

Performance Report for Nuclear Waste Management

Performance Update

As part of our commitment to keep you informed, this report tracks performance for Ontario Power Generation's Nuclear Waste Management facilities in the areas of safety, operations, and the environment. It also summarizes significant accomplishments achieved during the third quarter of 2019.

Safety

Employee Injury Frequency

TRIF is a measure of the number of injuries involving OPG employees that result in a fatality or lost-time, requiring restricted work or requiring medical treatment per 200,000 hours worked. During the third quarter, the Nuclear Waste Management (NWM) TRIF was zero.



Transportation Safety

The transportation of waste to our Western facility from Darlington, Pickering and Bruce Power is managed by experienced and skilled drivers. In this quarter, all shipments were made safely and the fleet traveled 72,000 additional kilometres. At the end of September 2019, a total of 4.8 million kilometres have been travelled safely.



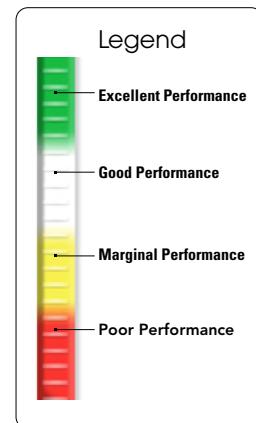
Environment - Spills to the Environment

NWM recorded no spills to the environment this quarter that were reportable to a regulatory authority. The year-to-date total remains at one spill. For detailed environmental information, please refer to the environmental data reports available on www.opg.com under Reporting.



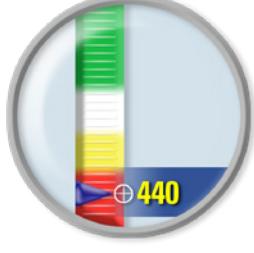
Operational Performance

A total of 160 used fuel Dry Storage Containers (DSC) were processed by the end of Q3. This was 15 below the third quarter target of 175. Recovery schedules are in place to meet the year-end target to process and store 212 DSCs across the three facilities.



Incinerator Performance

The incinerator processed 440 cubic metres of solid waste this quarter which was below the target of 1,044 cubic metres. This is a result of the delayed completion of the incinerator upgrade project earlier in the year. The 2019 year-end production target is to burn 1,398 cubic metres of nuclear waste.



Do you have any questions about our performance results? If so, please give us a call at 519-361-6414 x2764 or drop us a line nwmd@opg.com.

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Q3 2019
Apr. 1 to June 30

About OPG's Nuclear Waste Management

OPG's Nuclear Waste Management (NWM) division manages three sites; Western, Pickering and Darlington. The Western Waste Management Facility (WWMF) in Bruce County receives and manages the low- and intermediate-level waste for Darlington, Pickering and Bruce Power nuclear stations. Low-level waste is volume reduced through incineration or compaction. Used-fuel Dry Storage Containers are managed at the facilities where the waste was generated; Pickering, Darlington or the WWMF.



Bruce Museum Kids Celebrate Exhibit



Historic Saugeen Metis Rendezvous



Southampton Marine Heritage Festival

The following summarizes items of interest or milestones achieved by Nuclear Waste Management and across OPG:

Nuclear Waste Operation

- Used Fuel Dry Storage Building #4 (SB4) is under construction at the Pickering site. Once completed, SB4 will be OPG's single largest Used Fuel Storage Building, with a capacity to store over 600 Dry Storage Containers. This new storage space will meet Pickering's dry fuel storage needs until the end of commercial operations in 2024.
- In a collaborative effort between OPG and Bruce Power, the last of 66 spent resin shipments from Bruce B to OPG's Western Waste Management Facility was completed. The emptying of the spent resin tanks will provide storage for all of Bruce B's spent resins for the next four years, without the need to complete any resin shipments during Bruce Power's Unit 6 Major Component Replacement.
- Nuclear Waste Management participated and presented papers at the 4th Nuclear Waste Management, Decommissioning and Environmental Restoration Conference, Sept. 8-11, in Ottawa. Over 400 Canadian and international participants from nuclear related organizations and universities attended. The conference focus was on Indigenous relationships, updates on new repositories and disposal facilities, and current best practices for decommissioning nuclear power plants.

OPG News

- OPG launched its rate application process for its next five-year rate period from 2022 to 2026. Payment amounts set by the Ontario Energy Board (OEB) represent approximately 90 per cent of OPG's revenue and costs related to OPG's nuclear generation and most of its hydroelectric generation.

- Darlington's Unit 2 refurbishment reached an important milestone. With the fuel channel and feeder construction completed, the loading of new fuel into Unit 2 was able to begin.
- The federal government has begun the Environmental Assessment process for Canada's first proposed Small Modular Reactor (SMR). Global First Power, with support from OPG and Ultra Safe Nuclear Corporation, propose to construct and operate a Micro Modular Reactor plant at the Chalk River Laboratories. It is proposed to be 15 megawatts (MW) thermal, which is about 5 MW electrical. The project would be a model for future SMR deployments that could support remote industrial applications and provide a viable option to displace fossil fuel use.
- OPG has completed demolition of the powerhouse at the Nanticoke Generating Station – formerly the largest coal-fired plant in the world. The site, on the north shore of Lake Erie, has been transformed into OPG's first-ever solar facility, in partnership with Six Nations of the Grand River Development Corporation and the Mississaugas of the Credit First Nation.

In the Community

During this quarter, NWM provided tours to 19 various groups and held 29 information-sharing meetings with Bruce County's First Nations, Métis, Community, U.S. Political Organizations, and Municipal and Provincial representatives. The Western site supported 23 community initiatives in Bruce County and participated in 9, such as the Kincardine Scottish Festival, Southampton Marine Heritage Festival, Lighthouse Blues Festival, Historic Saugeen Rendezvous, and both the Saugeen and Nawash Pow Wows.