EXECUTIVE SUMMARY

HGC Engineering was retained by Union Gas Limited to undertake an Acoustic Assessment of the proposed Parkway West Compressor Station in the Milton, Ontario. The study is required in support of an application to the Ontario Ministry of the Environment ("MOE") to renew a Province-Wide Environmental Compliance Approval with Limited Operational Flexibility.

Source sound power levels were based on measurements conducted by HGC Engineering of similar Union Gas installations at other compressor stations in Ontario. 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 MOE 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 proposed Parkway West Compressor Station meet the sound level criteria of MOE publication NPC-205 during a predictable worst case hour of operation at the station.

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	40	33	No	50	45	Yes
R2	Two storey home approx. 705 m west of compressor plants	43	37	No	50	45	Yes
R3	Two storey home approx. 580 m west of compressor plants	48	39	No	50	45	Yes
R4	Single storey home approx. 550 m southwest of compressor plants	42	39	No	50	45	Yes
R5	Two storey home approx. 385 m southwest of compressor plants	47	44	No	50	45	Yes
R6	Single storey home approx. 645 m southwest of compressor plants	42	39	No	50	45	Yes
R7	Two storey home approx. 1070 m southeast of compressor plants	37	35	No	50	45	Yes

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