ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 5564-C4WR49
Issue Date: August 9, 2021

Mansfield Ski Club Inc.
628213 15 Sideroad Mansfield
Mulmur, Ontario
L9V 0T9

Site Location: Mansfield Ski Club Inc.
Lot East Part of Lot 16, Concession 6
628213 15 Sideroad
Township of Mulmur, County of Dufferin

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 new non-municipal sewage works with a daily sanitary sewage design flow of **135,050 litres per day**, for the collection, transmission and treatment of sanitary sewage from the facilities as described below at the Mansfield Ski Club and disposal of effluent to the Pine River at a maximum discharge rate of **120,387 litres per day**, located at the above Site Location, consisting of the following:

Details of Service Area:

- **Type of Occupancy**: Commercial/Seasonal Residential
- **Type and Number of Units:**
  - Existing Main Chalet, Administration Building (652 m^2 existing ground floor & 158 m^2 existing second floor), GM Office and Ski House;
  - Existing Patrol Hut and Chili Shack;
  - Proposed Building A, including 630 m^2 ground floor & 252 m^2 mezzanine as offices and personal business space, and 10 accommodation units on the second and third floors;
  - Expanded Administration Building (i.e. Building B), including 128 m^2 additional ground floor as offices and personal business space, and 15 accommodation units on the second and third floors; and
  - Six (6) stacked townhouse blocks, including a total of 66 accommodation units.

PROPOSED WORKS

Proposed Contingency Balancing Tanks

- two (2) single compartment balancing tanks, connected by bottom drains, each having a capacity of approximately 50,000 litres, to be installed downstream of the Trash Tank and upstream of the Anaerobic Digester Tank #1 of the Waterloo Biofilter Sewage Treatment System as described below within the reserved area, as a contingency measure in accordance with Condition 3.3;

Proposed Waterloo Biofilter Sewage Treatment System

Trash Tank

- one (1) single compartment Trash Tank, having a capacity of approximately 68,000 litres, complete with inlet and outlet baffles, receiving raw sewage from the on-site facilities above via the sewage collection system, discharging by gravity into Anaerobic Digester Tank #1 as described below;

Anaerobic Digester Tanks #1, #2 and #3

- three (3) single compartment Anaerobic Digester Tanks, connected in series, each having a capacity of approximately 68,000 litres with the inlet equipped with an InnerTube; the outlets of Anaerobic Digester Tanks #1 and #2 are equipped with a baffle and the outlet of Anaerobic Digester Tank #3 is equipped with six (6) effluent filters, discharging by gravity into the Aeration Tank as described below;

Aeration Tank

- one (1) two-compartment Aeration Tank, having a capacity of approximately 68,000 litres, equipped with four (4) aerators (two in each compartment) and complete with inlet and outlet baffles, discharging by gravity into the Clarifier Tank as described below;

Clarifier Tank

- one (1) two-compartment Clarifier Tank, having a capacity of approximately 68,000 litres, with the inlet equipped with an InnerTube and the outlet equipped with six (6) effluent filters, equipped with a submersible return pump to the Trash Tank discharge line, discharging by gravity into Balance Tank #2 as described below;

Internal Balance Tanks #1 & #2

- two (2) single compartment balance tanks, connected by bottom drains, each having a capacity of approximately 76,000 litres, with Balance Tank #2 equipped with two (2) pairs of submersible pumps, with each pair discharging into two and half (2.5) Waterloo Biofilter

Bulk-Filled Tanks as described below;

Waterloo Biofilter Bulk-Filled Tanks

- five (5) single compartment Waterloo Biofilter Bulk-Filled Tanks, connected in series by bottom drains, each having a capacity of approximately 55,000 litres and housing 55 cubic metres of Biofilter medium, discharging by gravity into Waterloo Biofilter Basket Tank #2 as described below;

Waterloo Biofilter Basket Tanks

- two (2) single compartment Waterloo Biofilter Basket Tanks, connected in series by bottom drains, each having a capacity of approximately 55,000 litres and housing three (3) baskets with approximately 10 cubic metres of Biofilter medium per basket (60 cubic metres in total); Waterloo Biofilter Basket Tank #1 is equipped with three (3) submersible simplex pumps and two (2) submersible duplex pumps, with Simplex Pump #1 recirculating to the Trash Tank discharge line, Simplex Pump #2 dosing Waterloo Biofilter Basket Tanks #1 and #2 on a closed loop, Simplex Pump #3 dosing the sand filters described below on a closed loop, and Duplex Pumps #1 and #2 discharging to the UV disinfection units as described below;

Sand Filters

- three (3) sand filter polishing units located in an above ground control building, receiving pumped effluent from Waterloo Biofilter Basket Tanks #1 and discharging by gravity to Waterloo Biofilter Basket Tanks #2;

UV Disinfection & Effluent Flow Measurement

- five (5) UV disinfection units with one (1) flow meter located the above ground control building, receiving pumped effluent from Waterloo Biofilter Basket Tanks #1 and discharging by gravity to the effluent pump station as described below;

Supplementary Treatment Systems

- one (1) sodium aluminate (or approved equivalent) dosing system located in the above ground control building, metering sodium aluminate (or approved equivalent) into the trash tank and/or Anaerobic Digester Tank #2;

- one (1) sodium aluminate (or approved equivalent) dosing system located in the above ground control building, metering sodium aluminate (or approved equivalent) into Anaerobic Digester Tank #2 and/or the clarifier tank;

- one (1) alkalinity dosing system located in the above ground control building, metering alkalinity into the clarifier tank;

- one (1) bacteria dosing system located in the above ground control building, metering bacteria into Balance Tank #2;

Effluent Pump Station & Final Effluent Disposal

- one (1) effluent pump station located downstream of the UV disinfection units, equipped with on-demand submersible duplex pumps (one duty, one standby), each rated at 2.5 litres per second at a total dynamic head (TDH) of approximately 14.4 metres, discharging via an approximately 134 metre long 50 millimetre diameter forcemain west to the proposed outlet storm sewer system at MH1 located west of the existing Main Chalet;

including all other controls, electrical equipment, instrumentation, piping, valves and appurtenances essential for the proper operation of the aforementioned sewage works;

EXISTING WORKS (All to be Decommissioned and Removed)

- one (1) existing 18,000 litre surge tank located immediately east of the Northern Purification System as described below;

- one (1) existing Northern Purification System, Model GC-2, having a rated capacity of 22,700 litres per day, discharging to the filter beds as described below via pumps;

- two (2) existing filter beds located immediately east of the existing gravel driveway/easement that provides access to the existing chalets to the northeast of the Main Chalet;

all in accordance with the supporting documentation submitted to the Ministry as listed in the **Schedule A** of this Approval.

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

4. "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;

5. "District Manager" means the District Manager of the Guelph District Office;

6. "*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);

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

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

9. "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(s);

10. "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;

11. "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;

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 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;

14. "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;

15. "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;

16. "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 E;

17. "Normal Operating Condition" means the condition when all unit process(es) in a treatment train is operating within its design capacity;

18. "Operating Authority" 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;

19. "Owner" means Mansfield Ski Club Inc., including any successors and assignees;

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

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

22. "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;

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

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

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

1. The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the 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 AUTHORITY

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. 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 Operating Authority;

   b. change of Operating Authority, including address of new Operating Authority.

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 environmental compliance approval number.

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

3. The Owner shall install the proposed contingency balance tanks as described in this Approval in accordance with the Contingency Plan included in **Schedule A**.

4. 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.

5. **One (1) week** prior to the commencement of the operation of the Proposed Works, the Owner shall notify the District Manager (in writing) of the pending start-up date.

6. 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. DESIGN OBJECTIVES

1. The Owner shall design and undertake everything practicable to operate the Works 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.

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(s) included in **Schedule C** are met.

2. The Owner shall operate and maintain the Works such that the Final Effluent is disinfected continuously year-round.

3. The Owner shall operate and maintain the Works such that the Final Effluent is non-acutely lethal to Rainbow Trout and Daphnia magna by ensuring that each Rainbow Trout acute lethality test and each Daphnia magna acute lethality test performed on any grab sample of the Final Effluent shall result in mortality of no more than 50% of the test organism in 100% effluent.

4. The Owner shall ensure that the flow of Final Effluent discharged into the Pine River does not exceed **120,387 litres per day**.

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 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;

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 Authority 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, upon the construction, prepare and make available for inspection by Ministry staff, a maintenance agreement with the manufacturer for the treatment process/technology. The maintenance agreement must be retained at the site and kept current for the operational life of the Works.

6. The Owner shall ensure that the effluent filters in the anaerobic digester tanks and clarifier tank be cleaned out at the frequency recommended by the manufacturer.

7. The Owner shall ensure that the sewage sludge accumulated in the Waterloo Biofilter sewage treatment system be periodically withdrawn at the frequency required to maintain efficiency of the treatment system.

8. 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.

9. 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.

10. 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.

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.b.

    c. definitions for frequency:

        i. Weekly means once every week;

        ii. Bi-weekly means once every two weeks;

        iii. Quarterly means once every three months;

        iv. 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/month for the scheduled sampling program, except when the actual scheduled

monitoring frequency is three (3) or more times per week.

e. The measurement frequencies specified in **Schedule D** in respect to any parameter may, after **three (3) years** of monitoring in accordance with this Condition, be modified by the Director in writing after consultation with the District Manager.

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;

   d. 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, subject to the following:

      i. the use of pH stabilization in the determination of acute lethality of final effluent to Rainbow Trout in accordance with the Environment Canada publication "Procedure for pH Stabilization during the Testing of Acute Lethality of Wastewater Effluent to Rainbow Trout (EPS 1/RM/50)" (2008), as amended, is permitted only if:

         a. all the three criteria stipulated in the Environment Canada EPS 1/RM/50 are met; and

         b. the final effluent is not discharged to a receiver in which the final effluent contributes more than 50% of the total flow in the receiving water, unless the District Manager, having reviewed additional information submitted regarding the final effluent and the receiving water approves on the use of RM50 on a site-specific basis.

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

3. The minimum monitoring frequency with respect to acute lethality to Rainbow Trout and Daphnia magna shall, after eight (8) consecutive quarters of monitoring results not indicating acute lethality, be reduced to annually. If any Final Effluent sample indicates acute lethality to Rainbow Trout or Daphnia magna, the monitoring frequency shall revert back to quarterly and

the Owner shall carry out the following immediately:

a. Review the following:

i. Final Effluent quality and confirm that concentrations of ammonia are within the limits;

ii. plant operations around the time of the toxicity event; and

iii. all data available regarding plant operations and Final Effluent quality.

b. If the observed effluent toxicity is not associated with ammonia, an investigation shall be undertaken to determine the cause or source of the toxicity.

c. Upon determination of cause or source of acute lethality to Rainbow Trout and Daphnia magna, the Owner shall determine appropriate control measures to achieve non-acutely lethal effluent and time lines for the implementation of identified control measures. The Owner shall submit the proposed control measures and implementation time lines for approval to the District Manager.

4. 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 Final Effluent discharged from the Waterloo Biofilter sewage treatment system by continuous flow measuring devices and instrumentations.

5. The Owner shall retain for a minimum of **five (5) years** from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.

8. 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.

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), the Owner shall, within **fifteen (15) days** of the occurrence of any reportable spill as provided in Part X of the EPA and Ontario Regulation 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 and submit a performance report, on an annual basis, within **ninety (90)**

days following the end of each operational season to the District Manager. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:

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

b. a summary and interpretation of all flow data and results achieved in not exceeding the maximum daily flow (120,387 litres per day) discharged to the Pine River;

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

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

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

f. 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;

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

h. a summary of the calibration and maintenance carried out on all 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;

i. 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;

j. 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;

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

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

m. 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;

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

9. DECOMMISSIONING OF UN-USED SEWAGE WORKS

1. The Owner shall properly abandon any portion of unused existing sewage 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 sewage 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.

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 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 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.

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 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.

9. Condition 9 regarding decommissioning of un-used sewage works is included to ensure that any components of un-used works are properly decommissioned.

Schedule A

1. Application for Environmental Compliance Approval for Municipal and Private Sewage Works, dated February 9, 2021 and received on April 7, 2021 with updated documentation received on April 13, 2021, submitted by WMI & Associates Limited on behalf of Mansfield Ski Club Inc., including the design brief, final plans, specifications and all supporting documentation and correspondence submitted in support of this application;

2. Technical memorandum Re. Mansfield Ski Club, Community of Mansfield, Township of Mulmur, ECA Reference No. 8664-BZVSYN, Contingency Plan, WMI File No. 15-319, dated August 5, 2021, prepared by Jeremy W. Lightheart, P.Eng. of WMI & Associates Limited.

Schedule B

Final Effluent Design Objectives

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	0.5 mg/L
Total Ammonia Nitrogen	Monthly Average Effluent Concentration	3 mg/L
Toxicity to Rainbow Trout and Daphnia magna	Single Sample Result	Non-acutely lethal
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

Final Effluent Parameter	Averaging Calculator	Limit (maximum 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	1 mg/L
Total Ammonia Nitrogen	Monthly Average Effluent Concentration	5 mg/L
E. coli	Monthly Geometric Mean Density	200 CFU/100 mL*
Toxicity to Rainbow Trout and Daphnia magna	Single Sample Result	Non-acutely lethal (no more than 50% mortality)
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

Loading Limits

Final Effluent Parameter	Averaging Calculator	Limit (maximum unless otherwise indicated)
CBOD5	Monthly Average Daily Effluent Loading	1.8 kg/d
Total Suspended Solids	Monthly Average Daily Effluent Loading	1.8 kg/d
Total Phosphorus	Monthly Average Daily Effluent Loading	0.12 kg/d
Total Ammonia Nitrogen	Monthly Average Daily Effluent Loading	0.6 kg/d

Maximum Final Effluent Discharge Rate

Period	Daily Effluent Flow (maximum unless otherwise indicated)
Year-round	120,387 L/day

Schedule D

Monitoring Program

Influent

- Influent sampling at the Trash Tank

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
Alkalinity	Grab	Bi-Weekly
Temperature	Grab	Bi-Weekly
pH	Grab	Bi-Weekly

Final Effluent

- Final Effluent sampling at the Above Ground Control Building / Effluent Pump Station

Parameters	Sample Type	Minimum Frequency
CBOD5	Grab	Weekly
Total Suspended Solids	Grab	Weekly
Total Phosphorus	Grab	Weekly
Total Ammonia Nitrogen	Grab	Weekly
E. coli	Grab	Weekly
Alkalinity	Grab	Weekly
pH*	Grab	Weekly
Temperature*	Grab	Weekly
Acute Lethality to Rainbow Trout and Daphnia magna	Grab	Quarterly**

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

**See Condition 7.3 for additional details.

Sludge/Biosolids

– Sludge sampling at the Clarifier Tank

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

Methodology for Calculating and Reporting 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.

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 9th day of August, 2021

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

SW/

c: District Manager, MECP Guelph District Office
Jeremy Lightheart, P.Eng., WMI & Associates Limited