

2017 Annual Compliance Report for Douglas Point and Gentilly-1 Waste Facilities

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 [1-1].

This annual report describes the present status of the Prototype Waste Facilities and the notable activities conducted within these facilities 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 are licensed under one licence [1-1], 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 [1-2] and is divided into two major sections, one for the DPWF, and one for the G1WF. The 2017 annual compliance report for the Nuclear Power Demonstration Waste Facility will be submitted separately.

The following provides overall performance highlights for 2017 activities, which are described throughout the report:

- Corrective actions from the Life Management Plan (LMP) continued to be addressed for all facilities.
- Corrective actions from the Fire Hazard Analysis (FHA) were addressed for all facilities.
- As part of extensive housekeeping, Health, Safety, Security, and Environment (HSSE) and fire load reduction initiatives, a significant amount of radiological and non-radiological waste was removed from the sites.
- A number of minor modifications were completed at each facility in order to address maintenance and HSSE issues.
- A number of planning activities to support future decommissioning were completed at each site.
- There were no radiation incidents that occurred, which resulted in exceeding the action level or regulatory limits for the Prototype Waste Facilities. The maximum individual worker dose during 2017 was 0.37 mSv (accrued by a contractor) at DPWF and 0.18 mSv (accrued by a Canadian Nuclear Laboratories (CNL) employee) at G1WF.
- The majority of ambient environmental radiation fields and emissions remained stable in both facilities in 2017. There were no abrupt changes in the nature or magnitude of releases during 2017, and all environmental releases were a small fraction of their respective Derived Release Limits (DRLs).
- Events or conditions reported pursuant to Licence Condition 5.1 of the licence [1-1] were minor Storage with Surveillance (SWS) issues.

Canadian Nuclear Laboratories 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 Douglas Point and Gentilly-1 Prototype Waste Facilities, while enhancements are also being implemented to improve results.