

# 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 second quarter of 2018.

### Safety

#### Total Reportable Injury Frequency (TRIF)

The TRIF is a measure of the number of injuries involving OPG employees that result in a fatality, a lost time, requiring restricted work and requiring medical treatment per 200,000 hours. During the second quarter, the TRIF was zero. At the end of June Nuclear Waste Management achieved 7.2 years without a lost time injury.



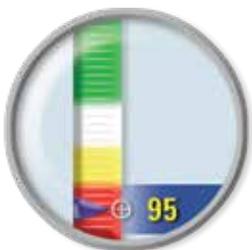
#### Transportation Safety

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 accident-free and the fleet safety traveled 125,000 additional kilometres. At the end of June 2018, 4.3 million kilometres were safety traveled.



#### Environment – Spills to the Environment

Our waste facilities experienced no spills to the environment this quarter that were reportable to a regulatory authority. For detailed environmental information, please refer to the environmental data reports available on [www.opg.com](http://www.opg.com) under News and Media.



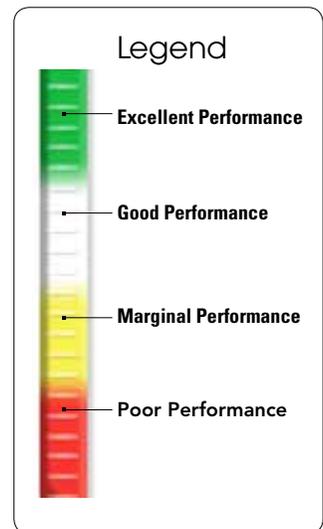
#### Operational Performance

A total of 95 used fuel Dry Storage Containers were loaded up to the end of June, which is 33 below the goal of 128. This was due to loading and equipment issues. Recovery plans are in place to ensure production remains on track to meet the year-end target of 212.



#### Incinerator Production

To the end of the first quarter, the incinerator processed 390 cubic metres of solid waste. This was below the goal of 544 cubic metres for this point in the year. This was due to forced outages early in the year and then proceeding into the spring planned outage. The year-end solid waste processing target is 1,050 cubic metres.



## About OPG's Nuclear Waste Management

OPG's Nuclear Waste Management (NWM) manages three sites. 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 facilities located at Pickering, Darlington and WWMF.



Lake Huron Centre for Coastal Conservation Conference



Korea Standard Association & KHNP Nuclear Power Plant Operation Tour



Steam Generator team reconfigured storage space for 16 more to come from Bruce Power's MCR.

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

### OPG's Deep Geologic Repository Project

In June OPG resumed payments to Kincardine and four adjacent municipalities, under the 2004 Deep Geologic Hosting Agreement with Kincardine. The payments were enabled by a 2018 amendment to the agreement, allowing the release of 50% of monies held in trust in recent years. A further total payment is to be made by the end of this year; and resuming annually at the 100% level on DGR approval. Progress continues toward an environmental assessment (EA) decision on OPG's proposed Deep Geologic Repository (DGR) for low- and intermediate-level nuclear waste (L&ILW). OPG continues to engage in respectful dialogue with Saugeen Ojibway Nation, to whom it committed in 2013 that the DGR will not be built without their support.

### Nuclear Waste Operations

- The Steam Generator Storage Building at OPG's Western Waste Management Facility (WWMF) has been reconfigured to allow for 16 additional Steam Generators to be stored in the same space. This work was completed in preparation for Bruce Power's refurbishment of Unit 6 – the first unit in its Major Component Replacement (MCR) project. The project involved teamwork and cooperation among five different companies: OPG, Bruce Power, ES Fox, Mammoet and Fluor.
- WWMF completed the first unload of the new Intermediate-Level Waste Utility Containers (ILWUC). The ILWUC container, a special design for miscellaneous Refurb waste, will provide improved efficiency in transportation and storage for intermediate-level waste. The new container can be used in other situations such as Bruce Power's MCR project and normal operational waste.

### OPG News

- Darlington Refurbishment Project's Unit 2 disassembly work is now complete. OPG and project partners began the complex job of rebuilding the reactor by installing new and refurbished components. The reassembly phase started with a series of inspections and cleaning, which will be followed by the installation of calandria tubes, fuel channels and feeder tubes. The rebuild of the reactor will provide 30 additional years of clean, reliable power production.
- OPG announced a new collaboration between OPG subsidiary Canadian Nuclear Partners and a subsidiary of BWX Technologies, Inc. to produce life-saving medical isotopes. It will make Darlington Nuclear the first large-scale commercial nuclear power station worldwide to produce molybdenum-99. This critical medical isotope is used in over 30 million life-saving diagnostic and medical treatments each year.
- The CNSC held public hearings in Pickering from June 25 to 29, on OPG's application to renew the licence for the Pickering Nuclear Generating Station. The renewal will enable the plant to continue operations to 2024, providing clean, safe, low-cost and reliable energy to Ontario.

### In the Community

During the second quarter of 2018, NWM provided tours to 16 groups and held 15 information-sharing meetings with First Nations, Métis, municipal, federal and provincial officials and five with US Congress staff. The Western site supported 18 community initiatives in Bruce County such as: Lake Huron Centre for Coastal Conservation Conference, Bluewater Science & Tech Fair, Eco Explorers, Southampton Summer Music Festival, Children's Water Festival, Bruce County Museum summer feature exhibit Animal Gibberish, Kincardine Blues and Huron Fringe Birding Festival.