

# 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 2019.

### Safety

#### Employee Injury Frequency

The total reportable injury frequency (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. During the second quarter, the Nuclear Waste Management (NWM) TRIF was zero. At the end of April, NWM achieved eight years without a lost-time incident.



#### 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 safely traveled 146,200 additional kilometres. At the end of June 2019, a total of over 4.7 million kilometres have been traveled safely.



### Environment - Spills to the Environment

NWM recorded one spill to the environment this quarter that was reportable to a regulatory authority, bringing the year-to-date total to one spill. For detailed environmental information, please refer to the environmental data reports available on [www.opg.com](http://www.opg.com) under Reporting.



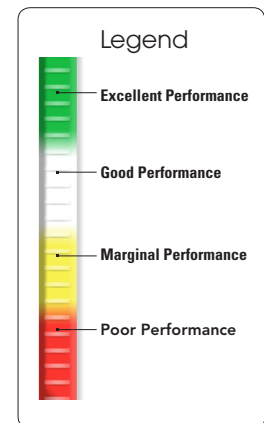
### Operational Performance

A total of 102 used fuel Dry Storage Containers (DSC) were processed by the end of Q2. This was 29 below the second quarter target of 131. Recovery schedules are in place to meet the year-end target to process and store 212 DSCs across the three facilities.



### Incinerator Performance

Toward the end of Q2 the incinerator upgrades were completed and the incinerator began the return to normal operations. The incinerator processed 192 cubic metres this quarter which was below the target of 696 cubic metres. The 2019 year-end production target is to burn 1,290 cubic metres of nuclear waste.



## 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 facilities where the waste was generated; Pickering, Darlington or the WWMF.



OPG Basketball Grade 5-8 League



Heritage Fair OPG Spark Award Winner



Blues in the Schools

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

### Nuclear Waste Operation

- In April, OPG's Nuclear Waste Management reached eight years without a Lost Time Incident. This is an important achievement and is a testament to the professional and safe work behaviours used at our facilities and across our division, every day.
- During this quarter, the Western Waste Management Facility (WWMF) safely completed major upgrades to its incinerator. Incinerator upgrades are a vital element of our preventative maintenance program, to ensure the incinerator is ready and reliable for the future to support station operations. Incineration can reduce low-level waste volumes up to 90 per cent, while keeping emissions far below regulatory limits, ultimately reducing the overall environmental footprint of the site.
- The NWM team established an X-lab, to focus on driving and fostering an innovative culture across the organization. The X-lab includes a resin-based 3D printer to help staff develop and model their ideas, including various waste container models. The X-lab also includes a virtual reality environment that contains a fully explorable model of the WWMF incinerator, allowing engineering to improve off-site collaboration and reviews.

### OPG News

- OPG entered into an agreement to acquire Cube Hydro. Cube Hydro owns and operates 19 hydroelectric stations, representing 385-megawatts of capacity, mainly in the northeast and southeast United States. Its facilities span 10 river systems and three U.S. power markets. Since OPG has

significant hydroelectric expertise in Ontario and in the U.S., this portfolio is a natural fit. This opportunity will increase our revenue base over the long-term and provide a greater return to our shareholder, the Province of Ontario.

- Darlington's Maintenance team became the first maintenance organization in Canada to receive an exemplary rating from the World Association of Nuclear Operators (WANO). This is a great accomplishment for the team and demonstrates their commitment to the highest standards and performance.
- OPG announced it will establish a new corporate campus in Clarington that is expected to be completed in 2024. The new campus will include the Darlington Energy Complex and a new building located on OPG-owned adjacent land. This is an opportunity to bring together our staff and expertise from across the company at one site. OPG will relocate all non-station-based groups in Toronto, Niagara and Durham Region to the new campus.

### In the Community

During this quarter, NWM provided tours to 16 groups and held 29 information-sharing meetings with Bruce County's First Nations, Métis, and community, municipal and provincial representatives. The Western site supported 24 community initiatives in Bruce County and participated in 17, such as: Indigenous Career Expos, Bluewater Science & Tech Fair, Grey Bruce Heritage Fair, Blues in the Schools, Children's Water Festival, Huron Fringe Birding Festival, Pine River Watershed Initiative Network, OPG Basketball, BCM&CC Family Celebrations exhibit, Cargill Heritage program and the Tiverton Reunion.