or structures, as well as a summary of any reports made pursuant to Sections 29 and 30 of the General Nuclear Safety and Control Regulations.

The Douglas Point Waste Facility (DPWF), Gentilly-1 Waste Facility (G1WF), and Nuclear Power Demonstration Waste Facility (NPDWF) are licensed under one licence [1], which was issued on 2014 October 22 and expires on 2034 December 31.

This report is in the form prescribed by the guidelines in Section 5.1 of the Licence Conditions Handbook [2]. The 2017 annual compliance report for the DPWF and G1WF will be submitted separately.

The following provides overall performance highlights for 2017 activities:

- As part of Health, Safety, Security and Environment initiatives, hazard reduction activities occurred such as asbestos abatement of the Boiler Room and minor modifications to improve facility structures such as the repair of ladders.
- Planning activities to support future decommissioning (e.g. characterization) including the submission of an Environmental Impact Statement (EIS) and licence amendment application to the Canadian Nuclear Safety Commission (CNSC).
- There were no radiation incidents that occurred, which resulted in exceeding the action level or regulatory limits at NPDWF. All doses for individual workers during 2017 were small.
- The majority of ambient radiation fields and liquid emissions remained stable at NPDWF in 2017. There were no abrupt changes in nature or magnitude of radiation or liquid releases during 2017 and all environmental releases were a small fraction of their respective Derived Release Limits (DRLs).
- Airborne emissions are reported as increased this year. This is directly attributable to the six month long intrusive asbestos abatement campaign in the Boiler Room, and is a conservative estimate for gross-beta since it does not take into consideration the temporary air mover High-Efficiency Particulate Air (HEPA) filter efficiency of 99% removal of particulate.
- Events or conditions reported pursuant to Sections 29 and 30 of the General Nuclear Safety and Control Regulations were minor Storage with Surveillance (SWS) issues.

Canadian Nuclear Laboratories (CNL) is committed to achieving high standards of operational safety. The information and data presented in this report support the conclusion that safe performance is being achieved at the NPDWF, while enhancements are also being implemented to improve results.