

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 0424-BYDJEX
 Issue Date: March 31, 2021

Wallenstein Feed & Supply Ltd.
 7307 Wellington Road 86, P.O. Box 22
 Wallenstein, Ontario
 N0B 2S0

Site Location: 7307 Wellington Road 86
 Township of Mapleton
 County of Wellington, Ontario

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, usage and operation of industrial sewage works for the treatment and disposal of four (4) process wastewater streams (including media filter backwash, polisher backwash, reverse osmosis (RO) wastewater, and boiler blowdown) generated in a boiler house, as well as stormwater surface runoff from a total drainage area of 8.2 hectares, with Final Effluent discharging into an adjacent valley that is within the floodplain of a tributary to the Conestogo River, serving a site with four (4) feed mills (three existing referred to as Mill 2, Mill 3 and Mill 4, and one proposed mill referred to as Mill 5), located at 7307 Wellington Road 86, in the Township of Mapleton, consisting of the following:

Projected Flowrates of Process Wastewater Streams

Process Wastewater Streams	Projected Average Flowrate (cubic meters per day)
media filter backwash	8.7
polisher backwash	2.3
reverse osmosis (RO) wastewater (reject stream)	82.1
boiler blowdown water	4.4

EXISTING WORKS

Pre-treatment of Process Wastewater

- one (1) 10,000 litre two-compartment settling tank, with the first compartment receiving the media filter backwash only, and the second compartment receiving effluent from the first compartment and all other three (3) streams, with effluent from the second compartment passing through an effluent filter and

discharging, via a storm sewer, into a water reservoir;

PROPOSED WORKS

Stormwater Management/Conveyance

- stormwater conveyance system collecting surface runoff from a drainage area of 8.2 hectares and discharging, via a 900 millimetre sewer from catchbasin manhole CBMH8, into a concrete reservoir for storage and further treatment;
- one (1) catchbasin manhole CBMH8, equipped with a 600 millimetre diameter orifice plate, controlling overflow for storms more than the 5 year storm event, discharging overflow to manhole MH9; and
- one stormwater manhole MH9, receiving overflow from the CBMH8 and the Final Effluent from wastewater/stormwater treatment system described below, discharging into headwall #1, where the water is outlet to an adjacent valley that is within the floodplain of a tributary to the Conestogo River.

Process Wastewater and Stormwater Runoff Storage and Treatment

- one (1) concrete reservoir, accepting process wastewater effluent from the settling tank and surface runoff from the CBMH8, having dimensions of 33.5 metres (diameter) by 4.4 metres (depth) with an effective volume of 3,900 cubic metres, and discharging via a perforated riser into a pump chamber;
- one (1) pump chamber, consisting of an 8.5 metre deep 2400 millimetre precast chamber complete with duplex pumps each having a rated capacity of 15.5 litres per second, discharging into a treatment system;
- one (1) wastewater/stormwater treatment system, having a design capacity of 15.5 litres per second (1,339 cubic metres per day), consisting of one (1) alum and polymer injection unit, one (1) pH adjustment (using caustic) unit, one (1) slant plate clarifier, five (5) Macrolite media filters each with a media capacity of 0.34 cubic metre, and three (3) carbon adsorption filters each with 2267 kilograms of Granular Activated Carbon (GAC);
- one (1) treated effluent discharging system, including a Final Effluent sample port, discharging the Final Effluent from the wastewater/stormwater treatment system into the aforementioned manhole MH9; and

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. "Approval" means this entire Environmental Compliance Approval and any Schedules attached to it;
2. "BOD5" (also known as TBOD5) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demands;
3. "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;
4. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Works is geographically located;
5. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19;
6. "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;
7. "Existing Works" means those portions of the Works included in the Approval that have been constructed previously;
8. "Final Effluent" means effluent that is discharged to the environment through the approved effluent disposal facilities, that are required to meet the compliance limits stipulated in the Approval for the Works at the Final Effluent sampling point;
9. "Grab Sample" 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;
10. "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, as amended;
11. "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;
12. "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;
13. "Monthly Average 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;
14. "Owner" means any person that is responsible for the establishment of the Works being approved by this Approval, and includes Owner's Legal Name and its successors and assigns;

15. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40;
16. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
17. "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; and
18. "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.
4. The issuance of, and compliance with the Conditions of this Approval does not:
 - a. relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement, including, but not limited to, the obligation to obtain approval from the local conservation authority necessary to construct or operate the sewage Works; or
 - b. limit in any way the authority of the Ministry to require certain steps be taken to require the Owner to furnish any further information related to compliance with this Approval.

2. CHANGE OF OWNER

1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:
 - a. change of address of Owner;

- b. change of Owner, including address of new owner;
 - c. change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Business Names Act, R.S.O. 1990, c. B.17*, as amended, shall be included in the notification;
 - 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. C.39*, as amended, shall be included in the notification.
2. 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.
 3. The Owner shall ensure that all communications made pursuant to this condition refer to the environmental compliance approval number.

3. CONSTRUCTION OF PROPOSED WORKS / RECORD DRAWINGS

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. EFFLUENT OBJECTIVES

1. The Owner shall design and undertake everything practicable to operate the Works in accordance with the following objectives:
 - a. Effluent objectives listed in the Table 1 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.

5. COMPLIANCE LIMITS

1. The Owner shall operate and maintain the Works such that compliance limits for the Final Effluent parameters listed in the Table 2 included in Schedule C are met.

6. 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/maintain 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. 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; and
 - c. a spill prevention and contingency plan, consisting of procedures and contingency plans (including a Sulphate Contingency Plan), including notification to the District Manager, to reduce the risk of spills of pollutants and prevent, eliminate or ameliorate any adverse effects that result or may result from spills of pollutants;
 - d. site salt Best Management Practices for de-icing/snow activities;
 - e. inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;
 - f. repair and maintenance programs, including the frequency of repair and maintenance for the Works;
 - g. procedures for the inspection and calibration of monitoring equipment; and
 - h. procedures for receiving, responding and recording public complaints, including recording any follow-up 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 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.

7. 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.a.
 - c. definitions for frequency:
 - i. Weekly means once every week
 - ii. Monthly means once every month
 - iii. Quarterly means once every three (3) months
 - d. The measurement frequencies specified in Schedule D in respect to any parameter may, after one (1) year of monitoring in accordance with this Condition, be modified by the District Manager in writing.
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 publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02, as amended;
 - b. the publication "Standard Methods for the Examination of Water and Wastewater", as amended;
 - c. the Environment Canada publications "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout" (EPS 1/RM/13 Second Edition - December 2000) and "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to *Daphnia magna* " (EPS 1/RM/14 Second Edition - December 2000), 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 flowrates.
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.

8. LIMITED OPERATIONAL FLEXIBILITY

1. The Owner may make pre-authorized modifications to the sewage pumping stations and sewage treatment facilities in Works in accordance with the document "Limited Operational Flexibility - Protocol for Pre-Authorized Modifications to Private Sewage 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.

9. REPORTING

1. The Owner shall report to the District Manager orally as soon as possible any non-compliance with the compliance limits, and in writing within seven (7) days of non-compliance. For the continuously monitored parameter (Chloride), non-compliance shall be reported to a maximum of once per day.
2. The Owner shall, within fifteen (15) days of occurrence of a spill within the meaning of Part X of the EPA, 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 schedule of implementation, in addition to fulfilling the requirements under the EPA and O. Reg. 675/98 "Classification and Exemption of Spills and Reporting of Discharges".
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 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 process wastewater characteristics and flow rates;
 - b. a summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates, and a comparison to the effluent objectives and compliance limits in this Approval, including an overview of the effectiveness of treatment and potential impact of monitored parameters.
 - c. a summary of all operating issues encountered and corrective actions taken;
 - d. 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;
 - e. a summary of any effluent quality assurance or control measures undertaken;
 - f. 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;
 - g. a summary of efforts made to achieve the effluent objectives in this Approval, including an assessment of the issues and recommendations for pro-active actions when any of the effluent objectives are not achieved or there is an increasing trend in deterioration of Final Effluent quality. Effluent chloride data may be reported in the Annual Report based on the full data or daily averages

for the months of May through October and based on weekly averages for the months of November through April along with providing the minimum and maximum 5-minute average values for each period reported and each daily exceedance.

- h. a summary of any complaints received and any steps taken to address the complaints; and
- i. any other information the District Manager requires from time to time.

Schedule A

1. Application for Environmental Compliance Approval dated December 27, 2018 and received on January 25, 2019, submitted by Craig Foster, Plant Manager, Wallenstein Feed & Supply Ltd., for the proposed process wastewater treatment and stormwater management system, including design report, engineering drawings and specifications.

Schedule B

Table 1 - Effluent Objectives
(Final Effluent from the Wastewater/Stormwater Treatment System)

Effluent Parameter	Averaging Calculator	Concentration Objectives* ^{1, 2, 5, 6} (maximum unless otherwise indicated)
Chloride* ³	5-minute Average	640 mg/L (Nov. 1 to Apr. 30)
Sulphate* ⁴	Single Sample Result	3855 mg/L
BOD5	Single Sample Result	10.0 mg/L
Total Suspended Solids (TSS)	Monthly Average	10.0 mg/L
Total Phosphorus (TP)	Monthly Average	0.5 mg/L
Toluene	Single Sample Result	0.8 µg/L
Formaldehyde	Single Sample Result	36 µg/L
Aluminium	Single Sample Result	0.075 mg/L
Cadmium	Single Sample Result	0.2 µg /L
Cobalt	Single Sample Result	0.9 µg/L
Copper	Single Sample Result	0.005 mg/L
Iron	Single Sample Result	0.3 mg/L
Nickel	Single Sample Result	0.025 mg/L
Vanadium	Single Sample Result	0.006 mg/L
Zinc	Single Sample Result	0.03 mg/L

Note*¹: Effluent Objectives to apply year round unless otherwise indicated.

Note*²: If an Effluent Objective is exceeded, the Owner shall take action to assess and reduce concentrations as deemed appropriate.

Note*³: If the Effluent Objective for Chloride in the noted months is exceeded, the Owner shall assess the cause (process or stormwater) and address as appropriate for each cause. If stormwater from site management is the source, current site salt Best Management Practices and activities shall be assessed and improved where possible.

Note*⁴: If the Effluent Objective for Sulphate is exceeded, the effluent discharge is stopped and the Contingency Plan outlined in an updated operations manual is invoked and followed until effluent levels are below 90% of the Effluent Limit concentration.

Note*⁵: "mg/L" means milligrams per litre.

Note*⁶: "µg/L" means micrograms per litre.

Schedule C

Table 2 - Final Effluent Compliance Limits
(Final Effluent from the Wastewater/Stormwater Treatment System)

Effluent Parameter	Averaging Calculator	Concentration Limits* ¹ (maximum unless otherwise indicated)
Chloride* ^{2,3,4}	5-minute Average	640 mg/L (May 1 to Oct. 31)
Sulphate	Single Sample Result	5,140 mg/L
BOD5	Single Sample Result	15.0 mg/L
Total Suspended Solids	Single Sample Result	15.0 mg/L
pH	Single Sample Result	between 6.0 - 9.0 inclusive

Note*¹: Effluent Limits to apply year round unless otherwise indicated.

Note*²: If the effluent limit for Chloride in the noted months is exceeded, the Owner shall assess the cause (process or stormwater) and address as appropriate for each cause. If stormwater from site management is the source, the current site salt best management practices and activities should be assessed and improved where possible.

Note*³: An exceedance from a discharge event during May and October will not be counted as an exceedance of the Chloride Effluent Compliance Limit, if the exceedance was deemed to be a result of stormwater runoff related to recent salt use and the previous discharge event exceeded the effluent objective concentrations

Note*⁴: If the effluent limit for Chloride in the noted months is exceeded, a single notification per day shall be reported.

Schedule D

Table 3 - Chloride and Sulphate Influent Monitoring (Influent to the Reservoir)

Sample location	effluent from the settling tank at an autosampler*
Frequency	Continuous for Chloride; and Quarterly for Sulphate, Hardness, and TP.
Sample Type	On-line analyzer for Chloride; and Grab for Sulphate, Hardness, and TP.
Parameters	Chloride, Sulphate, Hardness, and Total Phosphorus (TP)

Note*: an autosampler is to be installed at the settling tank that will collect hourly samples and direct it to a composite sample tank. The auto sampler will operate continuously such that there will be a continuous 3-day composite sample available. The chloride concentration in the composite sample tank will be monitored on a continuous basis.

Table 4-1 - Final Effluent Monitoring (Chloride, Sulphate and Hardness)

Sample location	Final Effluent of the wastewater/stormwater treatment system, at the sample port in the treatment building upstream of the discharge location- manhole MH9
Frequency	On-line analyzer for Chloride; and Weekly* for the Sulphate and Hardness
Sample Type	On-line analyzer for Chloride; and Grab for Sulphate and Hardness.
Parameters	Chloride, Sulphate, and Hardness

Note*: Weekly sampling frequency for Sulphate and Hardness shall be increased to once every three (3) days, in case the previous sampling result for Sulphate is more than 75% of the effluent limit concentration ($75\% \times 5,140 = 3,855$ mg/L).

Table 4-2 - Final Effluent Monitoring (Other Parameters)

Sample location	Final Effluent of the wastewater/stormwater treatment system, at the sample port in the treatment building upstream of the discharge location- manhole MH9
Frequency	Once a day, or once a discharge event for pH; Weekly for TP, TSS, Toluene and Formaldehyde; and Monthly for BOD5, Aluminium, Cadmium, Cobalt, Copper, Iron, Nickel, Vanadium and Zinc.
Sample Type	Grab
Parameters	BOD5, Total Suspended Solids (TSS), Total Phosphorus (TP), Toluene, Formaldehyde; Aluminium, Cadmium, Cobalt, Copper, Iron, Nickel, Vanadium, Zinc, and pH (field)

Table 4-3 - Final Effluent Toxicity Testing

Sample location	Final Effluent of the wastewater/stormwater treatment system, at the sample port in the treatment building upstream of the discharge location- manhole MH9
Frequency	Three times per year (June, August and October)*
Sample Type	Grab
Parameters	Toxicity testing on Rainbow Trout and Daphnia Magna

Note*: After two years (6 toxicity tests) of testing, this toxicity testing program may be removed by District Manager in writing upon review of the annual performance reports for two years.

Schedule E

Limited Operational Flexibility

Protocol for Pre-Authorized Modifications to Private Sewage 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 Works 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. Sewage 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 suction 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 System

a. Sewers and appurtenances

- i. 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.

b. Flow Distribution Chambers/Splitters

- i. 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.

c. Treatment System

- i. 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 de-watering washing compactors, hydrocyclones, grit classifiers, grit pumps, air blowers conveyor system, disposal bins and other ancillary equipment to the screening and grit removal processes.
- ii. Replacement of channel aeration systems, including air blowers, air supply main, air headers, air laterals, air distribution grids and diffusers.
- iii. 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.

d. Supplementary Treatment - Chemical Systems

- i. Replacement or relocation of chemical storage tanks for existing chemical systems only, provided that the tanks are sited with effective spill containment;
- ii. 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.
- iii. Relocation and addition of chemical dosing point(s) including chemical feed pipes and valves and controls, to improve phosphorus removal efficiency;
- iv. 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.

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 wastewater treatment works 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.



Ministry of the Environment, Conservation and Parks

Notice of Modification to Sewage Works

RETAIN COPY OF COMPLETED FORM AS PART OF THE ECA ON-SITE PRIOR TO THE SCHEDULED IMPLEMENTATION DATE.

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

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

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

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

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 Authority is included to ensure that the Ministry records are kept accurate and current with respect to ownership and Operating Authority 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 effluent 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.
5. Condition 5 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.
6. Condition 6 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.
7. Condition 7 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.
8. Condition 8 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.
9. Condition 9 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.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review 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 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:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

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

AND

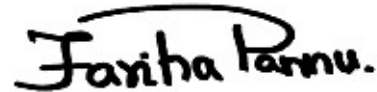
The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.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 31st day of March, 2021



Fariha Pannu, P.Eng.

Director

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

NH/

c: District Manager, MECP Guelph District Office
Dave Wilhelm, MTE Consultants Inc.