

## Executive Summary

This Emission Summary and Dispersion Modelling (ESDM) Report for the Chatham Paint Spray Booth, located at 555 Riverview Drive in Chatham, Ontario is part of a Province-wide Environmental Compliance Approval (PWECA) for Union Gas facilities in Ontario.

This ESDM Report follows the requirements of the Ontario Regulation 419/05 Air Pollution – Local Air Quality and the Ontario Ministry of the Environment, Conservation and Parks (MECP) “Procedure for Preparing an Emission Summary and Dispersion Modelling Report Version 4.1” dated March 2018 (the Procedure) and “Air Dispersion Modelling Guideline for Ontario, February 2017, Version 3.0” (the ADMGO) .

This 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 Schedule 3 regulatory requirements. Due to the underlying assumptions used for these scenarios, 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 the maximum emission rates and maximum point-of-impingement (POI) concentrations for the significant air contaminants; the POI limit used to evaluate the significant contaminants and the maximum percent of the POI limit calculated by dispersion modelling. As shown in the Emission Summary Table, the maximum Propylene Glycol and 1-Isobutyrates, POI concentrations at the Chatham Paint Spray booth are less than the applicable MECP POI limits.

**Table 1: Emission Summary Table**

Contaminant Name	CAS#	Total Facility Maximum Emission Rate (g/s)	Air Dispersion Model Used	Maximum POI Concentration (ug/m3) <sup>[1]</sup>	Averaging Period (hr)	POI Limit (ug/m <sup>3</sup> )	Limiting Effect	Regulation, Schedule # or Alternate	Maximum % of POI Limit
Propylene Glycol	57-55-6	0.034	AERMOD	24	24	120	Health	Schedule 3	20%
1-Isobutyrate (Texanol)	25265-77-4	0.034	AERMOD	24	24	120	Health	Schedule 3	20%

Note:

[1] Meteorological outliers have been removed from the results in accordance with Section 6.5 of the ADMGO.