

# 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 2020.

### Safety

#### Total Reportable Injury Frequency (TRIF)

TRIF is a measure of the number of injuries involving OPG employees that result in a fatality, a lost time, requiring restricted work or requiring medical treatment per 200,000 hours worked. An injury in Q1 placed the TRIF at 1.95. With corrective actions in place and no injuries since then, the third quarter TRIF improved to 0.65. The year-end target is set at 0.20 and the projection is to reach 0.50.



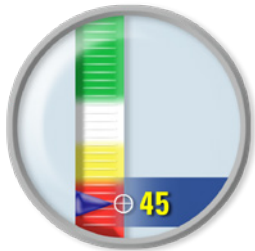
#### Transportation Safety

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 safely travelled 120,000 additional kilometres. At the end of September 2020 over 5.2 million kilometres were safely travelled.



### Environment - Spills to the Environment

This quarter our waste facilities continued to experience no spills to the environment 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 Reporting.



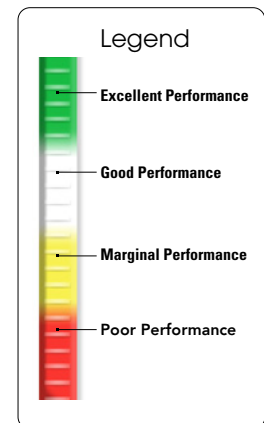
### Operational Performance

A total of 178 Used Fuel Dry Storage Containers (DSC) were processed up to the end of Q3. This was 12 below the third quarter goal of 190. Recovery schedules continue in an effort to meet year-end projections to process and store 217 DSCs.



### Waste Minimization

The incinerator processed a total of 775 cubic metres of low-level waste up to the end of Q3. This was below the year-to-date target of 1260. The 2020 year-end projection is to process 1,791 cubic meters of nuclear waste.



## 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 the 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.



OPG & BWXT to co-develop technology to recycle heavy water



Pumpkin Pack Wednesdays



Bruce Botanical Food Garden

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

### Nuclear Waste Operation

- OPG launched the Centre for Canadian Nuclear Sustainability (CCNS). It is a hub for world-class research on decommissioning, based at the Pickering Nuclear site. This will include working with the NWM division to support decommissioning, minimize and divert waste, and develop lasting solutions for permanent disposal. It will also support future clean-energy development, such as Small Modular Reactors, to support a low-carbon future for Ontario and the world. CCNS will play a leading role in providing sustainable solutions for the industry, environment, community and Ontario ratepayers.
- NWM continues to lead the way in waste minimization; examples include: identifying opportunities for segregation and processing in our Low-Level Storage Buildings, exploring best practices on diversion of large metal objects and other materials away from storage, making long-term investments in our incinerator, and supporting research by Laurentis Energy Partners and McMaster University to develop new sorting methods.
- Darlington surpassed a significant industry milestone: at 895 days, Unit 1 is now the longest running unit in North American nuclear plant history; which is also a world record for CANDU reactors – previously held by Pickering at 894 days. The station has been producing clean, affordable and reliable electricity for the people of Ontario since Jan. 26, 2018. To sustain this level of excellence through normal circumstances is outstanding, but to sustain it through the challenges of 2020 is especially remarkable.
- Darlington’s Tritium Removal Facility (TRF) completed an eight-month outage and returned to service. The TRF is now more reliable and ready to support the detritiation needs of the province. This supports the goal of building Darlington for the Future, creating opportunity and providing another 30 plus years of power to the people of Ontario with top quartile operating and financial performance.

### OPG News

- CCNS announced an innovative collaboration agreement between Laurentis Energy Partners (LEP) and BWXT Canada Ltd. (BWXT) to develop new technology that will assist in the recycling of heavy water from OPG’s nuclear facilities. The heavy water will be used in non-nuclear applications including pharmaceuticals, medical diagnostics and next generation electronics including fibre optics.
- OPG partnered with LEAF, Nature Conservancy of Canada, and Bruce Trail Conservancy to launch the “League of Trees.” The educational campaign kicked off Sept. 19 during National Forest Week. Its aim is to raise awareness of the vital role of trees in the fight against climate change and commits to plant up to 500,000 trees in the province over two years.

### In the Community

During this quarter, due to COVID-19 restrictions continuing, NWM was not able to provide tours to community groups. Information-sharing meetings with Bruce County’s First Nations, Métis, and Community representatives continued through conference calls and virtual options. Although most fairs and events were cancelled, OPG managed to support many groups and virtual events: Kincardine Canada Day, Kincardine Summer Music Festival, Big Brothers Big Sisters Mini Masters, Lake Huron Centre for Coastal Conservation Conference, Saugeen Memorial Hospital, Pumpkin Pack Wednesdays and the Bruce Botanical Food Garden.