

## EXECUTIVE SUMMARY

HGC Engineering was retained by Union Gas Limited to prepare an updated Acoustic Assessment Report (“AAR”) for the Parkway West Compressor Station in the Milton, Ontario. Previously, HGC Engineering prepared an AAR in 2013 [1] of the then proposed facility, construction of which is now nearly complete. This updated report considers an expanded property line, several minor modifications to the facility design, as well as details regarding a Blowdown Recovery Compressor. This report serves to satisfy condition 5.1(2) of Environmental Compliance Approval 3468-9DUJMT, dated March 7, 2014 which requires that a current AAR be maintained.

Source sound power levels were based on measurements conducted by HGC Engineering of similar Union Gas installations at other compressor stations in Ontario, and on manufacturer’s sound data for the Blowdown Recovery Compressor. The source sound levels were used as input to a predictive acoustical model to quantify the environmental sound emissions associated with the proposed facility. Acoustic assessment criteria were established in accordance with the sound level limits in MOECC guideline NPC-205.

The measurements and analysis indicate that, with the noise control measures integral to the station design, the predicted sound levels of the Parkway West 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
		Day	Night		Day	Night	
R1	Two storey home approx. 770 m northwest of compressor plants	41	35	No	50	45	Yes/Yes
R2	Two storey home approx. 705 m west of compressor plants	46	36	No	50	45	Yes/Yes
R3	Single storey home approx. 645 m southwest of compressor plants	42	39	No	50	45	Yes/Yes
R4	Two storey home approx. 1070 m southeast of compressor plants	36	33	No	50	45	Yes/Yes

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



ACOUSTICS



NOISE



VIBRATION