

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 2327-BNQQ7L

Issue Date: July 30, 2020

Valerie Falls General Partner Limited as general partner for
and on behalf of Valerie Falls Limited Partnership
243 Industrial Park Crescent,
Sault Ste. Marie, Ontario, P6B 5P3

Site Location: Valerie Falls Hydroelectric Generating Station
Valerie Falls Road, Township of Atikokan,
District of Rainy River, 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 of Industrial Sewage Works for the collection, treatment and disposal of stormwater and drainage water from the existing Valerie Falls Hydroelectric Generating Station (GS), with a generating capacity of 10 MW, equipped with two (2) Turbine Units, two (2) Generator Units, two (2) Turbine and Generator Lube Oil System in Turbine Pits, two (2) natural convection cooling systems, located at the mouth of Seine River consisting of the following:

Powerhouse Drainage and Treatment System: Drainage system comprised of vertical drain pipes, servicing the Powerhouse to collect sewage and drainage from within the powerhouse pressure relief drains located at upper and lower levels, floor trenches, funnel floor drains along turbine floor, oil-containing equipment drains, shaft seal drain, Draft tube drains from Access Galleries and Penstock Leakage, comprising of the following components:

1. Valve Pit:- Located on the lower floor of the station along with the sump pit and access pits for the both draft tubes (Unit 1 and Unit 2), each with a depth of 3.33 m, width 2.5 m and length of 1.2 m and having containment volume of 9,990 L, and is provided with a submersible pump rated at 2.6 L/s at 3 m TDH, controlled with float switch and discharges into the sump pit as described below:

2. Sump Pit (House Sump with Belt Skimmer): located on bottom floor of the Station, with a depth of 3.33 m, width 2.5 m and length 1.8 m, resulting in a containment volume of 14,985 L, to collect and contain oil water pumped from the Valve Pit, Draft tubes, access Pits, floor drains, upper and lower level pressure relief drains and is equipped with the following:

3. Belt Skimmer / Oil Water Separator (BS-OWS) with PLC Programmer: A proprietary Belt Skimmer /

Oil Water Separator (Abanaki Oil Graber Model 4 or approved equivalent) with Oil Removal capacity of 16 gph (60 lph) with high capacity tail pulley, and motor operating on either 115/230VAC, wash down duty motors. Belt Width 4 in. (10 cm), Belt Length as required and with corrosion-resistant steel/ elastomer, with oil discharge through piping into an Oil Skimmer Reservoir, having a storage capacity of 19 L (5 Gallons). The piping in the Oil Skimmer Reservoir allows the water to flow back into the House Sump while accumulating oil in the reservoir. Level switches allow for the monitoring of the reservoir level and will trigger an alarm when a predetermined amount (5 gallons or approximately 19 L) of oil is collected.

4. Pumps: two (2) Sump Pumps P8 and P14, each rated at 56.6 L/s (900 gpm), installed at a minimum of 100 mm above the bottom of the pit, and fitted with level monitoring electronic transducer connected to an Effluent PLC for starting and stopping the Pumps; which discharges clean water into the Seine River;

including other controls, piping works, valves, drains, and appurtenances essential for the proper operation of the aforementioned works;

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

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

1. "Approval" means this entire document and any schedules attached to it, and the Application;
2. "District Manager" means the Area Manager of the Thunder Bay - District Office of the Ministry;
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. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
5. "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;
6. "Owner" means Valerie Falls General Partner Limited as general partner for and on behalf of Valerie Falls Limited Partnership and its successors and assignees;
7. "OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended;
8. "Professional Engineer" means a person entitled to practice as a Professional Engineer in the Province of Ontario under a licence issued under the Professional Engineers Act;
9. "Quarterly" means four times over a year, relatively evenly spaced where possible, commencing with the start-up of the Works; and
10. "Works" means the sewage works described in the Owner's Application, both proposed and existing, as described in this Approval.

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

TERMS AND CONDITIONS

1. GENERAL CONDITION

1. The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the terms and conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
2. Except as otherwise provided by these terms and conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with this Approval.
3. Where there is a conflict between a provision of this environmental compliance approval and any document submitted by the Owner, the conditions in this environmental compliance approval shall take precedence.
4. Where there is a conflict between the documents listed in the Schedule A, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the Application.
5. The terms and conditions of this Approval are severable. If any term and condition of this environmental compliance approval, or the application of any requirement of this environmental compliance approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.
6. 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. EXPIRY OF APPROVAL

1. This Approval will cease to apply to those parts of the Works which have not been constructed within five (5) years of the date of this Approval.

3. CHANGE OF OWNER

1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:
 - a. change of Owner or operating authority, or both;
 - b. change of address of Owner or operating authority or address of new Owner or operating authority;
 - c. change of partners where the Owner or operating authority 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; and
 - d. change of name of the corporation where the Owner or operator is or at any time becomes a corporation, and a copy of the "Initial Return" or "Notice of Change" filed under the Corporations Information Act, R.S.O. 1990, c. C.39, shall be included in the notification to the District Manager.
2. In the event of any change in ownership of the Works, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the District Manager.
3. The Owner shall ensure that all communications made pursuant to this condition will refer to this Approval's number.

4. CONSTRUCTION

1. The Owner shall ensure that the design and construction of the Works is supervised by a Professional Engineer.
2. The Owner shall prepare a statement, certified by a Professional Engineer, that the Works were constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry staff.

5. OPERATION AND MAINTENANCE

1. The Owner shall ensure that the Works and related equipment and appurtenances which are installed or used to achieve compliance with this Approval are properly operated and maintained.
2. The Owner shall ensure that the Sump pumps are controlled by a level monitoring electronic transducer system that includes a "High-Level" alarm float and is wired to the effluent control panel and field personnel are dispatched to the site if the alarm is triggered. An alternating relay is also installed in order to equalize the run time of each sump pump and a spare pump is kept on site.

3. The Owner shall ensure that the oil skimmer operation is controlled by an effluent control panel and normally operates on a timer scheduled for 1 hour of run time every 12 hours.
4. The Owner shall check on a monthly basis, as a minimum, the following works for signs of oil loss and shall keep a record of the inspections and findings:
 - a. the Powerhouse Oil/Water Separators (BS-OWS).
 - b. The Owner shall carry out on a regular basis specific maintenance requirements and scheduling to ensure proper operation of the Works.
5. The Owner shall use best efforts to identify and clean-up all losses of oil within the Powerhouse.
6. The Owner shall, upon identification of a loss of oil, take immediate action to prevent the further occurrence of such loss.
7. In furtherance of, but without limiting the generality of, the obligation imposed by Subsection 1, the Owner shall ensure that equipment and material for the containment, clean-up and disposal of oil and materials contaminated with oil are kept on hand and in good repair for immediate use in the event of:
 - a. loss of oil from the Powerhouse Equipment and from the Sewage Works in the Powerhouse;
 - b. a spill within the meaning of Part X of the Environmental Protection Act, or
 - c. the identification of an abnormal amount of oil in the Oil/Water Separators (BS-OWS).

6. OIL SPILL COUNTERMEASURES

1. The Owner shall install, operate and maintain, as a minimum, the following process instruments with level alarms with accompanying 24/7 on-call operator response, for the equipment described below:
 - a. a low oil level alarm signal to a 24/7 on-call operator, and
 - b. an automatic stoppage of both turbines and their associated systems.

7. OPERATIONS MANUAL

1. The Owner shall prepare an operations manual prior to the commencement of operation of the sewage works, that includes, but not necessarily limited to, the following information:
 - a. operating procedures for routine operation of the Works;
 - b. inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;
 - c. repair and maintenance programs, including the frequency of repair and maintenance for the Works;

- d. contingency plans and procedures for dealing with potential spill, bypasses and any other abnormal situations and for notifying the District Manager; and
 - e. complaint procedures for receiving and responding to public complaints.
2. The Owner shall maintain the operations manual up to date through revisions undertaken from time to time and retain a copy at the location of the sewage works. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.

8. EFFLUENT OBJECTIVES

1. The Owner shall use best efforts to design, construct and operate the Works with the objective that the concentrations of the materials named in **Table 1 in Schedule B** as effluent parameters are not exceeded in the effluent from the location listed below:
- a. Powerhouse Sump Pit effluent to the Tail Race.
2. In the event of an exceedance of one of the objectives set out in Subsections (1), the Owner shall:
- a. notify the District Manager as soon as possible during normal working hours;
 - b. take immediate action to identify the source of the exceedance;
 - c. take immediate action to prevent further exceedance; and
 - d. record the date of each exceedance and its cause in a log book, located at the Station or at the local operations office of the Owner.

9. EFFLUENT - VISUAL OBSERVATIONS

1. Notwithstanding any other Condition in this Approval, the Owner shall ensure, by periodic visual inspection and recording in a log-book, that the effluent from the Works is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen, foam or discolouration on the receiving waters.

10. EFFLUENT MONITORING AND RECORDING

1. The Owner shall, upon commencement of operation of the sewage works, carry out the following monitoring program:
- a. All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality of the effluent stream over the time period being monitored.
 - b. Samples shall be collected and analyzed for the Powerhouse Sump Pit effluent at sampling point(s) M1 and M2 as shown in Drawing No. 3, at the following sampling frequencies and using the sample

type specified for each parameter listed **in Table 2 in Schedule C:**

2. In the event of a spill or an exceedance of the objective set out in Condition 8, Subsection (1), the Owner shall increase the frequency of sampling of the effluent from the Works, to once per month for each month that discharge occurs until it is demonstrated to the District Manager that the effluent complies with the said objective.
3. 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. Ministry of the Environment publication "Protocol for the Sampling and Analysis of Industrial/ Municipal Wastewater, Version 2" (January 2016) PIBS 2724e02, as amended from time to time by more recently published editions, and
 - b. the publication "Standard Methods for the Examination of Water and Wastewater", 21st edition, 2005, as amended from time to time by more recently published editions.
4. In respect of any parameters not mentioned in Table 1, the written approval of the District Manager, which approval shall be obtained prior to sampling.
5. The measurement frequencies specified in subsection Table 2 in respect of any parameter are minimum requirements which may, after (24) months of monitoring in accordance with this Condition, be modified by the District Manager in writing from time to time.
6. 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, inspection, testing and maintenance activities required by this Approval, including a record of all alarm-initiated operator trips to the Station.

11. REPORTING

1. The Owner shall prepare, and upon request, submit to the District Manager, a performance report, on an annual basis, within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the issuance of this Approval and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:
 - a. a summary and comprehensive interpretation of all monitoring data and analytical data collected relative to the Works during the reporting period, including an overview of the success and adequacy of the Works;
 - b. a description of any operating problems encountered and corrective actions taken;

- c. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;
 - d. a summary of any effluent quality assurance or control measures undertaken in the reporting period;
 - e. a summary of the efforts made and results achieved in comparison to the effluent quality objectives in accordance with Condition 8;
 - f. an evaluation of the calibration and maintenance procedures conducted on all monitoring equipment;
 - g. information on the disposal of any contaminated stormwater/oil; and
 - h. any other information the District Manager requires from time to time.
2. In addition to the obligations under Part X of the EPA, the Owner shall, within ten (10) working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, loss of any product, by-product, intermediate product, oil, solvent, waste material or any other polluting substance into the environment, or discovery thereof, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation. The District Manager may by written notice waive the requirement of a written report, on a case-by-case basis, when the respective oral report is made.
 3. The Owner shall immediately notify the Ministry's Spills Action Centre of any Works failure or potential Works failure, including any spills.
 4. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
 5. Reporting in accordance with subsections (3) or (4) does not relieve the Owner of any other regulatory or statutory obligations, including its reporting obligations pursuant to Part X of the EPA, nor does it relieve the Owner of any other obligations imposed by this Approval.

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

1. Condition 1 is imposed to ensure that the works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.
2. Condition 2 is included to ensure that, when the Works are constructed in time and operated, to meet the standards that apply at the time to ensure the ongoing protection of the environment.

3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to approved works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
4. Condition 4 is included to ensure that the Works are constructed, operated and maintained such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented.
5. Condition 5 is included to ensure that the Works will be operated and maintained in a manner enabling compliance with the terms and conditions of this Approval, such that the environment is protected and deterioration, loss, injury or damage to any person or property is minimized and/or prevented.
6. Condition 6 is included to ensure that a minimum level of spill protection is provided in the station, so that any oil leaks and spills are not discharged to the receiving watercourse.
7. Condition 7 is included to ensure that an operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept current by the Owner and made available to the Ministry upon request. Such a manual is an integral part of the operation of the works. Its compilation and use should assist the Owner in staff training and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a bench-mark for Ministry staff when reviewing the Owner's operation of the works.
8. Condition 8 is imposed to establish effluent quality objectives which the owner is obligated to use best efforts to meet on an ongoing basis. Also imposed are procedures to be followed to minimize environmental impact in the event that the objectives are exceeded.
9. Condition 9 is imposed to ensure that the effluents discharged from the works meets the Ministry's effluent quality requirements, as specified, on a continuous basis, thus minimizing environmental impact on the receiver.
10. Conditions 10 is related to sampling, monitoring and record keeping; and is imposed to require the Owner to demonstrate that the performance of the works is at a level consistent with the design and effluent objectives specified in the Approval, that the works are not causing any impairment of the receiving watercourse.
11. Condition 11 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.

Schedule A

1. Application for Environmental Compliance Approval submitted by Wilson Ryan, P.Eng., of Kresin Engineering Corporation, dated June 5, 2019 and supporting documents and drawings.

Schedule B

Table 1 - Effluent Objectives

(measured prior to discharge via outlet pipes to under the Tailrace in the River)

Effluent Parameter	Concentration Objective
Oil and Grease	15 mg/L
Phenolics (4AAP)	20 ug/L

Schedule C

Table 2 - Effluent Monitoring

Table 2 - Effluent Monitoring - (Sample Points M1 and M2)		
Effluent Parameter	Frequency	Sample Type
Oil and Grease	Quarterly	Grab
Phenolics (4AAP)	Quarterly	Grab

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

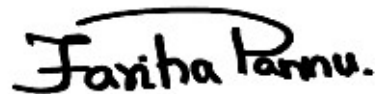
The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** 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 30th day of July, 2020



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

MN/

c: District Manager, MECP Thunder Bay - District
Ryan Wilson, P.Eng., Kresin Engineering Corporation