

**ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER 6606-DNERW7  
Issue Date: February 20, 2026

Aecon Construction Group Inc and Kiewit Nuclear Canada  
Corp. carrying on business under the general partnership  
firm name Aecon Kiewit Nuclear Partners  
1 Holt Rd S  
Bowmanville, Ontario  
L1C 3Z8

Site Location: 1 Holt Road South  
The Municipality of Clarington, Regional Municipality of  
Durham  
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:*

establishment of sewage works for the collection, transmission, treatment and disposal of cooling water for a tunnel boring machine (TBM) and for construction water management that includes a slurry treatment plant (STP) and water treatment plant (WTP) having a maximum discharge rate of 40 m<sup>3</sup>/h to the site ditch and ultimately to Lake Ontario, consisting of the following:

**PROPOSED WORKS**

**Slurry Treatment Plant (STP)**

a separation plant with DN300 slurry inlet pipe, cyclone pumps, screen machines, screen underflow tanks, collecting and balancing tanks, together with interconnected piping, recirculating acceptable slurry back to the TBM and discharging slurry with unacceptable properties to the waste suspension tank and then to the centrifuge unit described below, and with dry solids transferred by conveyor and to be managed according to the Soil Management Plan;

- a centrifuge unit with a 650 mm bowl centrifuge, flocculant dosing station (3.3 m<sup>3</sup>/h capacity), centrate water collection tank (10 m<sup>3</sup> capacity) and transfer pump (30 m<sup>3</sup>/h capacity), together with interconnected piping, discharging centrate water to the centrate storage tank described below, and dry solids discharged (12-15 tonnes/h capacity) to the muck pit to be managed according to the Soil Management Plan;
- a storage tank system including a fresh suspension tank (150 m<sup>3</sup> capacity), fresh water tank (250 m<sup>3</sup>

capacity) connected to the municipal supply, waste suspension tank (500 m<sup>3</sup> capacity) discharging to the centrifuge unit, and centrate water tank (250 m<sup>3</sup> capacity) with 152 mm outlet pipe, level sensors and controls, discharging water to the jobsite wastewater collection basin described below at a maximum rate of 300 to 350 m<sup>3</sup>/h or directly to the Water Treatment Plant (WTP) at a maximum rate of 40 m<sup>3</sup>/h;

- a jobsite wastewater collection basin that is lined with reinforced shotcrete with level sensors and controls having a capacity of 235 m<sup>3</sup> (17.1 m by 17.2 m by 1.7 m deep, with sloped sidewalls).

### **Water Treatment Plant (WTP)**

a water treatment plant with a treatment capacity of 40 m<sup>3</sup>/h, treating effluent from the STP and discharging treated effluent to the site ditch and ultimately to Lake Ontario, consisting of the following:

- one (1) feed pump installed in the jobsite wastewater collection basin having a maximum rated capacity of 40 m<sup>3</sup>/hr, discharging to the incoming buffer tank described below;
- one (1) incoming buffer tank having a capacity of 6.5 m<sup>3</sup> equipped with level control, automatic pH, turbidity and temperature monitoring to control the six (6) demand-dosed effluent pumps (acid for first pH control, antifoam, MEL coagulant for heavy metal control, aluminum polychloride for solid level and metal control, phosphorus coagulant for phosphorus control and ferrous sulphate for chrome control), discharging via transfer pump to the linear thickener described below;
- one (1) linear thickener with automatic flocculant dosing, including lime addition (as needed) and turbidity monitoring, with clean water overflowing to the treated water buffer tank having a capacity of 2.7 m<sup>3</sup> and pumped to the sand filters described below, and slurry pumped to the slurry buffer tank and once full, to the filter press described below;
- three (3) proposed sand filter pressure vessels (2 active, 1 for cleaning/backwash with automatic cleaning system monitoring/controls), each having a volume of 4 m<sup>3</sup>, together with interconnected piping and underdrain collection piping, discharging to the granular activated carbon filters described below,
- three (3) proposed granular activated carbon filters (2 active, 1 for cleaning/backwash with automatic cleaning system monitoring/controls), each with a volume of approximately 4 m<sup>3</sup>, together with interconnected piping and underdrain collection piping, discharging to the 3-way bypass valve described below;
- one (1) transfer pump having a maximum rated capacity of 40m<sup>3</sup>/h, with 3-way bypass valve, discharging to jobsite storage tank for re-use, or to site stormwater system (ditch to Lake Ontario), or to the jobsite wastewater collection basin for re-treatment through the WTP;
- one (1) filter press to dewater the slurry including 10 filter plates measuring 630 mm by 630 mm, with solid filter cake collection for disposal and filtrate water return by 635 mm diameter pipe to the incoming buffer tank;

including erosion/sedimentation control measures during construction and all other pipes, controls and

appurtenances essential for the proper operation of the aforementioned Works;  
all in accordance with the submitted supporting documents listed in Schedule "A" forming part of this Approval.

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

"Approval" means this entire document and any schedules attached to it, and the application;

"District Manager" means the District Manager of the appropriate local District Office of the Ministry, where the Works are geographically located;

"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;

"EPA" means the Environmental Protection Act , R.S.O. 1990, c.E.19, as amended;

"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;

"Owner" means Aecon Construction Group Inc and Kiewit Nuclear Canada Corp. carrying on business under the general partnership firm name Aecon Kiewit Nuclear Partners, and its successors and assignees;

"OWRA" means the Ontario Water Resources Act , R.S.O. 1990, c. O.40, as amended;

"Proposed Works" means the sewage works described in the Owner's application, this Approval, to the extent approved by this Approval;

"Regional Director" means the Regional Director of the Eastern Region of the Ministry;

"Soil Management Plan" means the site specific soils management plan listed in Schedule A of this approval;

"Works" means the sewage works described in the Owner's application, and this Approval, and includes Proposed Works.

*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 PROVISIONS

(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 conditions herein and shall take all reasonable measures to

ensure any such person complies with the same.

(2) Except as otherwise provided by these conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with the description given in this Approval, and the application for approval of the Works.

(3) Where there is a conflict between a provision of any document in the schedule referred to in this Approval and the conditions of this Approval, the Conditions in this Approval shall take precedence, and where there is a conflict between the documents in the schedule, the document bearing the most recent date shall prevail.

(4) Where there is a conflict between the documents listed in the Schedule submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

(5) The Conditions of this Approval are severable. If any Condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

## **2. EXPIRY OF APPROVAL**

(1) The approval issued by 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.

## **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 Owner;

(b) change of address of the 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.B17 shall be included in the notification to the District Manager;

(d) change of name of the corporation where the Owner is or at any time becomes a 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 to the District Manager;

(2) In the event of any change in ownership of the Works, other than a change to a successor municipality, 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.

#### **4. OPERATIONS MANUAL**

(1) The Owner shall prepare an operations manual prior to the commencement of operation of the Works, that includes, but not necessarily limited to, the following information:

(a) operating 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 spill, bypasses and any other abnormal situations and for notifying the District Manager; and

(e) complaint procedures for receiving and responding to public complaints.

(2) The Owner shall maintain the operations manual up to date through revisions undertaken from time to time and retain a copy at the location of the sewage works. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.

#### **5. OPERATIONS AND MAINTENANCE**

(1) The Owner shall ensure that at all times, the Works and related equipment and appurtenances which are installed or used to achieve compliance with this Approval are properly operated and maintained.

(2) The Owner shall ensure that the treatment system is at minimum inspected annually and maintained according to the manufacturer's recommendations;

(3) The Owner shall employ for the overall operation of the Works a person who possesses the level of training and experience sufficient to allow safe and environmentally sound operation of the Works.

(4) The Owner shall maintain a logbook to record the results of Operation and Maintenance activities specified in the above subclauses, and shall keep the logbook at the site and make it available for inspection by the Ministry staff.

(5) 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 monitoring activities required by this Approval.

#### **6. EFFLUENT LIMITS**

(1) The Owner shall operate and maintain the Sewage Treatment Plant such that compliance limits for the Final Effluent parameters listed in the table(s) included in Schedule B are met.

#### **7. EFFLUENT MONITORING AND RECORDING**

The Owner shall, upon commencement of operation of the sewage works, carry out the following monitoring program:

- (1) All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.
- (2) Samples shall be collected and analyzed at the sampling points (Inlet and Outlet of the WTP), at the sampling frequencies and using the sample type specified in Schedule C.
- (3) TSS and pH should be monitored daily at least for the first two weeks of the plant operation and then twice per week when the plant is in normal operation.
- (4) Metals, inorganics, BTEX, PHCs, and phenols shall be monitored on a weekly basis for the initial three-month period. If measured concentrations remain consistently below the established limits during this period, the sampling frequency may be reduced to monthly for the remainder of the monitoring program.
- (5) The measurement frequency and monitoring parameters specified in this Condition 7, may, after twelve months of monitoring in accordance with this Condition, be modified by the Director in writing from time to time.
- (6) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following:
  - (a) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (August 1994), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions; and
  - (b) the publication "Standard Methods for the Examination of Water and Wastewater" (20th edition) as amended from time to time by more recently published editions.
- (7) A continuous flow measuring device shall be installed and maintained to measure the flowrate of the influent to or effluent from the Works, with an accuracy to within plus or minus 15 per cent of the actual flowrate for the entire design range of the flow measuring device and the Owner shall measure, record and calculate the flowrate for each effluent stream on each day of sampling.
- (8) 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 monitoring activities required by this certificate.

## **8. REPORTING**

- (1) The Owner shall report to the District Manager or designate, any exceedance of any parameter specified in Condition 6 orally, as soon as reasonably possible, and in writing within seven (7) days of the exceedance.

(2) In addition to the obligations under Part X of the *Environmental Protection Act*, the Owner shall, within 10 working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, bypass or loss of any product, by-product, intermediate product, oil, solvent, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.

(3) The Owner shall prepare, and submit upon request, a performance report on an annual basis within sixty (60) days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the works and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:

(a) a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 6, including an overview of the success and adequacy of the sewage works;

(b) a description of any operating problems encountered and corrective actions taken;

(c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the sewage works;

(d) a summary of any effluent quality assurance or control measures undertaken in the reporting period;

(e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment; and

(f) any other information the District Manager requires from time to time.

## **9. SPILL CONTINGENCY PLAN**

(1) Within six (6) months from the issuance of this Approval, the Owner shall implement a spill contingency plan - that is a set of procedures describing how to mitigate the impacts of a spill within the area serviced by the Works. The Owner shall, upon request, make this plan available to Ministry staff. This plan shall include as a minimum:

(a) the name, job title and location (address) of the Owner, person in charge, management or person(s) in control of the facility;

(b) the name, job title and 24-hour telephone number of the person(s) responsible for activating the spill contingency plan;

(c) a site plan drawn to scale showing the facility, nearby buildings, streets, catch-basins and manholes, drainage patterns (including direction(s) of flow in storm sewers), any receiving

body(ies) of water that could potentially be significantly impacted by a spill and any features which need to be taken into account in terms of potential impacts on access and response (including physical obstructions and location of response and clean-up equipment);

(d) steps to be taken to report, contain, clean up and dispose of contaminants following a spill;

(e) a listing of telephone numbers for: local clean-up company(ies) who may be called upon to assist in responding to spills; local emergency responders including health institution(s); and MOE Spills Action Centre 1-800-268-6060;

(f) Materials Safety Data Sheets (MSDS) for each hazardous material which may be transported or stored within the area serviced by the Works;

(g) the means (internal corporate procedures) by which the spill contingency plan is activated;

(h) a description of the spill response training provided to employees assigned to work in the area serviced by the Works, the date(s) on which the training was provided and by whom;

(i) an inventory of response and clean-up equipment available to implement the spill contingency plan, location and, date of maintenance/replacement if warranted; and

(j) the date on which the contingency plan was prepared and subsequently, amended.

(2) The spill contingency plan shall be kept in a conspicuous, readily accessible location on-site.

(3) The spill contingency plan shall be amended from time to time as required by changes in the operation of the facility.

## **Schedule A**

1. Application for Approval of Industrial Sewage Works dated May 20, 2025 and received on June 17, 2025, submitted by Nicolas Granjon, AECON Group Inc.
2. Site Specific Soils Management Plan dated October 9, 2024, prepared by SMR-X Team of AECON Group Inc.
3. Engineering description and design drawings submitted by Susan Froud of AtkinsRéalis on December 10, 2025.

## Schedule B

### Final Effluent Compliance Limits (At the Outlet of WTP)

Final Effluent Parameter	Averaging Calculator	Limit (maximum unless otherwise indicated)
Total Suspended Solids (TSS)	Monthly Average Effluent Concentration	25 mg/L
Total Hydrocarbons	Monthly Average Effluent Concentration	1900 µg/L
Phenols	Monthly Average Effluent Concentration	1.0 µg/L
Aluminum	Monthly Average Effluent Concentration	100 µg/L
Cadmium	Monthly Average Effluent Concentration	0.5 µg/L
Chrome VI	Monthly Average Effluent Concentration	1.0 µg/L
Cobalt	Monthly Average Effluent Concentration	0.9 µg/L
Copper	Monthly Average Effluent Concentration	5.0 µg/L
Total Iron	Monthly Average Effluent Concentration	300 µg/L
Lead	Monthly Average Effluent Concentration	5.0 µg/L
Manganese	Monthly Average Effluent Concentration	250 µg/L
Nickel	Monthly Average Effluent Concentration	25 µg/L
Zinc	Monthly Average Effluent Concentration	30 µg/L
Boron	Monthly Average Effluent Concentration	1.5 mg/L
Benzene	Monthly Average Effluent Concentration	100 µg/L
Oil and Grease	Monthly Average Effluent Concentration	10 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	30 µg/L
pH	Single Sample Result	between 6.5 - 8.5 inclusive

## Schedule C

### Monitoring Program

#### Influent and Final Effluent Monitoring

Parameters	Sample Type	Minimum Frequency*
Total Suspended Solids (TSS)	Grab	Daily for the first two weeks of the plant operation Twice per week during normal operation
Petroleum Hydrocarbon (PHC) Fractions 1-4	Grab	Weekly
BTEX	Grab	Weekly
Phenols	Grab	Weekly
Aluminum	Grab	Weekly
Cadmium	Grab	Weekly
Chrome VI	Grab	Weekly
Cobalt	Grab	Weekly
Copper	Grab	Weekly
Total Iron	Grab	Weekly
Lead	Grab	Weekly
Manganese	Grab	Weekly
Nickel	Grab	Weekly
Zinc	Grab	Weekly
Boron	Grab	Weekly
Benzene	Grab	Weekly
Oil and Grease	Grab	Weekly
Total Phosphorus	Grab	Weekly
pH**	Grab/Probe/Analyzer	Daily for the first two weeks of the plant operation Twice per week during normal operation

\*Monitoring frequency might be changed according to Condition 7;

\*\*pH of the Influent and Final Effluent shall be determined in the field.

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

1. Condition 1 is imposed to ensure that the works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Certificate and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.
2. Condition 2 is included to ensure that the Works are constructed in a timely manner so that standards applicable at the time of Approval of the Works are still applicable 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 a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the owner and made available to the Ministry. Such a manual is an integral part of the operation of the works. Its compilation and use should assist the owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the owner's operation of the work.
5. Condition 5 is included to require that the Works be properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented.
6. Condition 6 is imposed to ensure that the effluent discharged from the works to the Tributary No. 3 of South Meade Creek meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver.
7. Condition 7 is included to require the owner to demonstrate on a continual basis that the quality and quantity of the effluent from the approved works is consistent with the effluent limits specified in the Approval and that the approved works does not cause any impairment to the receiving watercourse.
8. Condition 8 is included to provide a performance record for future references and to ensure that the Ministry is made aware of problems as they arise, so that the Ministry can work with the Owner in resolving the problems in a timely manner.
9. Condition 9 is included to ensure that the Owner will implement the Spill Contingency Plan, such that the environment is protected and deterioration, loss, injury or damage to any person(s) or property is prevented.

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.

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](http://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 20th day of February, 2026



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Neryed Ragbar, P.Eng.  
Director  
appointed for the purposes of Part II.1 of the  
*Environmental Protection Act*

YZ/

c: District Manager, MECP York-Durham District Office  
Susan Froud, AtkinsRealis