AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 2713-DEAML6
Issue Date: August 5, 2025

SSI Canada Property GP Inc. operating as Sun Communities Inc.
27777 Franklin Road, No. 200
Southfield, Michigan
USA 48034

Site Location: 490 Empire Road
City of Port Colborne, Regional Municipality of Niagara
L0S 1R0

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:

alteration, usage and operation of existing non-municipal Works, for the treatment of sanitary sewage from Sherkston Shores Resort and former Pleasant Beach Campground property and disposal of treated effluent to Lake Erie via a Sewage Treatment Plant (Sherkston's Wastewater Treatment Plant (WWTP)) and Final Effluent disposal facilities as follows:

Classification of Sewage Treatment Plant: Secondary

Classification of Sewage Treatment Plant (Prior to Completion of Construction of All Proposed Works): Secondary

Classification of Sewage Treatment Plant (Upon Completion of Construction of All Proposed Works): Secondary

Details of Service Area:

- **Type of Occupancy**: Commercial (seasonal tourist resort)
- **Type and Number of Units:**
  - Seasonal park modular home sites - approximately 1,650 sites
  - Seasonal cottage/cabin rentals (short stay, fully serviced) - approximately 78 sites;
  - Seasonal Tent sites (un-serviced, communal washroom) - approximately 46 sites;
  - Seasonal recreational vehicle (trailer/RV) sites, unserviced (dump station) - approximately 99

sites;

- Seasonal recreational vehicle (trailer/RV) serviced approximately 67 sites;
- Resort amenities including laundry facilities, public washroom and shower facilities, restaurants, pool/splash pad facilities, fitness centre, and general store; and
- Resort offices;
- Seasonal recreational vehicles approximately 115 sites (former Pleasant Beach)

Design Capacity of Sewage Treatment Plant:

Design Capacity with All Treatment Trains in Operation	Prior to Completion of Construction of All Proposed Works	Upon Completion of Construction of All Proposed Works
Rated Capacity	600 m^3/d	1,000 m^3/d

Influent and Imported Sewage

Receiving Location	Types
In Collection System	Sanitary Sewage
At Sewage Treatment Plant	None

PROPOSED WORKS:

COLLECTION AND TRANSMISSION WORKS

Gravity Sanitary Sewers (Pleasant Beach Campground)

- 410 metre long 100 millimetre diameter sanitary sewers and 410 metre long 150 millimetre diameter sanitary sewers, discharging into four (4) individual duplex pump stations and one (1) ejection pit located at southern portion of the Site;
- 294 metre long 50 millimetre diameter and 298 metre long 76 millimetre diameter forcemains, discharging into existing Golf Village Pump Station located in the Quarry Meadows section of Sherkston Shores.

Forest Grove Pump Station

- three (3) additional 25 m^3 in-line storage tanks at the Forest Grove Pump Station;

- one (1) automated stepping fine screen at the Forest Grove Pump Station;

Sherkston's Wastewater Treatment Plant (WWTP) - Phase III

Expanded Sewage Treatment Plant (Expansion from Rated Capacity of 600 to 1,000 cubic metres per day)

- **Head Works**
  - replacement of the existing flow splitting chamber with a new splitter box, consisting six (6) 150 millimetre diameter outlet pipes, each outlet equipped with a manual gate valve;
- **Secondary Treatment System**
  - two (2) additional aeration tanks (aeration tank #4 and aeration tank #5), each having an approximate volume of 320 cubic metres, located in the outer ring of the circular treatment plant, with an outer diameter of 16.5 metre and inner diameter of 7.7 metre;
  - two (2) dissolved oxygen (DO) sensors/analyzer to be installed in the extended aeration chamber;
  - two (2) fine bubble membrane air diffuser systems;
  - three (3) air blower assemblies (two (2) duty and one (1) standby) providing air to aeration tanks and aerobic digester;
  - one (1) 7.7 metre diameter secondary clarifier, equipped with sludge and scum scraping mechanism;
  - one (1) secondary effluent pump station complete with duplex pumps rated at 20.8 L/s, feeding secondary effluent to the existing UV disinfection system;
  - one (1) sludge holding tank with an approximate volume of 115 cubic metres equipped with a coarse bubble aeration system, located in the outer ring of the plant, with an outer diameter of 16.46 metre and inner diameter of 7.7 m;
  - one (1) 100 millimetre waste activated sludge (WAS) airlift pump, pumping WAS from secondary clarifier to aerobic sludge holding tank;
  - one (1) 100 millimetre scum airlift pump, pumping scum from scum box to aerobic sludge holding tank;
  - one (1) 80 millimetre supernatant airlift pump, pumping supernatant from aerobic sludge holding tank to the influent splitter box;
- **Post-Secondary Treatment System**
  - one (1) gravity based self cleaning disc filter, with filter area of 6 m^2, and the hydraulic capacity of 1,800 m^3/day, discharging effluent to the UV disinfection system.

WORKS TO BE DECOMMISSIONED

The following works to be decommissioned at the Pleasant Beach Campground Property:

Sewage System No. 1 (serving the Central Comfort Station)

- a two-compartment 4,500 L concrete septic tank;
- a 3,600 L concrete pump tank;
- a raised septic field with imported permeable soils, 305 metre of 100 millimetre diameter distribution piping (11 runs total).

Sewage System No. 2 (serving the Office / Residence and South Washrooms)

- two-compartment concrete septic tank;
- Effluent is pumped to an in-ground septic field.

Sewage System No. 3 (South Greywater System)

- Greywater subgrade tank and greywater pit/piping.

EXISTING WORKS

COLLECTION AND TRANSMISSION WORKS

Existing PVC Gravity Sanitary Sewers

- approximately 424 metres of 150 millimetre diameter sanitary sewers to service twenty-two (22) transient sites in Quarry Ledge area of the Sherkston Shores site;
- approximately 208 metres of 100 millimetre diameter and 32 metres of 150 millimetre diameter sanitary sewers to service thirty (30) sites at Meadow Lanes West area of the site;
- approximately 76 metres of 100 millimetre diameter and 195 metres of 150 millimetre diameter sanitary sewers on Shady Lane;
- sanitary sewers for 292 sites in Quarry Meadows of which 76 sites discharge to the Golf Village Pumping Station and the remaining 216 sites discharge to the Quarry Pumping Station, with the 76 sites area consisting of approximately 375 metres of 100 millimetre diameter and 340 metres of 150 millimetre diameter sanitary sewers, and the 216 sites area consisting of approximately 225 metres of 100 millimetre diameter and 1,700 metres of 150 millimetre diameter sanitary sewers;
- approximately 275 metres of 200 millimetre diameter sewers along the south edge of Indian Trails and Forest Grove areas of the park;
- approximately 7,103 metres of 150 millimetre diameter and 12,629 metres of 100 millimetre diameter sewers located through out the park;

- approximately 140 metres of 100 millimetre diameter and 79 metres of 150 millimetre diameter sewers in the Evergreen Village area of the park;
- approximately 70 metres of 100 millimetre diameter and 308 metres of 150 millimetre diameter sanitary sewers in the Quarry Ridge RV area of the park;

Existing Sewage Pumping Stations

Existing eighteen (18) precast concrete sewage pumping stations complete with dual pumps (one for duty and another for standby), level control and above grade electrical panels, comprising:

- Golf Village Pumping Station, with a design flow rate of 8.0 litres per second against a total dynamic head (TDH) of 9.5 metres, discharging via a 100 millimetre diameter forcemain to the existing Quarry Pumping Station;
- Sunset Pumping Station, with a design flow rate of 11.2 litres per second against a TDH of 10 metres;
- Wyldewood #1 Pumping Station, with a design flow rate of 7.8 litres per second against a TDH of 6.8 metres;
- Wyldewood #2 Pumping Station, with a design flow rate of 12 litres per second against a TDH of 5.5 metres;
- Mallard Pumping Station, with a design flow rate of 12.6 litres per second against a TDH of 4.4 metres;
- Cemetery Pumping Station, with a design flow rate of 12 litres per second against a TDH of 5 metres;
- Elcan Pumping Station, with a design flow rate of 7.8 litres per second against a TDH of 6.8 metres;
- Fiddlers Pumping Station, with a design flow rate of 9.3 litres per second against a TDH of 14 metres;
- Quarry Pumping Station, with a design flow rate of 9.3 litres per second against a TDH of 14 metres;
- Forest Grove Pumping Station, the main site pumping station, with a design flow rate of 15.5 litres per second against a TDH of 12 metres;
- Quarry 2 Pumping Station**,** with a design flow rate of 0.06 l/s against a TDH of 6 metres;
- Turtle Walk Pumping Station, with a design flow rate of 0.2 l/s against a TDH of 11 metres;

Additional small pumping stations with low h.p. pumps:

- Surf Side Pumping Station;
- Gullivers Pumping Station;
- Trillium Pumping Station;
- New Holland Pumping Station;

- Surf Loop Pumping Station;
- Ship Wreck Pumping Station;

Existing PVC Sanitary forcemains

- approximately 657 metres of 150 millimetre diameter forcemain from Forest Grove Pumping Station to the Sewage Treatment Plant;
- approximately 618 metres of 125 millimetre diameter forcemain from Quarry Pumping Station to Indian Trails sanitary sewers;
- approximately 2,340 metres of 100 millimetre diameter forcemains;
- approximately 329 metres of 50 millimetre diameter forcemains;
- approximately 177 metres of 50 millimetre diameter forcemain in Turtle Walk;
- approximately 40 metres of 50 millimetre diameter forcemain in Quarry 2;

Existing Holding Tanks

Existing seventeen (17) holding tanks for in-line equalization or storage with all contents feeding back into the pumping stations for transfer to the Sewage Treatment Plant for treatment and disposal, comprising:

- six (6) 25,000 litres each holding tanks at Forest Grove Pumping Station;
- one (1) 22,000 litre holding tank at Sunset Pumping Station;
- two (2) 22,000 litres each holding tanks at Fiddlers Pumping Station;
- one (1) 5,000 litre holding tank at Surf Side Pumping Station;
- two (2) 22,000 litres each holding tanks at Elcan Pumping Station;
- one (1) 22,000 litre holding tank at Turtle Walk Pumping Station; and
- four (4) 22,000 litres each holding tanks at Quarry Pumping Station.

TREATMENT WORKS

Sewage Treatment Plant with Surface Water Discharge

A seasonally-operated Sewage Treatment Plant operating from early/mid April until early/mid November in any calendar year, with a combined Rated Capacity of 600 cubic metres per day, consisting of two (2) packaged treatment plants using the extended aeration process, the originally approved Works with an average daily sewage flow of 200 cubic metres per day and the expanded plant with the addition of a second packaged plant with an average daily sewage flow of 400 cubic metres per day to increase the combined Rated Capacity to 600 cubic metres per day, consisting of the following:

- **Head Works**
  - an influent distribution flow splitting chamber receiving sewage from the Forest Grove (main

site) Pumping Station and splitting the flow between the original plant and the expanded plant;

- **Influent Flow Measurement and Sampling Point**
  - one (1) 150 millimetre diameter influent magnetic flowmeter located at the outlet of the Forest Grove forcemain, on the riser pipe attached to the influent distribution flow splitting chamber at the sewage treatment plant.
  - Influent sampling at the sampling tap on Forest Grove raw sewage forcemain at the Sewage Treatment Plant.

- **Original Sewage Treatment Plant** (approved in 1995 amended in 1996 to allow construction, with a daily sewage flow of 200 cubic metres per day)

  A package wastewater treatment plant with extended aeration process, designed to treat an average daily flow of 200 cubic metres per day, consisting of the following:

  - one (1) aeration tank with an approximate volume of 243 cubic metres located in the outer ring of the circular treatment plant;
  - a coarse bubble aeration system and two (2) blowers (duty and standby) capable of transferring a minimum of 75 kilograms per day of oxygen to the contents of the aeration tank (blowers rated for 350 standard cubic feet per minute (SCFM) at a pressure of 6 pounds per square inch, gauge pressure (psig) powered by 15 horsepower (hp) electric motors running on a 575 volt (V) supply, blowers equipped with inlet and discharge silencers;
  - one (1) secondary clarifier of dimensions 6 metres in diameter by 3.6 metres height (SWD) located in the centre ring of the plant, equipped with sludge and scum scraping mechanism and air lift pumps for handling scum, returned activated sludge (RAS) and waste activated sludge (WAS); and
  - one (1) aerobic sludge digester tank with an approximate volume of 41 cubic metres located in the outer ring of the plant, equipped with a coarse bubble aeration system and air lift pumps for handling sludge tank supernatant draw off;

- **Expanded Sewage Treatment Plant** (approved per amendment issued in 2000 allowing expansion from Rated Capacity of 200 to 600 cubic metres per day)

  A package wastewater treatment plant with extended aeration process, designed to treat an average daily flow of 400 cubic metres per day, consisting of the following:

  - two (2) aeration tanks each having an approximate volume of 322 cubic metres located in the outer ring of the circular treatment plant;
  - a fine bubble membrane air diffuser systems and three (3) additional blowers (two (2) duty, one (1) standby), each rated for approximately 330 SCFM at a pressure of eight 8 psig and powered by 25 hp electric motors running on a 575 V power supply, blowers equipped with inlet and discharge silencers;
  - one (1) secondary clarifier 7.7 metres in diameter located in the centre ring of the plant, equipped

with sludge and scum scraping mechanism;

- air lift pumps for handling scum, RAS and WAS; and
- one (1) aerobic sludge digester tank with an approximate volume of 115 cubic metres equipped with a coarse bubble aeration system, located in the outer ring of the plant;

- **Effluent Disinfection (Common for Both Plants)**
  - one (1) UV disinfection system capable of handling a Peak Daily Flow of 2000 cubic metres per day, and an average daily flow of 1000 cubic metres per day;
- **Chemical Treatment (Common for Both Plants)**
  - one (1) 5,700 litre chemical storage tank (aluminum or ferric/ferrous chemical, or other equivalent coagulant chemical storage);
  - three (3) chemical metering pumps, with one (1) shelf spare standby pump, for phosphorus control;
  - one (1) 3,000 litre storage tank with mixer for soda ash or other equivalent chemical for alkalinity adjustment; and
  - three (3) chemical metering pumps (one (1) duty, two (2) shelf spare standby), for alkalinity adjustment;
- **Final Effluent Sampling Point**
  - Final Effluent sampling at the outlet of the disinfection unit or at the outfall sewer as close as possible to the Works;

Final Effluent Disposal Facilities (Common for Both Plants)

- one (1) effluent pumping station with duplex submersible pumps rated at 40 litres per second. The pumping station transfers treated effluent through a 150 millimetre diameter force main approximately 915 metres in length and discharging to the 300 millimetre diameter gravity outfall sewer described below;
- 300 millimetre diameter gravity outfall sewer with pipe length of approximately 400 metres from the shore of Lake Erie at the location in vicinity of where the pipe exits the bedrock (and suffered damage in 2012), equipped with a single 150 millimetre diffuser with height of 150 millimetres from the outfall pipe centreline and orientation of 20 degrees from the horizontal;
- remaining separated length of the existing pipe and diffuser assembly capped and left in situ for future consideration and use if required;

including all other mechanical system, electrical system, instrumentation and control system, standby power system, piping, pumps, valves and appurtenances essential for the proper, safe and reliable operation of the Works in accordance with this Approval, in the context of process performance and general principles of wastewater engineering only;

Subsurface Disposal System

An existing subsurface sewage disposal system approved in 2008 with a total design daily sanitary sewage flow of **10,000 litres per day** to service staff, party functions and future uses, consisting of the following:

- a 150 millimetre by 100 millimetre reducing Tee installed on the existing 150 millimetre diameter raw sewage forcemain from the existing Forest Grove Pumping Station, prior to discharge to the existing summer use Sewage Treatment Plant (winterized and shut down during the off-season of late October/early November to late March/early April), allowing inclusion of a new 100 millimetre diameter HDPE forcemain and gate valve arrangement (one in each forcemain) to convey sewage to the subsurface disposal system by-passing the existing Sewage Treatment Plant;
- one (1) 36,000 litre two (2) compartment concrete septic tank with a Zabel A-100 effluent filter (or Equivalent Equipment) capable of handling a minimum flow of 10,000 litres per day receiving by-passed flow from the above discussed pumping station, and discharging by gravity to a balancing / pump tank discussed below;
- one (1) 18,000 litre single compartment balancing / pump tank equipped with two alternating submersible pumps, provided with a duplex timer control panel to control pump intervals and run times, each pump fitted with a single 50 millimetre diameter forcemain, 35 metres in length, each discharging to one of the cells of the proposed bed via a split header, with each pump discharge cycle of 833 litres per 15 minute cycle, 6 cycles per day; and
- a raised absorption trench type leaching bed with two cells, each consisting of 10 runs of 75 millimetre diameter distribution pipes, laid out in 25 metre lengths, for a total of 500 metres of pipe, with trenches centred at least 1600 millimetres apart and at least 900 millimetres at all points on the bottom of the trenches above the high ground water table, rock or soil with a percolation time grater than 50 minutes per centimetre, with the bed built in imported sandy soils with a percolation rate of 10 minutes per centimetre, covering an area of 2,275 square metres (65 metres by 35 metres) allowing a basal loading rate of 4.4 litres per square metre per day.

including all other mechanical system, electrical system, instrumentation and control system, piping, pumps, valves and appurtenances essential for the proper, safe and reliable operation of the Works in accordance with this Approval, in the context of process performance and general principles of wastewater engineering only;

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

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

1. "Annual Average Daily Influent Flow" means the cumulative total sewage flow of Influent to the Sewage Treatment Plant during a calendar year divided by the number of days during which sewage was flowing to the Sewage Treatment Plant that year;

2. "Approval" means this entire Environmental Compliance Approval and any Schedules attached to it;

3. "BOD5" (also known as TBOD5) means five day biochemical oxygen demand measured in an unfiltered

sample and includes carbonaceous and nitrogenous oxygen demands;

4. "Bypass" means diversion of sewage around one or more treatment processes, excluding Preliminary Treatment System, within the Sewage Treatment Plant with the diverted sewage flows being returned to the Sewage Treatment Plant treatment train upstream of the Final Effluent sampling point(s) and discharged via the approved effluent disposal facilities;

5. "CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;

6. "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;

7. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Works is geographically located;

8. "*E. coli* " refers to coliform bacteria that possess the enzyme beta-glucuronidase and are capable of cleaving a fluorogenic or chromogenic substrate with the corresponding release of a fluorogen or chromogen, that produces fluorescence under long wavelength (366 nm) UV light, or color development, respectively. Enumeration methods include tube, membrane filter, or multi-well procedures. Depending on the method selected, incubation temperatures include 35.5 + 0.5 °C or 44.5 + 0.2 °C (to enumerate thermotolerant species). Depending on the procedure used, data are reported as either colony forming units (CFU) per 100 mL (for membrane filtration methods) or as most probable number (MPN) per 100 mL (for tube or multi-well methods);

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

10. "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;
11. "Event" means an action or occurrence, at a given location within the Works that causes a Bypass or Overflow. An Event ends when there is no recurrence of Bypass or Overflow in the 12-hour period following the last Bypass or Overflow. Overflows and Bypasses are separate Events even when they occur concurrently;

12. "Existing Works" means those portions of the Works included in the Approval that have been constructed previously;

13. "Final Effluent" means effluent that is discharged to the environment through the approved effluent disposal facilities, including all Bypasses, that are required to meet the compliance limits stipulated in the Approval for the Sewage Treatment Plant at the Final Effluent sampling point(s);

14. "Grab Sample" or "Grab" means an individual sample of at least 1000 millilitres collected in an appropriate container at a randomly selected time over a period of time not exceeding 15 minutes;

15. "Influent" means flows to the Sewage Treatment Plant from the collection system and Imported Sewage

but excluding process return flows;

16. "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;

17. "Limited Operational Flexibility" (LOF) means the conditions that the Owner shall follow in order to undertake any modification that is pre-authorized as part of this Approval;

18. "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;

19. "Monthly Average Effluent Concentration" is the mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar month, calculated and reported as per the methodology specified in Schedule F;

20. "Monthly Average Daily Effluent Flow" means the cumulative total Final Effluent discharged during a calendar month divided by the number of days during which Final Effluent was discharged that month;

21. "Monthly Average Daily Effluent Loading" means the value obtained by multiplying the Monthly Average Effluent Concentration of a contaminant by the Monthly Average Daily Effluent Flow over the same calendar month;

22. "Monthly Geometric Mean Density" is the mean of all Single Sample Results of *E.coli* measurement in the samples taken during a calendar month, calculated and reported as per the methodology specified in Schedule F;

23. "Normal Operating Condition" means the condition when all unit process(es), excluding Preliminary Treatment System, in a treatment train is operating within its design capacity;

24. "Operating Agency" means the Owner, person or the entity that is authorized by the Owner for the management, operation, maintenance, or alteration of the Works in accordance with this Approval;

25. "Owner" means SSI Canada Property GP Inc. operating as Sun Communities Inc. , including any successors and assignees;

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

27. "Peak Instantaneous Flow Rate" means the instantaneous maximum flow rate as measured by a metering device for which the sewage treatment process unit or equipment is designed to handle;

28. "Peak Daily Flow Rate" means the largest volume of flow to be received during a one-day period for which the sewage treatment process unit or equipment is designed to handle;

29. "Preliminary Treatment System" means all facilities in the Sewage Treatment Plant associated with

screening and grit removal;

30. "Procedure F-5-1" means the Ministry guidance document titled "Procedure F-5-1 - Determination of Treatment Requirements for Municipal and Private Sewage Treatment Works Discharging to Surface Waters " dated May 2, 2019;

31. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;

32. "Rated Capacity" means the Annual Average Daily Influent Flow for which the Sewage Treatment Plant is designed to handle;

33. "Sewage Treatment Plant" means all the facilities related to sewage treatment within the sewage treatment plant site excluding the Final Effluent disposal facilities;

34. "Single Sample Result" means the test result of a parameter in the effluent discharged on any day, as measured by a probe, analyzer or in a composite or grab sample, as required;

35. "Works" means the approved sewage works, and includes Proposed Works, Existing 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 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 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.

2. CHANGE OF OWNER AND OPERATING AGENCY

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;

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. C.39* shall be included in the notification.

2. The Owner shall notify the District Manager, in writing, of any of the following changes within **thirty (30) days** of the change occurring:

   a. change of address of the Operating Agency;

   b. change of the Operating Agency, including address of the new Operating Agency.

3. In the event of any change in ownership of the Works, the Owner shall notify the succeeding owner in writing, of the existence of this Approval, and forward a copy of the notice to the District Manager.

4. The Owner shall ensure that all communications made pursuant to this condition refer to the number of this Approval.

3. CONSTRUCTION OF PROPOSED WORKS

1. All Proposed Works in this Approval shall be constructed and installed and must commence operation within **five (5) years** of issuance of this Approval, after which time the Approval ceases to apply in respect of any portions of the Works not in operation. In the event that the construction, installation and/or operation of any portion of the Proposed Works is anticipated to be delayed beyond the time period stipulated, the Owner shall submit to the Director an application to amend the Approval to extend this time period, at least six (6) months prior to the end of the period. The amendment application shall include the reason(s) for the delay and whether there is any design change(s).

2. Upon completion of construction of the Proposed Works, the Owner shall prepare and submit a written statement to the District Manager, certified by a Licensed Engineering Practitioner, that the Proposed Works is constructed in accordance with this Approval.

3. Within **one (1) year** of completion of construction of the Proposed Works, a set of record drawings of the Works shall be prepared or updated. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be readily accessible for reference at the Works.

4. The Owner shall ensure that the treatment technologies are installed in accordance with the manufacturer's installation manual.

4. BYPASSES

1. Any Bypass is prohibited, except:

   a. an emergency Bypass when a structural, mechanical or electrical failure causes a temporary reduction in the capacity of a treatment process or when an unforeseen flow condition exceeds the design capacity of a treatment process that is likely to result in personal injury, loss of life, health hazard, basement flooding, severe property damage, equipment damage or treatment process upset, if a portion of the flow is not bypassed;

   b. a planned Bypass that is a direct and unavoidable result of a planned repair and maintenance procedure or other circumstance(s), the Owner having notified the District Manager in writing at least fifteen (15) days prior to the occurrence of Bypass, including an estimated quantity and duration of the Bypass, an assessment of the impact on the quality of the Final Effluent and the mitigation measures if necessary, and the District Manager has given written consent of the Bypass.

2. Notwithstanding the exceptions given in Paragraph 1, the Operating Agency shall undertake everything practicable to maximize the flow through the downstream treatment process(es) prior to bypassing.

3. At the beginning of a Bypass Event, the Owner shall immediately notify the Spills Action Centre (SAC) and the local Medical Officer of Health. This notice shall include, at a minimum, the following information:

   a. the type of the Bypass as indicated in Paragraph 1 and the reason(s) for the Bypass;

   b. the date and time of the beginning of the Bypass;

   c. the treatment process(es) gone through prior to the Bypass and the treatment process(es) bypassed;

   d. the effort(s) done to maximize the flow through the downstream treatment process(es) and the reason(s) why the Bypass was not avoided.

4. Upon confirmation of the end of a Bypass Event, the Owner shall immediately notify the SAC and the local Medical Officer of Health. This notice shall include, at a minimum, the following information:

   a. the date and time of the end of the Bypass;

   b. the estimated or measured volume of Bypass.

5. For any Bypass Event, the Owner shall collect daily sample(s) of the Final Effluent, inclusive of the Event and analyze for all effluent parameters outlined in Compliance Limits condition that require composite samples, following the same protocol specified in the Monitoring and Recording condition for the regular samples. The sample(s) shall be in addition to the regular Final Effluent samples required under the monitoring and recording condition. If the Event occurs on a scheduled monitoring day, the regular sampling requirements prevail. If representative sample for the effluent parameter(s) that require

grab sample cannot be obtained, they shall be collected after the Event at the earliest time when situation returns to normal.

6. The Owner shall develop a notification procedure in consultation with the District Manager and SAC and notify the public and downstream water users that may be adversely impacted by any Bypass Event.

5. DESIGN OBJECTIVES

1. The Owner shall design and undertake everything practicable to operate the Sewage Treatment Plant in accordance with the following objectives:

   a. Final Effluent parameters design objectives listed in the table(s) included in Schedule B.

   b. Final Effluent 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 or sheen or foam or discolouration on the receiving waters.

   c. Annual Average Daily Influent Flow is within the design capacity of the Sewage Treatment Plant.

6. COMPLIANCE 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 C are met.

2. The Owner shall operate and maintain the Sewage Treatment Plant such that the Final Effluent is disinfected during the disinfection period between April and November inclusive.

7. OPERATION AND MAINTENANCE

1. The Owner shall ensure that, at all times, the Works and the related equipment and appurtenances used to achieve compliance with this Approval are properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate staffing and training, including training in all procedures and other requirements of this Approval and the OWRA and relevant regulations made under the OWRA, process controls and alarms and the use of process chemicals and other substances used in the Works.

2. The Owner shall prepare/update the operations manual for the Works within **six (6) months** of completion of construction of the Proposed Works, that includes, but not necessarily limited to, the following information:

   a. operating procedures for the Works under Normal Operating Conditions;

   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. procedures for the inspection and calibration of monitoring equipment;

e. operating procedures for the Works to handle situations outside Normal Operating Conditions and emergency situations such as a structural, mechanical or electrical failure, or an unforeseen flow condition, including procedures to minimize Bypasses;

f. a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the Spills Action Centre (SAC) and District Manager;

g. procedures for receiving, responding and recording public complaints, including recording any followup actions taken.

3. 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.

4. The Owner shall ensure that the Operating Agency fulfills the requirements under O. Reg. 129/04, as amended for the Works, including the classification of facilities, licensing of operators and operating standards.

5. The Owner shall maintain a logbook to record the results of all inspections, repair and maintenance undertaken, calibrations, monitoring and spill response or contingency measures undertaken and shall make the logbook available for inspection by Ministry staff. The logbook shall include the following:

   a. the name of the operator making the entry; and

   b. the date and results of each inspection, repair, maintenance, calibration, monitoring, spill response and contingency measure.

6. The Owner shall ensure that grass-cutting is maintained regularly over the subsurface disposal bed(s), and that adequate steps are taken to ensure that the area of the underground works is protected from vehicle traffic.

7. The Owner shall visually inspect the general area where Works are located for break-out **once every month** during the operating season.

8. In the event a break-out is observed from a subsurface disposal bed, the Owner shall do the following:

   a. sewage discharge to that subsurface disposal bed shall be discontinued;

   b. the incident shall be **immediately** reported verbally to the Spills Action Centre (SAC) at (416)

325-3000 or 1-800-268-6060;

c. submit a written report to the District Manager within **one (1) week** of the break-out;

d. access to the break-out area shall be restricted until remedial actions are complete;

e. during the time remedial actions are taking place the sewage generated at the site shall not be allowed to discharge to the environment; and

f. sewage generated at the site shall be safely collected and disposed of through a licensed waste hauler to an approved sewage disposal site.

9. The Owner shall ensure that the septic tanks be inspected **at least twice per year**, and the sewage sludge accumulated in the septic tanks be periodically withdrawn at the frequency required to maintain efficiency of the treatment system. The effluent filters in septic tanks shall be cleaned out at least once every six (6) months, when the tank is pumped out, or as determined by the Operating Agency, whichever comes first.

10. The owner or their qualified person shall conduct an annual inspection of the outfall pipe and diffuser assembly which discharges the final effluent from the sewage treatment plant into Lake Erie, prior to the annual start up and operation of the sewage treatment plant;

11. The owner shall ensure that any deficiencies or issues noted during the inspection conducted as per condition 7.10 are addressed prior to the annual start up and operation of the sewage treatment plant.

12. The Owner shall ensure that the Operating Agency possesses the level of training and experience sufficient to allow safe and environmentally sound operation of the Works.

13. The Owner shall have a valid written agreement with a hauler who is in possession of a Waste Management Systems Approval, for the treatment and disposal of the sludge generated from the Works, at all times during operation of the Works;

14. Upon request, the Owner shall make the Inspection Reports available to Ministry staff.

15. 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.

8. MONITORING AND RECORDING

1. The Owner shall, upon commencement of operation of the Works, carry out a scheduled monitoring program of collecting samples at the required sampling points, at the frequency specified or higher, by means of the specified sample type and analyzed for each parameter listed in the tables under the monitoring program included in Schedule D and record all results, as follows:

a. all samples and measurements are to be taken at a time and in a location characteristic of the quality and quantity of the sewage stream over the time period being monitored.

b. definitions and preparation requirements for each sample type are included in document referenced in Paragraph 2.b.

c. definitions for frequency:

i. Daily means once every day;

ii. Thrice Weekly means three times every week;

iii. Weekly means once every week;

iv. Bi-weekly means once every two weeks;

v. Monthly means once every month;

vi. Quarterly means once every three months;

vii. Annually means once every year;

d. a schedule of the day of the week/month for the scheduled sampling shall be created. The sampling schedule shall be revised and updated every year through rotation of the day of the week for the scheduled sampling program, except when the actual scheduled monitoring frequency is three (3) or more times per week.

2. The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following documents and all analysis shall be conducted by a laboratory accredited to the ISO/IEC:17025 standard or as directed by the District Manager:

a. the Ministry's Procedure F-10-1, “Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended;

b. the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02, as amended;

c. the publication "Standard Methods for the Examination of Water and Wastewater", as amended; and

d. for any parameters not mentioned in the documents referenced in Paragraphs 2.a, 2.b and 2.c, the written approval of the District Manager shall be obtained prior to sampling.

3. The Owner shall monitor and record the flow rate and daily quantity using flow measuring devices or other methods of measurement as approved below calibrated to an accuracy within plus or minus 15 per cent (+/- 15%) of the actual flowrate of the following:

a. Influent flow to the Sewage Treatment Plant by continuous flow measuring devices and instrumentations;

4. 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.

9. LIMITED OPERATIONAL FLEXIBILITY

1. The Owner may make pre-authorized modifications to the sewage pumping stations and Sewage Treatment Plant in Works in accordance with the document "Limited Operational Flexibility - Protocol for Pre-Authorized Modifications to Private Works" (Schedule E), as amended, subject to the following:

   a. the modifications will not involve the addition of any new treatment process or the removal of an existing treatment process, including chemical systems, from the liquid or solids treatment trains as originally designed and approved.

   b. the scope and technical aspects of the modifications are in line with those delineated in Schedule E and conform with the Ministry's publication "Design Guidelines for Sewage Works 2008", as amended, Ministry's regulations, policies, guidelines, and industry engineering standards;

   c. the modifications shall not negatively impact on the performance of any process or equipment in the Works or result in deterioration in the Final Effluent quality;

   d. where the pre-authorized modification requires notification, a "Notice of Modifications to Sewage Works" (Schedule E), as amended shall be completed with declarations from a Licensed Engineering Practitioner and the Owner and retained on-site prior to the scheduled implementation date. All supporting information including technical memorandum, engineering plans and specifications, as applicable and appropriate to support the declarations that the modifications conform with LOF shall remain on-site for future inspection.

2. The following modifications are not pre-authorized under Limited Operational Flexibility:

   a. Modifications that involve addition or extension of process structures, tankages or channels;

   b. Modifications that involve relocation of the Final Effluent outfall or any other discharge location or that may require reassessment of the impact to the receiver or environment;

   c. Modifications that involve addition of or change in technology of a treatment process or that may involve reassessment of the treatment train process design;

   d. Modifications that require changes to be made to the emergency response, spill prevention and contingency plan; or

   e. Modifications that are required pursuant to an order issued by the Ministry.

10. REPORTING

1. The Owner shall report to the District Manager orally **as soon as possible** any non-compliance with the compliance limits specified in Condition 6, and in writing within **seven (7) days** of non-compliance.

2. 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.

3. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.

4. The Owner shall prepare performance reports on a calendar year basis and submit to the District Manager in an electronic format by **March 31** of the calendar year following the period being reported upon. The reports shall contain, but shall not be limited to, the following information pertaining to the reporting period:

    a. a summary and interpretation of all Influent monitoring data, and a review of the historical trend of the sewage characteristics and flow rates;

    b. a summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates, loading and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works;

    c. a summary of any deviation from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year;

    d. a summary of all operating issues encountered and corrective actions taken;

    e. a summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus or mechanism forming part of the Works;

    f. a summary of any effluent quality assurance or control measures undertaken;

    g. a summary of the calibration and maintenance carried out on all Influent and Final Effluent monitoring equipment to ensure that the accuracy is within the tolerance of that equipment as required in this Approval or recommended by the manufacturer;

    h. a summary of efforts made to achieve the design objectives in this Approval, including an assessment of the issues and recommendations for pro-active actions when any of the design objectives is not achieved more than 50% of the time in a year or there is an increasing trend in

deterioration of Final Effluent quality;

i. a tabulation of the volume of sludge generated, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;

j. a summary of any complaints received and any steps taken to address the complaints;

k. a summary of all Bypasses and other situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events;

l. a summary of all Notice of Modifications to Sewage Works completed under Paragraph 1.d. of Condition 9, including a report on status of implementation of all modification;

m. a summary of efforts made to achieve conformance with Procedure F-5-1 including but not limited to projects undertaken and completed in the sanitary sewer system that result in overall Bypass/Overflow elimination including expenditures and proposed projects to eliminate Bypass/Overflows with estimated budget forecast for the year following that for which the report is submitted;

n. any changes or updates to the schedule for the completion of construction and commissioning operation of major process(es) / equipment groups in the Proposed Works;

o. The results of the annual inspection of the final effluent outfall pipe and diffuser assembly and any maintenance or repair work undertaken on the outfall pipe and diffuser assembly during the reporting year as per conditions 7.10 and 7.11.

p. any other information the District Manager requires from time to time.

11. FINANCIAL ASSURANCE

1. Within **sixty (60) days** of issuance of this Approval, the Owner shall submit to the Director, Financial Assurance, as defined in Section 131 of the Act, for the amount of **33,589.00**. This Financial Assurance shall be in a form acceptable to the Director and shall provide sufficient funds to pay for analysis, monitoring, clean-up and decommissioning of the Works.
2. Commencing on **August 15, 2025**, and at intervals of five (5) years thereafter, the Owner shall submit to the Director, a re-evaluation of the amount of Financial Assurance to implement the actions required under Subsection (1). The re-evaluation shall include an assessment based on any new information relating to the environmental conditions of the Works and the costs of additional monitoring, clean-up and/or implementation of contingency plans required by the Director upon review of the annual reports.
3. The amount of Financial Assurance is subject to review at any time by the Director and may be amended at his/her discretion.
4. If any Financial Assurance is scheduled to expire or notice is received, indicating Financial Assurance will not be renewed, and satisfactory methods have not been made to replace the Financial assurance at

least **sixty (60) days** before the Financial Assurance terminates, the Financial Assurance shall forthwith be replaced by cash.

12. DECOMMISSIONING OF UN-USED WORKS

1. The Owner shall properly abandon any portion of unused Existing Works, as directed below, and upon completion of decommissioning, report in writing to the District Manager:

   a. any sewage pipes leading from building structures to unused Works components shall be disconnected and capped;

   b. any unused septic tanks, holding tanks and pump chambers shall be completely emptied of its content by a licensed hauler and either be removed, crushed and backfilled, or be filled with granular material;

   c. if the area of the existing leaching bed is going to be used for the purposes of construction of a replacement bed or other structure, all distribution pipes and surrounding material must be removed by a licensed hauler and disposed off site at an approved waste disposal site; otherwise the existing leaching bed may be abandoned in place after disconnecting, if there are no other plans to use the area for other purposes.

13. REINSTATEMENT OF ORIGINAL OUTFALL

1. The Owner shall ensure that, the original outfall structure is reinstated and operational prior to providing sewage servicing to the former Pleasant Beach Campground area of the Sherkston site as described below;

   a. one (1) outfall structure consisting of 635 metre long, 300 millimetre diameter, gravity sewer extending from the shore into Lake Erie including connection to the existing works, equipped with a 22.5 metre long, 300 millimetre diameter diffuser at an approximate lake depth of 6.9 meters along the diffuser's length, comprised of five (5) evenly spaced 100 millimetre diameter diffuser ports, sited along the top of the diffuser pipe with the centre-line approximately 450 millimetre from the main outfall centre-line, oriented at an angle of 22.5 degrees from the horizontal; and

   b. up to four (4) inspection manholes with inner diameter of 1,800 millimetre, located along the 300 millimetre outfall pipe at 250 m interval, each equipped with an air release valve, shall be used for cleanouts, camera inspections, and maintenance.

2. The reinstated outfall structure shall be kept in a state of good maintenance and operation;

3. The outfall structure (diffuser and connection) shall be removed at the end of each waste water treatment plant operational season and stored over the off season so as to prevent damage to the works and shall be reinstated at the start of each season; and

4. The outfall structure shall be inspected annually in the spring before start up of the operations of the

waste water treatment plant with any necessary repairs made before start up as per Conditions 7.10 and 7.11.

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

1. Condition 1 regarding general provisions 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.

2. Condition 2 regarding change of Owner and Operating Agency is included to ensure that the Ministry records are kept accurate and current with respect to ownership and Operating Agency of the 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.

3. Condition 3 regarding construction of Proposed Works/record drawings 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, and that prior to the commencement of construction of the portion of the Works that are approved in principle only, the Director will have the opportunity to review detailed design drawings, specifications and an engineer's report containing detailed design calculations for that portion of the Works, to determine capability to comply with the Ministry's requirements stipulated in the terms and conditions of the Approval, and also ensure that the Works are constructed in accordance with the Approval and that record drawings of the Works "as constructed" are updated and maintained for future references.

4. Condition 4 regarding Bypasses is included to indicate that Bypass is prohibited, except in circumstances where the failure to Bypass could result in greater damage to the environment than the Bypass itself. The notification and documentation requirements allow the Ministry to take action in an informed manner and will ensure the Owner is aware of the extent and frequency of Bypass Events.

5. Condition 5 regarding design objectives is imposed to establish non-enforceable design objectives to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.

6. Condition 6 regarding compliance limits is imposed to ensure that the Final Effluent discharged from the Works to the environment meets the Ministry's effluent quality requirements.

7. Condition 7 regarding operation and maintenance 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. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Owner. 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 Works.

8. Condition 8 regarding monitoring and recording is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives and compliance limits.

9. Condition 9 regarding Limited Operational Flexibility is included to ensure that the Works are constructed, maintained and operated in accordance with the Approval, and that any pre-approved modification will not negatively impact on the performance of the Works.

10. Condition 10 regarding reporting 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 this Approval.

11. Condition 11 is included to ensure that the Owner provides financial assurance on a timely basis, in an amount adequate to cover the capital and operating costs of the environmental measures for which it is provided and is in a form readily used by Ministry personnel.

12. Condition 12 is included to ensure that any components of un-used Works are properly decommissioned.

13. Condition 13 is included to ensure that adequate mixing within the receiver is consistently achieved at the expanded effluent flows in conjunction with the newly established effluent criteria.

Schedule A

1. Application for Environmental Compliance Approval submitted by Bruce Thelen, Chief Operating Officer of SSI Canada Property GP Inc. operating as Sun Communities Inc. received on December 21, 2023 for the proposed expansion of Sherkston's Wastewater Treatment Plant (WWTP), including design report, final plans and specifications.

Schedule B

Final Effluent Design Objectives

Concentration Objectives prior to completion of construction of all Proposed Works

Final Effluent Parameter	Averaging Calculator	Objective (milligrams per litre unless otherwise indicated)
CBOD5	Monthly Average Effluent Concentration	15 mg/L
Total Suspended Solids	Monthly Average Effluent Concentration	15 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	0.5 mg/L
Total Ammonia Nitrogen (Ammonia + Ammonium Nitrogen)	Monthly Average Effluent Concentration	10 mg/L
E. coli	Monthly Geometric Mean Density	*150 CFU/100 mL
pH	Single Sample Result	6.5 - 8.5 inclusive

*If the MPN method is utilized for *E. coli* analysis the objective shall be 150 MPN/100 mL

Concentration Objectives upon completion of construction of all Proposed Works (For average daily flows (ADFs) up to 1,200 m^3/day)

Final Effluent Parameter	Averaging Calculator	Objective
CBOD5	Monthly Average Effluent Concentration	10 mg/L
Total Suspended Solids	Monthly Average Effluent Concentration	10 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	0.3 mg/L
Total Ammonia Nitrogen	Monthly Average Effluent Concentration	7.8 mg/L(Spring (Apr - May) 5.4 mg/LSummer (June - Nov)
E. coli	Monthly Geometric Mean Density	*100 CFU/100 mL
pH	Single Sample Result	6.5 - 8.5 inclusive

*If the MPN method is utilized for *E. coli* analysis the objective shall be 100 MPN/100 mL

Schedule C

Final Effluent Compliance Limits

Concentration Limits prior to completion of construction of all Proposed Works

Final Effluent Parameter	**Averaging Calculator**	**Limit** (maximum unless otherwise indicated)
CBOD5	Monthly Average Effluent Concentration	25 mg/L
Total Suspended Solids	Monthly Average Effluent Concentration	25 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	1 mg/L
E. coli	Monthly Geometric Mean Density	200 CFU/100 mL*
pH	Single Sample Result	between 6.0 - 9.5 inclusive

*If the MPN method is utilized for *E. coli* analysis the limit shall be 200 MPN/100 mL

Concentration Limits upon completion of construction of all Proposed Works (For average daily flows (ADFs) up to 1,200 m^3/day)

Final Effluent Parameter	**Averaging Calculator**	**Limit** (maximum unless otherwise indicated)
CBOD5	Monthly Average Effluent Concentration	12.5 mg/L
Total Suspended Solids	Monthly Average Effluent Concentration	12.5 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	0.5 mg/L
Total Ammonia Nitrogen	Monthly Average Effluent Concentration	9.7 mg/L (Spring (Apr - May) 6.8 mg/L Summer (June - Nov)
E. coli	Monthly Geometric Mean Density	*150 CFU/100 mL
pH	Single Sample Result	between 6.0 - 9.5 inclusive

*If the MPN method is utilized for *E. coli* analysis the limit shall be 150 MPN/100 mL

Loading Limits prior to completion of construction of all Proposed Works

Final Effluent Parameter	**Averaging Calculator**	**Limit** (maximum unless otherwise indicated)
CBOD5	Monthly Average Effluent Concentration	15 kg/d
Total Suspended Solids	Monthly Average Effluent Concentration	15 kg/d
Total Phosphorus	Monthly Average Effluent Concentration	0.6 kg/d

Loading Limits upon completion of construction of all Proposed Works (For average daily flows (ADFs) up to 1,200 m^3/day)

Final Effluent Parameter	**Averaging Calculator**	**Limit** (maximum unless otherwise indicated)
CBOD5	Monthly Average Effluent Concentration	15 kg/d
Total Suspended Solids	Monthly Average Effluent Concentration	15 kg/d
Total Phosphorus	Monthly Average Effluent Concentration	0.6 kg/d

Schedule D

Monitoring Program

Influent (Raw Sewage)

Influent Sampling Point (At main splitter box ahead of treatment system)

Parameters	Sample Type	Minimum Frequency
BOD5	Grab	Bi-weekly
Total Suspended Solids	Grab	Bi-weekly
Total Phosphorus	Grab	Bi-weekly
Total Kjeldahl Nitrogen	Grab	Bi-weekly

Final Effluent

Final Effluent Sampling Point (At outlet chamber from the UV disinfection system)

Parameters	Sample Type	Minimum Frequency
CBOD5	24 hour composite	Weekly
Total Suspended Solids	24 hour composite	Weekly
Total Phosphorus	24 hour composite	Weekly
Total Ammonia Nitrogen	24 hour composite	Weekly
Total Kjeldahl Nitrogen	24 hour composite	Weekly
Nitrate as Nitrogen	24 hour composite	Weekly
Nitrite as Nitrogen	24 hour composite	Weekly
E. coli	Grab	Weekly
pH*	Grab/Probe/Analyzer	Thrice Weekly
Temperature*	Grab/Probe/Analyzer	Thrice Weekly
Un-ionized Ammonia**	As Calculated	Weekly

*pH and temperature of the Final Effluent shall be determined in the field at the time of sampling for Total Ammonia Nitrogen.

**The concentration of un-ionized ammonia shall be calculated using the total ammonia concentration, pH and temperature using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended.

Sludge/Biosolids – holding tank/truck loading bay

Parameters	Sample Type	Minimum Frequency
Total Solids	Grab	Annually
Total Phosphorus	Grab	Annually
Total Ammonia Nitrogen	Grab	Annually
Nitrate as Nitrogen	Grab	Annually
Metal Scan - Arsenic - Cadmium - Cobalt - Chromium - Copper - Lead - Mercury - Molybdenum - Nickel - Potassium - Selenium - Zinc	Grab	Annually

Schedule E

Limited Operational Flexibility

Protocol for Pre-Authorized Modifications to Works

1. General

1. Pre-authorized modifications are permitted only where Limited Operational Flexibility has already been granted in the Approval and only permitted to be made at the pumping stations and sewage treatment plant in the Works, subject to the conditions of the Approval.

2. Where there is a conflict between the types and scope of pre-authorized modifications listed in this document, and the Approval where Limited Operational Flexibility has been granted, the Approval shall take precedence.

3. The Owner shall consult the District Manager on any proposed modifications that may fall within the scope and intention of the Limited Operational Flexibility but is not listed explicitly or included as an example in this document.

4. The Owner shall ensure that any pre-authorized modifications will not:

    a. adversely affect the hydraulic profile of the Sewage Treatment Plant or the performance of any upstream or downstream processes, both in terms of hydraulics and treatment performance;

    b. result in new Overflow or Bypass locations, or any potential increase in frequency or quantity of Overflow(s) or Bypass(es).

    c. result in a reduction in the required Peak Flow Rate of the treatment process or equipment as originally designed.

2. Modifications that do not require pre-authorization:

1. Works that are exempt from Ministry approval requirements;

2. Modifications to the electrical system, instrumentation and control system.

3. Pre-authorized modifications that do not require preparation of "Notice of Modification to Sewage Works"

1. Normal or emergency maintenance activities, such as repairs, renovations, refurbishments and replacements with Equivalent Equipment, or other improvements to an existing approved piece of equipment of a treatment process do not require pre-authorization. Examples of these activities are:

a. Repairing a piece of equipment and putting it back into operation, including replacement of minor components such as belts, gear boxes, seals, bearings;

b. Repairing a piece of equipment by replacing a major component of the equipment such as motor, with the same make and model or another with the same or very close power rating but the capacity of the pump or blower will still be essentially the same as originally designed and approved;

c. Replacing the entire piece of equipment with Equivalent Equipment.

2. Improvements to equipment efficiency or treatment process control do not require pre-authorization. Examples of these activities are:

a. Adding variable frequency drive to pumps;

b. Adding on-line analyzer, dissolved oxygen probe, ORP probe, flow measurement or other process control device.

4. Pre-Authorized Modifications that require preparation of "Notice of Modification to Sewage Works"

1. Pumping Stations

a. Replacement or realignment of existing sewers including manholes, valves, gates, weirs and associated appurtenances provided that the modifications will not add new influent source(s) or result in an increase in flow from existing sources as originally approved.

b. Extension or partition of wetwell to increase retention time for emergency response and improve station maintenance and pump operation;

c. Replacement or installation of inlet screens to the wetwell;

d. Replacement or installation of flowmeters;

e. Replacement, reconfiguration and modifications to pump suctions and discharge pipings including valve, gates, motors, variable frequency drives and associated appurtenances to maintain firm pumping capacity or modulate the pump rate provided that the modifications will not result in a reduction in the firm pumping capacity or discharge head or an increase in the peak pumping rate of the pumping station as originally designed;

f. Replacement or realignment of existing forcemain(s) including valves, gates, and associated appurtenances provided that the modifications will not reduce the flow capacity or increase the total dynamic head and transient in the forcemain.

2. Sewage Treatment Plant

1. Sewers and appurtenances

    a. Replacement or realignment of existing sewers (including pipes and channels), including manholes, valves, gates, weirs and associated appurtenances within the a sewage treatment plant, provided that the modifications will not add new influent source(s) or result in an increase in flow from existing sources as originally approved and that the modifications will remove hydraulic bottlenecks or improve the conveyance of sewage into and through the Works.

2. Flow Distribution Chambers/Splitters

    a. Replacement or modification of existing flow distribution chamber/splitters or construction of new flow distribution chamber/splitters, including replacements or installation of sluice gates, weirs, valves for distribution of flows to the downstream process trains, provided that the modifications will not result in a change in flow distribution ratio to the downstream process trains as originally designed.

3. Imported Sewage Receiving Facility

    a. Replacement or relocation of loading bays, connect/disconnect hook-up systems and unloading/transferring systems;

    b. Replacement or relocation of screens, grit removal units and compactors;

    c. Replacement or relocation of pumps, such as dosing pumps and transfer pumps, valves, piping and appurtenances;

    d. Replacement or relocation of storage tanks/chambers and spill containment systems;

    e. Replacement, relocation or installation of flow measurement and sampling equipment.

4. Preliminary Treatment System

    a. Replacement of existing screens and grit removal units with equipment of the same or higher process performance technology, including where necessary replacement or upgrading of existing screenings dewatering washing compactors, hydrocyclones, grit classifiers, grit pumps, air blowers conveyor system, disposal bins and other ancillary equipment to the screening and grit removal processes.

    b. Replacement of channel aeration systems, including air blowers, air supply main, air headers, air laterals, air distribution grids and diffusers.

5. Primary Treatment System

    a. Replacement of existing sludge removal mechanism, including sludge chamber;

    b. Replacement of scum removal mechanism, including scum chamber;

    c. Replacement of primary sludge pumps, scum pumps, provided that:the modifications will not result in a reduction in the firm pumping capacity or discharge head that the primary sludge pump(s) and scum pump(s) are originally designed to handle.

6. Secondary Treatment System

    1. Biological Treatment

        a. Conversion of complete mix aeration tank to plug-flow multi-pass aeration tank, including modifications to internal structural configuration;

        b. Addition of inlet gates in multi-pass aeration tank for step-feed operation mode;

        c. Partitioning of an anoxic/flip zone in the inlet of the aeration tank, including installation of submersible mixer(s);

        d. Replacement of aeration system including air blowers, air supply main, air headers, air laterals, air distribution grids and diffusers, provided that the modifications will not result in a reduction in the firm capacity or discharge pressure that the blowers are originally designed to supply or in the net oxygen transferred to the wastewater required for biological treatment as originally required.

    2. Secondary Sedimentation

        a. Replacement of sludge removal mechanism, including sludge chamber;

        b. Replacement of scum removal mechanism, including scum chamber;

        c. Replacement of return activated sludge pump(s), waste activated sludge pump(s), scum pump(s), provided that the modifications will not result in a reduction in the firm pumping capacity or discharge head that the activated sludge pump(s) and scum pump(s) are originally designed to handle.

7. Post-Secondary Treatment System

    a. Replacement of filtration system with equipment of the same filtration technology, including feed pumps, backwash pumps, filter reject pumps, filtrate extract pumps, holding tanks associated with the pumping system, provided that the modifications will not result in a reduction in the capacity of

the filtration system as originally designed.

8. Disinfection System

    1. UV Irradiation

        a. Replacement of UV irradiation system, provided that the modifications will not result in a reduction in the design capacity of the disinfection system or the radiation level as originally designed.

    2. Chlorination/Dechlorination and Ozonation Systems

        a. Extension and reconfiguration of contact tank to increase retention time for effective disinfection and reduce dead zones and minimize short-circuiting;

        b. Replacement of chemical storage tanks, provided that the tanks are provided with effective spill containment.

9. Supplementary Treatment Systems

    1. Chemical systems

        a. Replacement or relocation of chemical storage tanks for existing chemical systems only, provided that the tanks are sited with effective spill containment;

        b. Replacement of chemical dosing pumps provided that the modifications will not result in a reduction in the firm capacity that the dosing pumps are originally designed to handle.

        c. Relocation and addition of chemical dosing point(s) including chemical feed pipes and valves and controls, to improve phosphorus removal efficiency;

        d. Use of an alternate chemical provided that it is a non-proprietary product and is a commonly used alternative to the chemical approved in the Works, provided that the chemical storage tanks, chemical dosing pumps, feed pipes and controls are also upgraded, as necessary.

10. Sludge Management System

    1. Sludge Holding and Thickening

        a. Replacement of sludge holding tanks, sludge handling pumps, such as transfer pumps, feed pumps, recirculation pumps, provided that modifications will not result in reduction in the solids storage or handling capacities;

    2. Sludge Digestion

a. Replacement of digesters, sludge handling pumps, such as transfer pumps, feed pumps, recirculation pumps, provided that modifications will not result in reduction in the solids storage or handling capacities;

b. replacement of sludge digester covers.

3. Sludge Dewatering and Disposal

a. Replacement of sludge dewatering equipment, sludge handling pumps, such as transfer pumps, feed pumps, cake pumps, loading pumps, provided that modifications will not result in reduction in solids storage or handling capacities.

11. Standby Power System

1. Replacement or installation of standby power system, including feed from alternate power grid, emergency power generator, fuel supply and storage systems, provided that the existing standby power generation capacity is not reduced.

12. Lagoons

a. installing baffles in lagoon provided that the operating capacity of the lagoon system is not reduced;

b. raise top elevation of lagoon berms to increase free-board;

c. replace interconnecting pipes and chambers between cells, provided that the process design operating sequence is not changed;

d. replace mechanical aerators, or replace mechanical aerators with diffused aeration system provided that the mixing and aeration capacity are not reduced;

e. removal of accumulated sludge and disposal to an approved location offsite.

3. Final Effluent Disposal Facilities

a. Replacement or realignment of the Final Effluent channel, sewer or forcemain, including manholes, valves and appurtenances from the end of the treatment train to the discharge outfall section, provided that the sewer conveys only effluent discharged from the Sewage Treatment Plant and that the replacement or re-aligned sewer has similar dimensions and performance criteria and is in the same or approximately the same location and that the hydraulic capacity will not be reduced.

This page contains an image of the form entitled "Notice of Modification to Sewage Works". A digital copy can be obtained from the District Manager.

Ontario

Ministry of the Environment, Conservation and Parks

Form 1

Notice of Modification to Sewage Works

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

Part 1 – Environmental Compliance Approval (ECA) with Limited Operational Flexibility

(Insert the ECA's owner, number and issuance date and notice number, which should start with "01" and consecutive numbers thereafter)

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

(Attach a detailed description of the sewage works)

Description shall include:

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

I hereby declare that I have verified the scope and technical aspects of this modification and confirm that the design:

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.

I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate

Name (Print)	PEO License Number

Signature	Date (mm/dd/yy)

Name of Employer

Part 4 – Declaration by Owner

I hereby declare that:

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 *Environmental Assessment Act*.

I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate

Name of Owner Representative (Print)	Owner representative's title (Print)

Owner Representative's Signature	Date (mm/dd/yy)

EPB Form

Schedule F

Methodology for Calculating and Reporting Monthly Average Effluent Concentration and Monthly Geometric Mean Density

1. Monthly Average Effluent Concentration

Step 1: Calculate the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar month and proceed as follows depending on the result of the calculation:

a. If the arithmetic mean does not exceed the compliance limit for the contaminant, then report and use this arithmetic mean as the Monthly Average Effluent Concentration for this parameter where applicable in this Approval;

b. If the arithmetic mean exceeds the compliance limit for the contaminant and there was no Bypass Event during the calendar month, then report and use this arithmetic mean as the Monthly Average Effluent Concentration for this parameter where applicable in this Approval;

c. If the arithmetic mean exceeds the compliance limit for the contaminant and there was Bypass Event(s) during the calendar month, then proceed to Step 2;

d. If the arithmetic mean does not exceed the compliance limit for the contaminant and there was Bypass Event(s) during the calendar month, the Owner may still elect to proceed to Step 2 calculation of the flow-weighted arithmetic mean.

Step 2: Calculate the flow-weighted arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar month and proceed depending on the result of the calculation:

a. Group No Bypass Days (**NBPD**) data and Bypass Days (**BPD**) data during a calendar month separately;

b. Calculate the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured on all NBPD during a calendar month and record it as **Monthly Average NBPD Effluent Concentration**;

c. Obtain the "**Total Monthly NBPD Flow**" which is the total amount of Final Effluent discharged on all NBPD during the calendar month;

d. Calculate the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured on all BPD during a calendar month and record it as **Monthly Average BPD Effluent Concentration**;

e. Obtain the "**Total Monthly BPD Flow**" which is the total amount of Final Effluent discharged on all BPD during the calendar month;

f. Calculate the flow-weighted arithmetic mean using the following formula:

[(Monthly Average NBPD Effluent Concentration × Total Monthly NBPD Flow) + (Monthly Average BPD Effluent Concentration × Total Monthly BPD Flow)] ÷ (Total Monthly NBPD Flow + Total Monthly BPD Flow)

It should be noted that in this method, if there are no Bypass Event for the month, the calculated result would be the same as the non-flow-weighted arithmetic mean method;

g. Report and use the lesser of the flow-weighted arithmetic mean obtained in Step 2 and the arithmetic mean obtained in Step 1 as the Monthly Average Effluent Concentration for this parameter where applicable in this Approval.

2. Monthly Geometric Mean Density

Geometric mean is defined as the n^{th} root of the product of n numbers. In the context of calculating Monthly Geometric Mean Density for *E. coli*, the following formula shall be used:

$$\sqrt[n]{x_1 x_2 x_3 \cdots x_n}$$

in which,

"n" is the number of samples collected during the calendar month; and

"x" is the value of each Single Sample Result.

For example, four weekly grab samples were collected and tested for *E. coli* during the calendar month. The *E. coli* densities in the Final Effluent were found below:

Sample Number	*E. coli* Densities* (CFU/100 mL)
1	10
2	100
3	300
4	50

The Geometric Mean Density for these data:

$$\sqrt[4]{10 \times 100 \times 300 \times 50} = 62$$

*If a particular result is zero (0), then a value of one (1) will be substituted into the calculation of the Monthly Geometric Mean Density. If the MPN method is utilized for E. coli analysis, values in the table shall be MPN/100 mL.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 1854-CNUPQG issued on March 30, 2023

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 required 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 August, 2025

Fariha Pannu.

Fariha Pannu, P.Eng.
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

SN/
c: District Manager, MECP Niagara
Dominic Bauer, P.Eng., Gunnell Engineering Ltd.