

**Executive Summary of the
Emission Summary and Dispersion Modelling Report
for the Enniskillen Pool Station
dated April 27, 2010**

Union Gas Limited retained ORTECH Environmental, a division of ORTECH Consulting Inc., to update the Emission Summary and Dispersion Modelling (ESDM) Report for their Enniskillen Pool Station, located at Lot 1 Concession 4 in Enniskillen Township, Ontario in compliance with section 5.2 of the Province-wide Comprehensive (Air) Certificate of Approval (CCofA) Number 1949-7KRMC5 issued on November 28, 2008. This report assessed compliance of the natural gas-fired reciprocating engine compressor using a stack height between 9.5 metres and 10 metres above grade.

The operation at the facility continues to be within the Facility Production Limit as specified in the CCofA.

The Enniskillen Pool Station is used to compress natural gas for transmission and storage purposes. The NAICS Code applicable to the facility is '486210 – Pipeline Transportation of Natural Gas'. Facilities described by this NAICS Code are not listed on Schedules 4 or 5 of Ontario Regulation 419/05 and are therefore allowed to demonstrate air compliance using Schedule 2 standards until February 1, 2020. However, Union Gas requested for the application of Schedule 3 standards under section 20(4) of O. Reg. 419/05 to this facility prior to the regulatory time frames.

This ESDM Report follows the requirements of the Ontario Regulation 419/05 Air Pollution – Local Air Quality and the Ontario Ministry of the Environment (MOE) "Procedure for Preparing an Emission Summary and Dispersion Modelling Report Version 3.0" dated March 2009 (the Procedure).

The ESDM report includes the quantification of emission rates for all significant sources of contaminants, specifically oxides of nitrogen (NO_x) at the facility and an estimation of the aggregate maximum 1-hour and 24-hour point-of-impingement (POI) concentrations for NO_x.

The NO_x emission rates that have been estimated in this report are for maximum 1-hour and 24-hour operating scenarios as per O. Reg. 419/05 Schedule 3 regulatory requirements. Due to the underlying assumptions used for this scenario, the emission rates cannot be realistically extrapolated to annual values and should not be used for such purposes.

As shown on Table 1, the predicted maximum POI concentrations of oxides of nitrogen resulting from the maximum emission scenario are all below the MOE POI.

Table 1: Emission Summary Table

Contaminant Name	CAS#	Total Facility Maximum Emission Rate (g/s)	Air Dispersion Model Used	Maximum POI Concentration ($\mu\text{g}/\text{m}^3$)	Averaging Period (hr)	POI Limit ($\mu\text{g}/\text{m}^3$)	Limiting Effect	Regulation Schedule # or Alternate	Maximum % of POI Limit (%)
Nitrogen Oxides (as NO ₂)	10102-44-0	1.6	AERMOD	247	1	400	Health	3	62
Nitrogen Oxides (as NO ₂)	10102-44-0	1.6	AERMOD	172	24	200	Health	3	86