

# UNION GAS PARKWAY COMPRESSOR STATION

## Acoustic Assessment Report Executive Summary

HGC Engineering was retained by Union Gas Limited to update the Acoustic Assessment Report (“AAR”) for the Parkway Compressor Station in Mississauga, Ontario. Previously, HGC Engineering prepared an AAR in 2007 [1]. This updated AAR considers several modifications that have taken place at the site since that time, and has been prepared to satisfy condition 5.1(2) of Environmental Compliance Approval (“ECA”) 3468-9DUJMT, dated March 7, 2014 which requires that a current AAR be maintained.

Sound level measurements were conducted at the facility near each stationary source and at neighbouring offsite points of reception on numerous occasions since December 2003. The source sound levels were used as input to a predictive acoustical model to quantify the environmental sound emissions associated with the facility. Acoustic assessment criteria were established in accordance with the sound level limits in Ontario Ministry of the Environment and Climate Change (“MOECC”) guideline NPC-205.

The measurements and analysis indicate that the sound levels of the Parkway Compressor Station meet the sound level criteria of MOECC publication NPC-205 during a predictable worst case hour of operation at the station. Given the absence of any sources of ground-borne vibration at the site, the facility also complies with the applicable vibration limits of the MOECC.



**Table A3: Acoustic Assessment Summary Table**

Point of Reception	Point of Reception Description	Sound Level at Point of Reception, $L_{EQ}$ [dBA]	Verified by Acoustic Audit	Performance Limit, $L_{EQ}$ [dBA]	Compliance with Performance Limit
R2	Two storey home approx. 295 m north of compressor plants	45	Yes	49	Yes
R3	Two storey home approx. 250 m northeast of compressor plants	49	Yes	49	Yes

**Note:** Point of Reception sound levels include a + 5 dBA penalty for tonality.



ACOUSTICS



NOISE



VIBRATION