

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 3501-DCKHX5
Issue Date: March 5, 2025

Ontario Power Generation Inc.
1 Holt Road South
Clarington, ON L1C 3Z8

Site Location: Darlington New Nuclear Project
1 Holt Road South
Clarington, ON L1C 3Z8

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

the establishment of stormwater management Works as well as the modification of existing Works servicing the Darlington New Nuclear Project (DNNP), located at the above site address, for the collection, transmission and treatment of stormwater runoff from approximately 65 hectares of the overall approximately 480 ha site, to provide Normal Level quality control for the Osborne Creek Watershed and Enhanced Level quality control for the Darlington Creek Watershed, each via treatment train approach and to convey post-development runoff from 100-year storm events within the Osborne Creek Watershed as well as to attenuate post-development peak flows to allowable release rates for all storm events up to and including the 100-year storm event within the Darlington Creek Watershed, consisting of the following Works:

Proposed Works:

Darlington Creek Watershed

Stormwater management works servicing laydown areas 16A and 16B with a catchment area of approximately 3.82 hectares (and existing upstream drainage areas, approximately 13 hectares), located south of 2nd Line and east of Maple Grove Road, consisting of:

- **Enhanced Grassed Swales (Catchment Area 2.34 ha [2.12 ha from existing lands and 0.22 ha from Area 16A])** : Swales receiving surface runoff from Area 16A as well as existing lands via existing ditches, comprised of a 1 metre bottom width trapezoidal channel with 3:1 side slopes and longitudinal slopes limited to 3% or less, with rock check dams to be provided in sections with 3% slope, complete with 450 millimeter diameter culverts, discharging via existing ditches to a tributary of Darlington Creek;

- **Storage and Conveyance Swale (Catchment Area 1.14 ha [Area 16A]) :** One swale receiving surface runoff from Area 16A, comprised of a 2 metre bottom width trapezoidal channel with varying side slopes, complete with hickenbottom drain equipped with silt sock and flow restrictor to provide a minimum active storage volume of approximately 248 cubic metres, discharging via 150 millimetre outlet pipe and existing ditches towards to a tributary of Darlington Creek;
- **Enhanced Grassed Swales (Catchment Area 11.06 ha [11 ha of existing lands + 0.06 ha of Area 16B]) :** Swales receiving surface runoff from Area 16B as well as existing lands via existing ditches, comprised of a 1 metre bottom width trapezoidal channel with 3:1 side slopes and average longitudinal slopes of 0.5%, with rock check dams re-directing the existing ditch system to flow around Area 16B at the base of its embankment and onward to an existing overland flow path east of Area 16B which will act as the future spillway of the proposed East-West Haul Road dry pond described below;
- **Enhanced Grassed Swales (Catchment Area 0.55 ha [Area 16B]) :** Swales receiving surface runoff from Area 16B, comprised of a 1 metre bottom width trapezoidal channel with 3:1 side slopes and average longitudinal slopes of 2.7%, discharging to the future spillway of the proposed East-West Haul Road dry pond;
- **Enhanced Grassed Swales (Catchment Area 1.12 ha [0.18 ha of existing lands + 0.94 ha of Area 16B]) :** One swale receiving surface runoff from Area 16B as well as existing lands, comprised of a 1 metre bottom width trapezoidal channel with 3:1 side slopes and average longitudinal slopes of 2.9%, complete with rock check dams, discharging to an enhanced grass swale at the northeast corner of Area 16B;
- **Enhanced Grassed Swales (Catchment Area 0.61 ha [Area 16B]) :** One swale receiving surface runoff from Area 16B, comprised of a 1 metre bottom width trapezoidal channel with 3:1 side slopes and average longitudinal slopes of 2.4%, complete with rock check dams in sections of the swale greated in depth than 0.6 metres, discharging to an enhanced grass swale at the northeast corner of Area 16B;
- **Grassed Swales:** Two (2) terminal swales discharge to existing overland flow paths and onwards to a tributary of Darlington Creek;

Units 2, 3 and 4 Grade Lowering

- **Enhanced Grassed Swales (Catchment Area 6.16 ha) :** Approximately 628 metres of enhanced grassed swales along the south and east perimeter of the eastern portion of the DNNP development containing laydown areas and roads as well as the east parking lot, comprised of 0.75 metre to 3.0 metre bottom width trapezoidal channels with 2.5-3:1 side slopes, complete with rock check dams, with one (1) 450 millimeter diameter CSP culvert within the ditch downstream of the east parking lot to provide flow attenuation, ultimately discharging towards Darlington Creek via 1050 millimetre diameter outfall.

Osborne Creek Watershed

Units 2, 3 and 4 Grade Lowering

- **Enhanced Grassed Swales and Conveyance Swales (Catchment Area 23 ha) :** Approximately 801 metres of enhanced grassed swales along with approximately 2,067 metres of trapezoidal swales within the western portion of the DNNP development containing two gravel parking lots, roads and reactors 1 to 4, comprised of 3.0 metre bottom width trapezoidal channels with 3:1 side slopes for enhanced swales and 1.0 metre to 3.0 metre bottom width trapezoidal channels with 2.5-3:1 side slopes, discharging to an existing stormwater swale north of reactor 1 towards the existing Lake Ontario outfall as well as via a new headwall and sewer system discharging to the existing storm sewer ultimately discharging to the existing Lake Ontario outfall.

Temporary Works:

- **Conveyance Channel (Catchment Area 10 ha):** During construction and prior to installation of the above mentioned headwall and sewer system to discharge to the existing storm sewer, minor event flows from this area will be conveyed to an existing ditch via a 450 millimetre CSP culvert to an outfall on the Darlington Nuclear Generation Station site, and major flows will be conveyed overland via an 1 metre deep, 3 metre bottom width trapezoidal channel with 4:1 side slopes, discharging to the armour embankment at the location of the existing DNNP outfall towards Lake Ontario.

Previously Proposed Works:

Osborne Creek Watershed

Administrative Building Area

- **on-site sewers and culverts**, discharging to the outfall on 2nd Line roadside ditch;
- **enhance grass swales**, discharging to the bio-retention garden;
- **vegetative grass swales**, discharging to the bio-retention garden;
- **three (3) bioretention gardens**, engineered soil mixture placed above a gravel storage bed, containing underdrains systems, discharging to the 2nd Line roadside ditch, via a 450 millimetres diameter outlet, complete with headwall and rip rap, and ultimately to Lake Ontario;

Parking Lot Area (to be replaced by Unit 2, 3, and 4 Grade Lowering Works when completed)

- **on-site sewers**, discharging to the outfall on the former Holt Road roadside ditch.
- **on-site culverts**, connecting to the swales described below;
- **vegetative grass swales**, discharging to the outfall on the former Holt Road roadside ditch;
- **two (2) oil/grit separators**, Stormceptor model EF08 (or Equivalent Equipment), serving a total catchment area of approximately 3.45 (1.83 & 1.62) hectares, discharging via a 450 millimetres outlet pipe, to the former Holt Road roadside ditch, through a 600 millimetres diameter outlet, complete with headwall and rip rap, and ultimately to Lake Ontario;

AECON Trailor/Laydown Area, AECON Pre-Assembly Area and Black Veatch North and South Laydown Area (to be replaced by Unit 2, 3, and 4 Grade Lowering Works when completed)

- **on-site culverts**, connecting to the swales described below.
- **vegetative grass swales**, discharging to the swales described in Reactor Unit 1 Area;

Condensing Cooling Water (CCW) Outfall Construction Area (to be replaced by Unit 2, 3, and 4 Grade Lowering Works when completed)

Stormwater management works servicing the construction phase of the CCW outfall area, located south of the Reactor Unit 1 area described below, consisting of:

- **Grassed Swale:** One (1) grassed swale, located south of the CCW installation area, approximately 210 meters in length, receiving surface runoff from the site, comprised of a triangular shaped channel with a minimum depth of 0.6 m and 2:1 side slopes transitioning into a trapezoidal shaped 1 metre bottom width channel with 2:1 side slopes with longitudinal slopes limited to 5% or less, discharging towards an existing Lakeshore Road ditch and ultimately to Lake Ontario;

Darlington Creek Watershed

Steel Composite Fabrication Building Area

Stormwater management works servicing the steel composite fabrication building area, located immediately east to the Warehouse Building area described below, consisting of:

- **Bioretention Cells:** Two (2) bioretention cells located to the east and west of the proposed fabrication building, receiving surface runoff from the site, comprised of a flat bottom vegetated surface over approximately 0.5 to 1 metre of engineered soil mix and approximately 0.5 metre of a clear stone storage layer wrapped in filter fabric, providing approximately 388 cubic metres of surface ponding volume at a ponding depth of 15 centimetres along with approximately 991 cubic metres of subsurface storage, complete with 200 mm diameter perforated underdrain system discharging to 300 mm and 450 mm diameter concrete storm sewers and ultimately outlet to the proposed grassed swales described below;
- **Grassed Swales:** Perimeter swales, approximately 492 meters in length, receiving surface runoff from the site along with roof runoff from the fabrication building as well as bioretention cells discharge, comprised of a 1 metre bottom width trapezoidal channel with 3:1 side slopes and longitudinal slopes limited to 1% or less, discharging to on-site conveyance ditches along 2nd Line and ultimately to Darlington Creek;

Warehouse Building Area

- **on-site sewers**, discharging to the outfall on 2nd Line roadside ditch;
- **on-site culverts**, connecting to the swales described below;
- **enhance grass swales**, discharging to the 2nd Line roadside ditch, via 600 millimetres diameter outlet, complete with headwall and rip rap, and ultimately to the Lake Ontario;

- **vegetative grass swales**, discharging to the bio-retention garden;
- **two (2) bioretention gardens**, engineered soil mixture placed above a gravel storage bed, containing underdrains systems, discharging to the 2nd Line roadside ditch, via 450 millimetres diameter outlet, complete with headwall and rip rap, and ultimately to Lake Ontario;

Existing Works

The establishment of stormwater infrastructure Works servicing The Darlington New Nuclear Project, an approximately 29 hectares site, located at the above site address, for the collection, transmission and treatment of stormwater runoff, to provide Normal Level quality control for the Osborne Creek Watershed and Enhanced Level quality control for the Darlington Creek Watershed, each via treatment train approach and to convey post-development runoff from storms with a return period of 100 years for major storms events within the Osborne Creek Watershed as well as to attenuate post-development peak flows to allowable release rates for all storm events up to and including the 100-year storm event within the Darlington Creek Watershed, consisting of the following Works:

Darlington Creek Watershed

Switchyard Area

- **Enhanced Grassed Swales:** Perimeter swales, approximately 590 meters in length, receiving surface runoff from the site, comprised of a 3 metre bottom width trapezoidal channel with 3:1 side slopes and longitudinal slopes limited to 4% or less, complete with a series of rock check dams and culverts, discharging via 1000 mm diameter outlet pipe to conveyance ditches along 2nd Line and ultimately to Darlington Creek;

East-West Road and 2nd Line Road

Stormwater management works servicing the construction of a new service road and surrounding area located east of Holt Road between the CN rail tracks and 2nd Line including grading alterations to 2nd Line, servicing an approximately 14 hectares site area, consisting of:

- **Conveyance Ditches:** Roadside ditches receiving runoff from the eastern portion of the proposed service road and from 2nd Line;
- **Enhanced Grassed Swales:** Roadside swales receiving runoff from the eastern portion of the proposed service road, approximately 565 metres in length and along the north of 2nd Line approximately 280 metres in length, comprised of a 1 metre bottom width trapezoidal channel with 3:1 side slopes and longitudinal slopes limited to 2% or less, with rock check dams to be provided where required, discharging to the detention pond below via roadside swales along Maple Grove Road;

- **Detention Pond: (catchment area 14.0 hectares):** one (1) dry pond, located south-east of 2nd Line and Maple Grove Road, receiving inflow via three (3) 750 mm diameter inlet culverts, providing a minimum active storage volume of approximately 959 cubic meters to contain the 100-year storm event, discharging up to approximately 1,833 L/s peak flow from the pond during the 100-year storm event towards a v-shaped outlet ditch with 4:1 side slopes, with a total of up to approximately 1,884 L/s from the drainage area towards Darlington Creek;

Osborne Creek Watershed

Reactor Unit 1 Area

- **on-site culverts**, connecting to the swales described below.
- **vegetative grass swales**, discharging to the outfall pipe described below;
- **outfall pipe**, 1650 millimetres diameter, discharging to Lake Ontario, complete with headwall and rip rap;

including erosion/sedimentation measures and all other controls and appurtenances essential for the proper operation of the aforementioned Works;

all in accordance with the following submitted supporting documents listed in Schedule A.

For the purpose of this environmental compliance approval, the following definitions apply:

1. "Approval" means this entire Environmental Compliance Approval and any Schedules attached to it;
2. "Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;
3. "District Manager" means the District Manager of the appropriate local District Office of the Ministry, where the Works are geographically located;
4. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19, as amended;
5. "Equivalent Equipment" means alternate piece(s) of equipment that meets the design requirements and performance specifications of the piece(s) of equipment to be substituted;
6. "Existing Works" means those portions of the Works included in the Approval that have been constructed previously;
7. "Licensed Engineering Practitioner" means a person who holds a licence, limited licence or temporary licence under the *Professional Engineers Act*, R.S.O. 1990, c. P.28;
8. "Limited Operational Flexibility" (LOF) means any modifications that the Owner is permitted to make to the Works under this Approval;

9. "Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;
10. "Owner" means Ontario Power Generation Inc. and its successors and assignees;
11. "OWRA" means the *Ontario Water Resources Act* , R.S.O. 1990, c. O.40, as amended;
12. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
13. "Temporary Works" means the temporary Works, described in this Approval and that are to be used for short-term purposes only in accordance with this Approval, until otherwise approval for an extension of this period has been granted;
14. "Works" means the approved sewage works, and includes Proposed Works, Existing Works, Temporary Works and modifications made under Limited Operational Flexibility.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL CONDITION

1. The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the terms and conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
2. The Owner shall design, construct, operate and maintain the Works in accordance with the conditions of this Approval.
3. Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence.
4. The issuance of, and compliance with the conditions of, this Approval does not:
 - a. relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement, including, but not limited to, the obligation to obtain approval from the local conservation authority necessary to construct or operate the Works; or
 - b. limit in any way the authority of the Ministry to require certain steps be taken to require the Owner to furnish any further information related to compliance with this Approval.

2. EXPIRY OF APPROVAL

1. This Approval will cease to apply to those parts of the Works which have not been constructed within **five (5) years** of the date of this Approval.
2. In the event that completion and commissioning of any portion of the Works is anticipated to be more than five (5) years, the Owner shall submit an application for extension at least **twelve (12) months** prior to the end of the five (5) years from the day of issuance of this Approval. The application shall include the reason(s) for the delay, whether there is any design change(s) and a review of whether the standards applicable at the time of Approval of the Works are still applicable at the time of request for extension, to ensure the ongoing protection of the environment.
3. This Approval to the **Temporary Works** shall expire and become null and void within 3 years from the issue date of this approval.
4. The Owner shall decommission the **Temporary Works** on or before the expiry date mentioned in subsection 3.

3. CHANGE OF OWNER

1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within **thirty (30) days** of the change occurring:
 - a. change of address of Owner;
 - b. change of Owner, including address of new owner;
 - c. change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Business Names Act, R.S.O. 1990, c. B.17* shall be included in the notification; or
 - d. change of name of the corporation, and a copy of the most current information filed under the *Corporations Information Act, R.S.O. 1990, c. C39* shall be included in the notification.
2. In the event of any change in ownership of the Works, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the District Manager and the Director.
3. The Owner shall ensure that all communications made pursuant to this condition refer to the number of this Approval.

4. CONSTRUCTION OF PROPOSED WORKS

1. Upon the construction of the Works, the Owner shall prepare a statement, certified by a Licensed Engineering Practitioner, that the Works are constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry personnel.
2. Within **one (1) year** of the construction of the Proposed Works, a set of as-built drawings showing the Works “as constructed” shall be prepared. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the Works for the operational life of the Works.

5. OPERATION AND MAINTENANCE

1. The Owner shall make all necessary investigations, take all necessary steps and obtain all necessary approvals so as to ensure that the physical structure, siting and operations of the Works do not constitute a safety, health or flooding hazard to the general public.
2. The Owner shall undertake an inspection of the condition of the Works, at least once a year, and undertake any necessary cleaning and maintenance to ensure that sediment, debris and excessive decaying vegetation are removed from the Works to prevent the excessive build-up of sediment, oil/grit, debris and/or decaying vegetation, to avoid reduction of the capacity and/or permeability of the Works, as applicable. The Owner shall also regularly inspect and clean out the inlet to and outlet from the Works to ensure that these are not obstructed.
3. The Owner shall construct, operate and maintain the Works with the objective that the effluent from the Works is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen, foam or discoloration on the receiving waters.
4. The Owner shall carry out and maintain an inspection and maintenance program on the operation of the manhole oil/grit separator in accordance with the manufacturer's recommendation.
5. The Owner shall ensure that the manhole for the oil/grit separator remains accessible year-round to facilitate maintenance access and spill response measures.
6. The Owner shall ensure the immediate clean-out of the Works after a fuel or oil spill capture.
7. The Owner shall ensure that equipment and material for the containment, clean-up and disposal of fuel and oil and materials contaminated with such, is on hand and in good repair for immediate use in the event of:
 - a. loss of fuel or oil to the Works; or
 - b. a spill within the meaning of Part X of the EPA.

8. The Owner shall prepare an operations manual prior to the commencement of operation of the Works that includes, but is not necessarily limited to, the following information:
 - a. operating and maintenance procedures for routine operation of the Works;
 - b. inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;
 - c. repair and maintenance programs, including the frequency of repair and maintenance for the Works;
 - d. contingency plans and procedures for dealing with potential abnormal situations and for notifying the District Manager; and
 - e. procedures for receiving, responding and recording public complaints, including recording any follow-up actions taken.
9. The Owner shall maintain an up to date operations manual and make the manual readily accessible for reference at the Works for the operational life of the Works. Upon request, the Owner shall make the manual available to Ministry staff.
10. The Owner shall maintain a logbook to record the results of these inspections and any cleaning and maintenance operations undertaken, and shall keep the logbook at the Works for inspection by the Ministry. The logbook shall include the following:
 - a. the name of the Works;
 - b. the date and results of each inspection, maintenance and cleaning, including an estimate of the quantity of any materials removed and method of clean-out of the Works; and
 - c. the date of each spill within the catchment area, including follow-up actions and remedial measures undertaken.
11. The Owner shall retain for a minimum of **five (5) years** from the date of their creation, all records and information related to or resulting from the operation and maintenance activities required by this Approval.

6. REPORTING

1. **One (1) week** prior to the start-up of the operation of the Works, the Owner shall notify the District Manager (in writing) of the pending start-up date.
2. The Owner shall, upon request, make all reports, manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.

3. In addition to the obligations under Part X of the EPA and O. Reg. 675/98 (Classification and Exemption of Spills and Reporting of Discharges) made under the EPA, the Owner shall, within **fifteen (15) days** of the occurrence of any reportable spill as provided in Part X of the EPA and O. Reg. 675/98, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill, clean-up and recovery measures taken, preventative measures to be taken and a schedule of implementation.
4. The Owner shall prepare performance reports on a calendar year basis by **July 31** of the calendar year following the period being reported upon and submit to the District Manager upon request. The reports shall contain, but shall not be limited to, the following information pertaining to the reporting period:
 - a. a description of any operating problems encountered and corrective actions taken;
 - b. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works, including an estimate of the quantity of any materials removed from the Works;
 - c. a summary of any effluent quality assurance or control measures undertaken in the reporting period;
 - d. a summary of any complaints received during the reporting period and any steps taken to address the complaints;
 - e. a summary of all spill or abnormal discharge events; and
 - f. any other information the District Manager requires from time to time.

7. LIMITED OPERATIONAL FLEXIBILITY

1. The Owner may make modifications to the Works in accordance with the Terms and Conditions of this Approval and subject to the Ministry's "Limited Operational Flexibility Criteria for Modifications to Works", included under **Schedule B** of this Approval, as amended.
2. Works under Limited Operational Flexibility shall adhere to the design guidelines contained within the Ministry's publication "Design Guidelines for Sewage Works 2008", as amended.
3. The Owner shall ensure at all times, that the Works, related equipment and appurtenances which are installed or used to achieve compliance are operated in accordance with all Terms and Conditions of this Approval.

4. For greater certainty, the following are **not** permitted as part of Limited Operational Flexibility:
 - a. Modifications to the Works that result in an increase of the approved capacity of the Works, unless permitted in accordance with Schedule B subsection 1(d);
 - b. Modifications of the Works that would permit discharge of process water or dewatering effluent to the stormwater management system;
 - c. Modifications to the Works that may adversely affect the approved effluent quality criteria or the location of the discharge/outfall;
 - d. Modifications to the treatment process technology of the Works, or modifications that involve construction of new reactors (tanks) or alter the treatment train process design;
 - e. Modifications to the Works approved under s.9 of the EPA, and
 - f. Modifications to the Works pursuant to an order issued by the Ministry.
5. Implementation of Limited Operational Flexibility is not intended to be used for piecemeal measures that result in major alterations or expansions.
6. If the implementation of Limited Operational Flexibility requires changes to be made to the Emergency Response, Spill Reporting and Contingency Plan, the Owner shall, provide a revised copy of this plan to the local fire services authority prior to implementing Limited Operational Flexibility.
7. For greater certainty, any modification made under the Limited Operational Flexibility may only be carried out after other legal obligations have been complied with, including those arising from the Environmental Protection Act, Niagara Escarpment Planning and Development Act, Oak Ridges Moraine Conservation Act, Lake Simcoe Protection Act and Greenbelt Act.
8. At least **thirty (30) days** prior to implementing Limited Operational Flexibility, the Owner shall complete a Notice of Modifications describing any proposed modifications to the Works and submit it to the District Manager.
9. The Owner shall not proceed with implementation of Limited Operational Flexibility until the District Manager has provided written acceptance of the Notice of Modifications or a minimum of **thirty (30) days** have passed since the day the District Manager acknowledged the receipt of the Notice of Modifications.

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 is imposed to ensure that the Works are constructed and operated in the manner in which they were described and upon which approval was granted. This condition is also included to emphasize the precedence of conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. Condition 1.4 is included to emphasize that the issuance of this Approval does not diminish any other statutory and regulatory obligations to which the Owner is subject in the construction, maintenance and operation of the Works. The Condition specifically highlights the need to obtain any necessary conservation authority approvals. The Condition also emphasizes the fact that this Approval doesn't limit the authority of the Ministry to require further information.
2. Condition 2 is included to ensure that, when the Works are constructed, the Works will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.
3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to the approved Works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
4. Condition 4 is included to ensure that the Works are constructed in accordance with the approval and that record drawings of the Works "as constructed" are maintained for future references.
5. Condition 5 is included as regular inspection and necessary removal of sediment and excessive decaying vegetation from the Works are required to mitigate the impact of sediment, debris and/or decaying vegetation on the treatment capacity of the Works. The Condition also ensures that adequate storage is maintained in the Works at all times as required by the design. Furthermore, this Condition is included to ensure that the Works are operated and maintained to function as designed.
6. Condition 6 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.
7. Condition 7 is included to ensure that the Works are operated in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider. These Conditions are also included to ensure that a Professional Engineer has reviewed the proposed modifications and attests that the modifications are in line with that of Limited Operational Flexibility, and provide assurance that the proposed modifications comply with the Ministry's requirements stipulated in the Terms and Conditions of this Approval, Ministry's policies, guidelines, and industry engineering standards and best management practices.

Schedule A

1. Environmental Compliance Approval Application for Industrial Sewage Works submitted by WSP Canada Inc. on behalf of Ontario Power Generation Inc., dated May 11, 2023, and all supporting documentation and information.
2. Environmental Compliance Approval Application for Industrial Sewage Works signed by Dragan Popovic, Senior Vice President Darlington New Nuclear Project, dated January 24, 2024 and received on January 24, 2024 and all supporting documentation and information.
3. BWRX-300 DNNP Development Stormwater Management Design Report dated January 31, 2024, including calculations and engineering drawings, prepared by AtkinsRéalis Canada Inc.
4. Stormwater Management Report for DNNP - East West Gravel Road and Second Line Road dated March 12, 2024 and revised June 10, 2024, including calculations and engineering drawings, prepared by Tetra Tech..
5. Addendum to BWRX-300 DNNP Development Stormwater Management Design Report dated April 29, 2024, including calculations and engineering drawings, prepared by AtkinsRéalis Canada Inc.
6. Environmental Compliance Approval Application for Industrial Sewage Works signed by Dragan Popovic, Senior Vice President Darlington New Nuclear Project, dated October 31, 2024 and received on November 7, 2024 and all supporting documentation and information.
7. Area 16A & 16B Stormwater Management Design Report dated August 15, 2024, including calculations and engineering drawings, prepared by AtkinsRéalis Canada Inc.
8. Stormwater Management Report for Darlington New Nuclear Project – Units 2,3, &4 Grade Lowering dated September 30, 2024, including calculations and engineering drawings, prepared by Tetra Tech.
9. Memo "DNNP Units 2, 3 & 4 - Diversion of CCW South Swale", dated January 31, 2025, including calculations and engineering drawings, prepared by Tetra Tech.

Schedule B

Limited Operational Flexibility Criteria for Modifications to Works

1. The modifications to Works approved under an Environmental Compliance Approval (Approval) that are permitted under the Limited Operational Flexibility (LOF), are outlined below and are subject to the LOF conditions in the Approval, and require the submission of the Notice of Modifications. If there is a conflict between the Works listed below and the Terms and Conditions in the Approval, the Terms and Conditions in the Approval shall take precedence.
 - a. Sewage Pumping Stations
 - i. Alter pumping capacity by adding or replacing equipment where new equipment is located within an existing sewage treatment plant site or an existing sewage pumping station site, provided that the modifications do not result in an increase of the sewage treatment plant Rated Capacity and the existing flow process and/or treatment train are maintained, as applicable.
 - ii. Forcemain relining and replacement with similar pipe size where the nominal diameter is not greater than 1,200mm.
 - b. Sewage Treatment Process
 - i. Installing additional chemical dosage equipment including replacing with alternative chemicals for pH adjustment or coagulants (non-toxic polymers) provided that there are no modifications of treatment processes or other modifications that may alter the intent of operations and may have negative impacts on the effluent quantity and quality.
 - ii. Expanding the buffer zone between a sanitary sewage lagoon facility or land treatment area and adjacent uses provided that the buffer zone is entirely on the proponent's land.
 - iii. Optimizing existing sanitary sewage lagoons with the purpose to increase efficiency of treatment operations provided that existing sewage treatment plant rated capacity is not exceeded and where no land acquisition is required.
 - iv. Optimizing existing sewage treatment plant equipment with the purpose to increase the efficiency of the existing treatment operations, provided that there are no modifications to the Works that result in an increase of the approved Rated Capacity, and may have adverse effects to the effluent quality or location of the discharge.
 - v. Replacement, refurbishment of previously approved equipment in whole or in part with Equivalent Equipment, like-for-like of different make and model, provided that the firm capacity, reliability, performance standard, level of quality and redundancy of the group of equipment is kept the same. For clarity purposes, the following equipment can be considered under this provision: pumps, screens, grit separators, blowers, aeration equipment, sludge

thickeners, dewatering equipment, UV systems, chlorine contact equipment, bio-disks, and sludge digester systems.

c. Sewage Treatment Plant Outfall

- i. Replacement of discharge pipe with similar pipe size provided that the outfall location is not changed.

d. Stormwater Management System

- i. Modifications of Works to service the Darlington Creek sub-watershed within the existing approved site drainage area shall be subject to the following limitations:
 - any increase of the average level of imperviousness established in the previously approved design shall not exceed 5%.
 - Stormwater peak discharge rates towards Darlington Creek resulting from modifications in accordance with this condition shall not exceed allowable release rates established in the previously approved design.
- ii. Modifications of Works to service the Osborne Creek sub-watershed within the existing approved site drainage area shall be subject to the following limitations:
 - any increase of the average level of imperviousness established in the previously approved design shall not exceed 5%.
 - Stormwater peak discharge rates towards Osborne Creek resulting from modifications in accordance with this condition shall be limited to a maximum 5% increase compared to release rates established in the previously approved design.
- iii. Installation of new oil grit separators.
- iv. Additional Works servicing roads or temporary laydown areas within the existing approved drainage area for the collection, transmission, treatment and disposal of stormwater towards a previously approved outlet, shall be subject to the following limitations:
 - Works shall not service a drainage area exceeding 2 hectares.
 - Works may include storm sewers, culverts, ditches and enhanced grassed swales as well as associated appurtenances as defined in O.Reg. 525/98.
 - Works shall be designed to provide enhanced level treatment and quantity control within the Darlington Creek Watershed and normal level treatment within the Osborne Creek Watershed.

e. Sanitary Sewers

- i. Pipe relining and replacement with similar pipe size within the Sewage Treatment Plant site, where the nominal diameter is not greater than 1,200mm.

f. Pilot Systems

- i. Installation of pilot systems for new or existing technologies provided that:

- any effluent from the pilot system is discharged to the inlet of the sewage treatment plant or hauled off-site for proper disposal,
- any effluent from the pilot system discharged to the inlet of the sewage treatment plant or sewage conveyance system does not significantly alter the composition/concentration of the influent sewage to be treated in the downstream process; and that it does not add any inhibiting substances to the downstream process, and
- the pilot system's duration does not exceed a maximum of two years; and a report with results is submitted to the Director and District Manager three months after completion of the pilot project.

2. Works that are exempt from section 53 of the OWRA by O. Reg. 525/98 continue to be exempt and are not required to follow the notification process under this Limited Operational Flexibility.
3. Normal or emergency operational modifications, such as repairs, reconstructions, or other improvements that are part of maintenance activities, including cleaning, renovations to existing approved Works equipment, provided that the modification is made with Equivalent Equipment, are considered pre-approved.
4. The modifications noted in section (3) above are not required to follow the notification protocols under Limited Operational Flexibility, provided that the number of pieces and description of the equipment as described in the Approval does not change.

Form 1
Notice of Modification to Sewage Works

RETAIN COPY OF COMPLETED FORM AS PART OF THE ECA AND SEND A COPY TO THE DISTRICT MANAGER.

Part 1 – Environmental Compliance Approval (ECA) with Limited Operational Flexibility <i>(Insert the ECA's owner, number and issuance date and notice number, which should start with "01" and consecutive numbers thereafter)</i>		
ECA Number	Issuance Date (mm/dd/yy)	Notice number (if applicable)
ECA Owner		Municipality

Part 2: Description of the modifications as part of the Limited Operational Flexibility <i>(Attach a detailed description of the sewage works)</i>
<p>Description shall include:</p> <ol style="list-style-type: none"> 1. A detail description of the modifications and/or operations to the sewage works (e.g. sewage work component, location, size, equipment type/model, material, process name, etc.) 2. Confirmation that the anticipated environmental effects are negligible. 3. List of updated versions of, or amendments to, all relevant technical documents that are affected by the modifications as applicable, i.e. submission of documentation is not required, but the listing of updated documents is (design brief, drawings, emergency plan, etc.)

Part 3 – Declaration by Professional Engineer	
<p>I hereby declare that I have verified the scope and technical aspects of this modification and confirm that the design:</p> <ol style="list-style-type: none"> 1. Has been prepared or reviewed by a Professional Engineer who is licensed to practice in the Province of Ontario; 2. Has been designed in accordance with the Limited Operational Flexibility as described in the ECA; 3. Has been designed consistent with Ministry's Design Guidelines, adhering to engineering standards, industry's best management practices, and demonstrating ongoing compliance with s.53 of the Ontario Water Resources Act; and other appropriate regulations. <p>I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate</p>	
Name (Print)	PEO License Number
Signature	Date (mm/dd/yy)
Name of Employer	

Part 4 – Declaration by Owner	
<p>I hereby declare that:</p> <ol style="list-style-type: none"> 1. I am authorized by the Owner to complete this Declaration; 2. The Owner consents to the modification; and 3. This modifications to the sewage works are proposed in accordance with the Limited Operational Flexibility as described in the ECA. 4. The Owner has fulfilled all applicable requirements of the <i>Environmental Assessment Act</i>. <p>I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate</p>	
Name of Owner Representative (Print)	Owner representative's title (Print)
Owner Representative's Signature	Date (mm/dd/yy)

EPB Form

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 8085-D42GTJ issued on June 26, 2024.

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me, the Ontario Land Tribunal and in accordance with Section 47 of the *Environmental Bill of Rights*, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the *Environmental Protection Act* provides that the notice requiring the hearing ("the Notice") shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the *Environmental Protection Act*, a hearing may not be available with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

Registrar*
Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5
OLT.Registrar@ontario.ca

and

The Minister of the Environment,
Conservation and Parks
777 Bay Street, 5th Floor
Toronto, Ontario
M7A 2J3

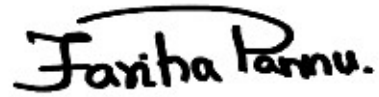
and

The Director appointed for the purposes of
Part II.1 of the *Environmental Protection Act*
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or www.olt.gov.on.ca**

This instrument is subject to Section 38 of the *Environmental Bill of Rights*, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at <https://ero.ontario.ca/>, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the *Environmental Protection Act*.
DATED AT TORONTO this 5th day of March, 2025

A handwritten signature in black ink that reads "Fariha Pannu." The signature is written in a cursive style with a large, sweeping 'F' and a trailing dot at the end.

Fariha Pannu, P.Eng.

Director

appointed for the purposes of Part II.1 of the
Environmental Protection Act

MS/

c: District Manager, MECP York-Durham
Douglas Kerr, WSP Canada Inc.