

## Appendix D

## Certificate of Approval for Sewage Works from the Ontario MOE



## AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 1232-9PEJYW Issue Date: December 9, 2014

1195714 Alberta Ltd.
525 8th St SW, No. 3800
Calgary, Alberta
T2P 1G1
Site Location: 4391 Highway 40
4391 Hwy 40 (Lot 25, Moore Concession 11) Corunna
St. Clair Township, County of Lambton

You have applied under section 20.2 of Part II.1 of the <u>Environmental Protection Act</u>, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

The establishment of sewage works for the collection, transmission, treatment and disposal of stormwater drainage from the Hydrocarbon Storage and Distribution Site which now includes the former Area 430 (Ethylene Operations Side), consisting of the following:

#### **PROPOSED WORKS:**

Construction of concrete process and storage area pads designed to store stormwater runoff and release manually to gravel areas after quality control of collected stormwater and brine ponds located at the following process and storage areas:

#### **Proposed Works**

- One (1) 191,000 m<sup>3</sup> storage capacity brine pond and one (1) 286,000 m<sup>3</sup> storage capacity brine pond, both located in the north-eastern part of the site;
- One (1) approximately 15,000 m<sup>2</sup> truck loading and unloading station and associated access road;
- One (1) approximately 7,000 m<sup>2</sup> area located within the rail loading facility to be used for pumps and compressors to accommodate anticipated increased rail traffic;
- One (1) additional propane, n-butane, and RFG butane drier unit to be added onto existing concrete process pad-areas;

### **Existing Works:**

- One (1) brine pond with a top surface area of  $52,808 \text{ m}^2$  in the Block 400 location;
- One (1) approximately 50  $\text{m}^2$  concrete process pad at the ethyl mercaptan storage area;
- One (1) approximately 155  $m^2$  concrete pad at the isobutane process area;
- Three (3) concrete pads each approximately 123 m<sup>2</sup> located at the propane, n-butane, and refinery grade butane process areas;
- One (1) methanol storage tank, one (1) calcium chloride storage tank, four (4) storage tanks for storing n-butane, refinery grade butane, off-spec n-butane, and refinery grade propane;
- Three (3) segments of rail truck in the existing rail truck car off-loading area;
- One (1) approximately 90  $\text{m}^2$  above grade motor control centre building;
- One (1) approximately  $6 \text{ m}^2$  above grade operations control building in the rail car loading area;
- Including all controls and associated appurtenances.

All in accordance with the documents listed in Schedule 'A'.

#### PREVIOUS WORKS APPROVED ON DECEMBER 10, 2008 UNDER ECA No. 4968-7LXU4M:

#### MODIFIED SEWAGE WORKS FOR STORMWATER DRAINAGE ONLY

- One (1) existing concrete process pad of approximately 1860 square metres at the former Ethylene Storage and Processing Area, located west of Highway 40 and south of the Hydro-Electric Power Commission (HEPC) Right-of-Way, with only storm water now directed from the pad to existing storm trenches and hence via connecting underground sewers to Collection Sump SP-601;
- One (1) Oil Storage Tank D-109, with a holding volume of approximately 22 cubic metres, within a curbed pad, approximately 12.8 metres by 8.5 metres which drains via an always open valve to a concrete sump, which drains to Collection Sump SP-601;
- One (1) existing Collection Sump SP-601 in the form of an elliptical underground storage tank with a storage volume of approximately 100 cubic metres, including an oil skimmer and a diaphragm discharge pump, P-106, rated at approximately 5 Litres per second, with manual start-up on a preset alarm signal and automatic level control, and also including filters on the pump suction and discharge lines, discharging to Oil/Water Separator D-106;

- One (1), cylindrical, above-grade, steel, three-compartment Oil/Water Separator D-106, approximately 1.2 metres in diameter and 5.5 metres long, rated for a maximum flow of 5 Litres per second, with feed entering the bottom of the second compartment which includes coalescing units and an overflow baffle on one side to an adjacent oil compartment with a capacity of approximately 680 Litres and an underflow baffle on the other side just upstream of a 1.1 metre high overflow weir to a water compartment;
- One (1) centrifugal, Oil Transfer Pump P-109, rated at a maximum flow of approximately 1.9 Litres per second to pump, as needed, any accumulated oil from the oil compartment in D-106 to Oil Storage Tank D-109;
- One (1) centrifugal, Water Compartment Pump P-108, rated at a maximum flow of approximately 5.7 Litres per second with manual start-up, based on a preset alarm level in the water compartment of D-106, and typically run between 1.3 and 2.6 Litres per second, to discharge via a 38 millimetre line to a 152 millimetre diameter underground sewer draining to the transfer ditch running north via the Brine Pond 431 chloride detector to the Municipal Parker Drain, which is located south of the HEPC Right-of-Way, with final drainage conveyed via the Parker Drain, west to the St. Clair River; and
- Including all controls and associated appurtenances.

All in accordance with the documents listed in Schedule 'A'.

# *PREVIOUS WORKS APPROVED ON OR BEFORE DECEMBER 13, 2001 UNDER ECA No.s* - 4-0095-86-006, 4-0095-87-917, 4-096-86-006, AND 4-029-78-967:

- Impoundment ditches, complete with outlet valves and two (2) chloride detectors at the property boundary, with a storage volume of approximately 11,400 Litres, draining the north and west areas of the Site and including provision for pumping to a Brine Pond, with uncontaminated surface runoff normally draining to the St. Clair River via the Austin Drain and Talfourd Creek;
- One (1) oil trap with a capacity of approximately 230 cubic metres, including a manual shut-off valve (normally open) and a chloride detector, located at the West Brine Farm (Areas 410 and 430), with uncontaminated surface runoff normally draining via surface ditches to the St. Clair River via the Austin Drain and Talfourd Creek and with any chloride contaminated runoff contained by closing the shut-off valve and trucking the impounded contents to the Brine Pond;
- One (1) oil trap with a capacity of approximately 230 cubic metres, including a manual shut-off valve (normally open) and a chloride detector, located at the East Brine Farm (Area 420), with uncontaminated surface runoff normally draining via surface ditches to the St. Clair River via Talfourd Creek and with any chloride contaminated runoff contained by closing the shut-off valve and trucking the impounded contents to the Brine Pond;
- One (1) oil trap with a capacity of approximately 230 cubic metres, including a manual shut-off valve (normally open) and a chloride detector, located in Area 420 of the Brine Wells, with uncontaminated surface runoff normally draining via surface ditches to the St. Clair River via the

Gibb and Austin Drains and Talfourd Creek and with any chloride contaminated runoff contained by closing the shut-off valve and trucking the impounded contents to the Brine Pond; and

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

All in accordance with the documents listed in Schedule 'A'.

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

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

"Average Daily Flow" means the cumulative total sewage flow to the sewage works during a calendar year divided by the number of days during which sewage was flowing to the sewage works that year;

"Daily Concentration" means the concentration of a contaminant in the effluent discharged over any single day, as measured by a composite or grab sample, whichever is required;

"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;

"District Manager" means the District Manager of the Sarnia District Office;

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

"Equivalent Equipment" means a substituted equipment or like-for-like equipment that meets the required quality and performance standards of a named equipment;

"Limited Operational Flexibility" (LOF) means any modifications that the Owner is permitted to make to the Works under this Approval;

"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;

"Monthly Average Concentration" means the arithmetic mean of all Daily Concentrations of a contaminant in the effluent sampled or measured, or both, during a calendar month;

"Monthly Average Daily Flow" means the cumulative total sewage flow to the sewage works during a calendar month divided by the number of days during which sewage was flowing to the sewage works that month;

"Notice of Modifications" means the form entitled "Notice of Modifications to Sewage Works";

"Owner" means 1195714 Alberta Ltd. and its successors and assignees;

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

"Previous Works" means those portions of the sewage works previously constructed and approved under an Approval;

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

"Rated Capacity" means the Average Daily Flow for which the Works are approved to handle;

"Works" means the sewage works described in the Owner's application, and this Approval, and includes Proposed Works, Previous 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. <u>GENERAL CONDITION</u>

- (1) The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- (2) Except as otherwise provided by these conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with the description given in this Approval, and the application for approval of the Works.
- (3) Where there is a conflict between a provision of any document in the schedule referred to in this Approval and the conditions of this Approval, the Conditions in this Approval shall take precedence, and where there is a conflict between the documents in the schedule, the document bearing the most recent date shall prevail.
- (4) Where there is a conflict between the documents listed in the Schedule submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.
- (5) The Conditions of this Approval are severable. If any Condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

#### 2. <u>CHANGE OF OWNER</u>

- (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 Partnerships Registration Act;
  - (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 most current "Initial Notice or Notice of Change" (Form 1, 2 or 3 of O. Reg. 189, R.R.O. 1980, as amended from time to time), filed under the Corporations Information Act 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.

#### 3. <u>OPERATIONS AND MAINTENANCE</u>

- (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.
- (3) The Owner shall check the chloride detectors at a frequency recommended by the manufacturer.

#### 4. <u>EFFLUENT - VISUAL OBSERVATIONS</u>

Notwithstanding any other condition in this Approval, the Owner shall ensure 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 or foam on the receiving waters.

### 5. STORMWATER AND SURFACE WATER MONITORING AND RECORDING

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

- (1) All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.
- (2) Stormwater samples shall be collected and analyzed at the following sampling point, at the sampling frequencies and using the sample type specified for each parameter listed:

Table 1 - Stormwater MonitoringSample Point: Effluent from the D-106 Water Compartment atthe Pump P-108 discharge				
Parameters	Sample Type	Frequency		
Dissolved Organic Carbon	Quarterly	Grab		
Total Phosphorus	Quarterly	Grab		
Specific Conductance	Quarterly	Grab		
Total Suspended Solids	Quarterly	Grab		
Diethyl Benzenes (mixed)	Quarterly	Grab		
Oil and Grease	Quarterly	Grab		
Hydrogen Ion (pH)	Quarterly	Grab		

(3) Surface water samples shall be collected and analyzed at the following sampling points,

Table 2 - Surface Water Monitoring         Sample Points       *NOTE 1         SW-1, SW-2, SW-3, and SW-4				
ParametersSample TypeFrequency				
Dissolved Organic Carbon	Semi-Annually	Grab		
Total Phosphorus	Semi-Annually	Grab		
Specific Conductance	Semi-Annually	Grab		
Total Suspended Solids	Semi-Annually	Grab		
Diethyl Benzenes (mixed)	Semi-Annually	Grab		
Oil and Grease	Semi-Annually	Grab		
Hydrogen Ion (pH)	Semi-Annually	Grab		

at the sampling frequencies and using the sample type specified for each parameter listed:

Note 1: Surface water sampling locations:

- SW-1 = Monitoring station located at the OWS near the process area.
- SW-2 = Monitoring station located at the ditch outlet to Talfourd Creek on the east side of Highway 40 at C. P. #1.
- SW-3 = Monitoring station located at the drain adjacent to Gibb Drain at C. P. #2.

SW-4 = New monitoring station located at the ditch south of the rail loading/unloading area.

- (4) The methods and protocols for sampling, analysis, toxicity testing, and recording shall conform, in order of precedence, to the methods and protocols specified in the following:
  - (a) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (August 1994), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions; and
  - (b) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition) as amended from time to time by more recently published editions.
- (5) The measurement frequencies specified in subsection (2) and subsection (3) in respect of any parameter are minimum requirements which may, after two (2) years 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 activities required by this Approval.

### 6. <u>LIMITED OPERATIONAL FLEXIBILITY</u>

(1) The Owner may make modifications to the Works in accordance with the Terms and Conditions of this Approval and subject to the Ministry's "Limited Operational Flexibility Criteria for Modifications to Sewage Works ", included under Schedule B of this Approval, as amended.

- (2) Sewage works under Limited Operational Flexibility shall adhere to the design guidelines contained within the Ministry's publication "Design Guidelines for Sewage Works 2008", as amended.
- (3) The Owner shall ensure at all times, that the Works, related equipment and appurtenances which are installed or used to achieve compliance are operated in accordance with all Terms and Conditions of this Approval.
- (4) For greater certainty, the following are <u>not</u> permitted as part of Limited Operational Flexibility:
  - (a) Modifications to the Works that result in an increase of the Rated Capacity of the Works;
  - (b) Modifications to the Works that may adversely affect the approved effluent quality criteria or the location of the discharge/outfall;
  - (c) Modifications to the treatment process technology of the Works, or modifications that involve construction of new reactors (tanks) or alter the treatment train process design;
  - (d) Modifications to the Works approved under s.9 of the EPA, and
  - (e) Modifications to the Works pursuant to an order issued by the Ministry.
- (5) Implementation of Limited Operational Flexibility is not intended to be used for piecemeal measures that result in major alterations or expansions.
- (6) If the implementation of Limited Operational Flexibility requires changes to be made to the Emergency Response, Spill Reporting and Contingency Plan, the Owner shall, provide a revised copy of this plan for approval to the local fire services authority prior to implementing Limited Operational Flexibility.
- (7) For greater certainty, any modification made under the Limited Operational Flexibility may only be carried out after other legal obligations have been complied with, including those arising from the Environmental Protection Act, Niagara Escarpment Planning and Development Act, Oak Ridges Moraine Conservation Act, Lake Simcoe Protection Act and Greenbelt Act.
- (8) At least thirty (30) days prior to implementing Limited Operational Flexibility, the Owner shall complete a Notice of Modifications describing any proposed modifications to the Works and submit it to the District Manager.

(9) The Owner shall not proceed with implementation of Limited Operational Flexibility until the District Manager has provided written acceptance of the Notice of Modifications or a minimum of thirty (30) days have passed since the day the District Manager acknowledged the receipt of the Notice of Modifications.

#### 7. <u>REPORTING</u>

- (1) In addition to the obligations under Part X of the Environmental Protection Act, the Owner shall, within ten (10) working days of the occurrence of any reportable spill as defined on Ontario Regulation 675/98, bypass or loss of any product, by-product, intermediate product, oil, solvent, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.
- (2) The Owner shall prepare and submit a performance report to the District Manager 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 commencement of operation of the works and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:
  - (a) a summary and interpretation of all monitoring data collected under Condition 5 and an overview of the success and adequacy of the sewage works;
  - (b) a description of any operating problems encountered and corrective actions taken;
  - (c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the sewage works;
  - (d) a summary of any effluent quality assurance or control measures undertaken in the reporting period;
  - (e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
  - (f) a copy of all Notice of Modifications submitted to the District Manager as a result of Schedule B, Section 1, with a status report on the implementation of each modification;
  - (g) a report summarizing all modifications completed as a result of Schedule B, Section 3; and
  - (h) any other information the District Manager may require from time to time.

#### Schedule 'A'

# *I. PREVIOUS WORKS APPROVED ON OR BEFORE DECEMBER 13, 2001 UNDER ECA No.s* - 4-0095-86-006, 4-0095-87-917, 4-096-86-006, AND 4-029-78-967:

- 1. Application for the Approval of Plans and Specifications for the Construction of Works for the Collection, Transmission, Treatment and Discharge of Industrial Wastes, dated March 15, 1978 and signed by D.B. Cattran, Production Manager, Hydrocarbons Department, Dow Chemical Canada Inc., in support of Certificate of Approval No. 4-029-78-006, dated November 7, 1978.
- Application for the Approval of Plans and Specifications for the Construction of Works for the Collection, Transmission, Treatment and Discharge of Industrial Wastewater dated September 24, 1986 and signed by Don Dukes, Manager - Energy and Feedstocks, Dow Chemical Canada Inc., in support of Certificate of Approval No. 4-095-86-006, dated October 30, 1986.
- 3. Application for the Approval of Plans and Specifications for the Construction of Works for the Collection, Transmission, Treatment and Discharge of Industrial Wastewater dated September 24, 1986 and signed by Don Dukes, Manager -Energy and Feedstocks, Dow Chemical Canada Inc., in support of Certificate of Approval No. 4-096-86-006, dated October 30, 1986.
- Application for the Approval of Plans and Specifications for the Construction of Works for the Collection, Transmission, Treatment and Discharge of Industrial Wastewater dated June 18, 1987 and signed by Don Dukes, Manager -Wells and Safety Department, Dow Chemical Canada Inc., in support of Certificate of Approval No. 4-095-87-917, dated March 6, 1991.
- 5. Application for Approval of Industrial Sewage Works dated April 15, 1996 and signed by Jorma Salmikivi, Manager Environmental Services, Dow Chemical Canada Inc., in support of Certificate of Approval No. 4-029-78-967, dated July 24, 1996.
- 6. Application for Approval of Industrial Sewage Works dated December 13, 2001 and signed by Allan C. Ebert, Production Leader HCSD, Dow Chemical Canada Inc., in support of an amendment to Certificate of Approval 4-095-86-006.

#### II. PREVIOUS WORKS APPROVED ON DECEMBER 10, 2008 UNDER ECA No. 4968-7LXU4M:

- 1. Application for Approval of Industrial Sewage Works dated March 28, 2006 and signed by Allan Ebert, Hydrocarbon Storage and Distribution Plant Leader, Dow Chemical Canada Inc.
- 2. Application for Approval of Industrial Sewage Works dated September 8, 2008 and signed by Allan Ebert, Hydrocarbon Storage and Distribution Plant Leader, Dow Chemical Canada Inc.
- 3. An information letter dated October 9, 2008 from Jill Ward, Site EH&S Leader, Dow Chemical Canada Inc., with additional information and drawings.

#### III. PROPOSED WORKS:

- 1. Application for Environmental Compliance Approval submitted by 1195714 Alberta Ltd. dated June 30, 2014 and design brief and engineering drawings prepared by SNC-Lavalin Inc., Toronto, Ontario.
- 2. "Stormwater Management Report Pembina Hydrocarbon Storage & Distribution Facility" dated June 2014 and prepared by SNC-Lavalin Inc., Toronto, Ontario.

#### Schedule B

#### Limited Operational Flexibility Criteria for Modifications to Industrial Sewage Works

- 1. The modifications to sewage works approved under an Environmental Compliance Approval (Approval) that are permitted under the Limited Operational Flexibility (LOF), are outlined below and are subject to the LOF conditions in the Approval, and require the submission of the Notice of Modifications. If there is a conflict between the sewage works listed below and the Terms and Conditions in the Approval, the Terms and Conditions in the Approval shall take precedence.
  - 1.1 Sewage Pumping Stations
    - a. Adding or replacing equipment where new equipment is located within an existing sewage treatment plant site or an existing sewage pumping station site, provided that the facility Rated Capacity is not exceeded and the existing flow process and/or treatment train are maintained, as applicable.
  - 1.2 Sewage Treatment Process
    - a. Installing additional chemical dosage equipment including replacing with alternative chemicals for pH adjustment or coagulants (non-toxic polymers) provided that there are no modifications of treatment processes or other modifications that may alter the intent of operations and may have negative impacts on the effluent quantity and quality.
    - b. Expanding the buffer zone between a sanitary sewage lagoon facility or land treatment area and adjacent uses provided that the buffer zone is entirely on the proponent's land.
    - c. Optimizing existing sanitary sewage lagoons with the purpose to increase efficiency of treatment operations provided that existing sewage treatment plant rated capacity is not exceeded and where no land acquisition is required.
    - d. Optimizing existing sewage treatment plant equipment with the purpose to increase the efficiency of the existing treatment operations, provided that there are no modifications to the works that result in an increase of the Rated Capacity, and may have adverse effects to the effluent quality or location of the discharge.
    - e. Replacement, refurbishment of previously approved equipment in whole or in part with Equivalent Equipment, like-for-like of different make and model, provided that the firm capacity, reliability, performance standard, level of quality and redundancy of the group of equipment is kept the same. For clarity proposes, the following

equipment can be considered under this provision: screens, grit separators, blowers, aeration equipment, sludge thickeners, dewatering equipment, UV systems, chlorine contact equipment, bio-disks, and sludge digester systems.

- 1.3 Sewage Treatment Plant Outfall
  - a. Replacement of discharge pipe with similar pipe size provided that the outfall location is not changed.
- 1.4 Sanitary Sewers
  - a. Pipe relining and replacement with similar pipe size within the Sewage Treatment Plant site, where the nominal diameter is not greater than 1,200mm.
- 1.5 Pilot Systems
  - a. Installation of pilot systems for new or existing technologies provided that:
    - i. any effluent from the pilot system is discharged to the inlet of the sewage treatment plant or hauled off-site for proper disposal,
    - ii. any effluent from the pilot system discharged to the inlet of the sewage treatment plant or sewage conveyance system does not significantly alter the composition/concentration of the influent sewage to be treated in the downstream process; and that it does not add any inhibiting substances to the downstream process, and
    - iii. the pilot system's duration does not exceed a maximum of two years; and a report with results is submitted to the Director and District Manager three months after completion of the pilot project.
- 2. Sewage works that are exempt from section 53 of the OWRA by O. Reg. 525/98 continue to be exempt and are not required to follow the notification process under this Limited Operational Flexibility.
- 3. Normal or emergency operational modifications, such as repairs, reconstructions, or other improvements that are part of maintenance activities, including cleaning, renovations to existing approved sewage works equipment, provided that the modification is made with Equivalent Equipment, are considered pre-approved.
- 4. The modifications noted in section (3) above are <u>not</u> required to follow the notification protocols under Limited Operational Flexibility, provided that the number of pieces and description of the equipment as described in the Approval does not change.



#### Notice of Modification to Sewage Works

#### RETAIN COPY OF COMPLETED FORM AS PART OF THE ECA AND SEND A COPY TO THE WATER SUPERVISOR (FOR MUNICIPAL) OR DISTRICT MANAGER (FOR NON-MUNICIPAL SYSTEMS)

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

Part 2: Description of the modifications as part of the Limited Operational Flexibility (Attach a detailed description of the sewage works)

- Description shall include: 1. A detail description of the modifications and/or operations to the sewage works (e.g. sewage work component, location, size, equipment type/model, material, process name, etc.) 2. Confirmation that the anticipated environmental effects are negligible.
- List of updated versions of, or amendments to, all relevant technical documents that are affected by the modifications as applicable, i.e. submission of documentation is not required, but the listing of updated documents is (design brief, drawings, emergency plan, etc.)

Part 3 – Declaration I	by	Professional	Engineer
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- I hereby declare that I have verified the scope and technical aspects of this modification and confirm that the design: 1. Has been prepared or reviewed by a Professional Engineer who is licensed to practice in the Province of Ontario; 2. Conforms with the Limited Operational Flexibility as per the ECA;

3. Has been designed consistent with Ministry's Design Guidelines, adhering to engineering standards, industry's best management practices, and demonstrating ongoing compliance with s.53 of the Ontario Water Resources Act; and other appropriate regulations. I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate.				
Name (Print)	PEO License Number			
Signature	Date (mm/dd/yy)			
-				
Name of Employer	,			

#### Part 4 – Declaration by Owner

I hereby declare that:

- I am authorized by the Owner to complete this Declaration;
- The Owner consents to the modification; and
   The Owner consents to the sewage works are proposed in accordance with the Limited Operational Flexibility as described in the ECA.
   The Owner has fulfilled all applicable requirements of the *Environmental Assessment Act*.
   Hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate.

Through declare and to the best of my knowedge, mermation and benefitie mermation contained in and form to complete and accurate.				
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 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 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.
- 3. Condition 3 is included to ensure that a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Owner and made available to the Ministry. Such a manual is an integral part of the operation of the works. Its compilation and use should assist the owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the owner's operation of the works.
- 4. Condition 4 is imposed to ensure that the effluent discharged from the Works to the St. Clair River meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver.
- 5. Condition 5 is included to require the Owner to demonstrate on a continual basis that the quality and quantity of the effluent from the approved Works is consistent with the effluent limits specified in the Approval and that the approved works does not cause any impairment to the receiving watercourse.
- 6. Condition 6 is included to ensure that the Works are operated in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider. These conditions are also included to ensure that a Professional Engineer has reviewed the proposed modifications and attests that the modifications are in line with that of Limited Operational Flexibility, and provide assurance that the proposed modifications of this Approval, MOE policies, guidelines, and industry engineering standards and best management practices.
- 7. Condition 7 is included to provide a performance record for future references and to ensure that the Ministry is made aware of problems as they arise, so that the Ministry can work with the Owner in resolving the problems in a timely manner.

# Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 4968-7LXU4M issued on December 10, 2008

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

- 1. 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;
- 2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

- 3. The name of the appellant;
- 4. The address of the appellant;
- 5. The environmental compliance approval number;
- 6. The date of the environmental compliance approval;
- 7. The name of the Director, and;
- 8. 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:

## \* 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) 314-4506 or www.ert.gov.on.ca

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 December, 2014

Edgardo Tovilla Director appointed for the purposes of Part II.1 of the *Environmental Protection Act* 

### SH/

c: District Manager, MOE Sarnia Mart Lupp, SNC-Lavalin Inc.



Pembina Infrastructure and Logistics LP's Product and Brine Infrastructure Overall Layout Map



		 -
PERMIT STAMP AND	DRUP	
AFFIXED AROVE SHAL		ΤO

	Point Table					
Point #	Northing	Easting	Description			
100	4,751,294.78	385,631.84	ВН-100			
101	4,751,130.80	385,565.26	BH-101			
102	4,751,130.80	385,632.89	BH-102			
103	4,751,130.80	385,700.52	BH-103			
104	4,750,976.07	385,599.51	BH-104			
105	4,750,899.77	385,437.55	BH-105			
106	4,750,892.97	385,562.37	BH-106			
107	4,750,886.17	385,687.18	BH-107			
108	4,750,808.09	385,557.74	BH-108			

UTM ZONE 17, NAD 83 DATUM

CUT					191,572		
FILL					152,474		
NET					39,097		
300	mm	TOP	SOIL	REMOVAL	36,045	CU.	Μ.
NET	CUT				3,052	CU.	М.

		JOB NO 085344 FILE NO. 085344-EX-03
Pembina	NGL	Corporation

CONESTOGA-ROVERS & ASSOCIATES INC.

PEMBINA CORUNNA PRODUCT AND BRINE INFRASTRUCTURE

	OVERALL LAYOUT					
	AREA NAME:	CLASS:	SCALE:	PPL, DRAWING NUMBER		
STAMP D REV(s)	CORUNNA		1:2000	085344-EX-03	_Α	