

**Executive Summary of the
Emission Summary and Dispersion Modelling Report
for the North Bay Paint Spray Booth
dated April 26, 2010**

Union Gas Limited retained ORTECH Environmental to update the Emission Summary and Dispersion Modelling (ESDM) Report for the North Bay Paint Spray Booth, located at 36 Charles Street in North Bay, Ontario in compliance with in compliance with section 5.2 of Province-wide Comprehensive (Air) Certificate of Approval (CCofA) Number 1949 – 7KRMC5 issued on November 28, 2008. The update covers a relocation of the paint spray booth.

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

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 from the paint spray booth. Emission rates that have been estimated in this report are for maximum operating scenarios as per O. Reg. 419/05 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.

The Emission Summary Table (Table 1) shows all of the significant sources and associated air contaminants; the maximum source and site-wide emission rates and maximum off-property point of impingement (POI) concentrations calculated by air dispersion modelling. As shown on Table 1, the predicted maximum Propylene Glycol and 1-Isobutyrate POI concentrations resulting from the maximum emission scenario 13 µg/m³ or 13% of the MOE POI limit and 8% of the MOE JSL, respectively.

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 (%)
Propylene Glycol	57-55-6	0.01	Reg. 346	13	0.5	100	Particulate	Guideline (1)	13
1-Isobutyrate	25265-77-4	0.01	Reg. 346	13	0.5	165	-	Jurisdictional Screening Level (2)	8

Notes: (1) Taken from "Summary of Standards and Guidelines to support Ontario Regulation 419: Air Pollution – Local Air Quality", February 2008.

(2) Taken from "Jurisdictional Screening Level List", February 2008.