

EXECUTIVE SUMMARY

HGC Engineering was retained by Union Gas Limited to undertake an Acoustic Assessment of the proposed Heritage Pool Station in St. Clair Township, County of Lambton, Ontario. The study is required in support of an application for a Comprehensive Certificate of Approval (C of A) to the Ministry of Environment (MOE).

Source sound power levels were based on manufacturer's data and on calculations using methods from standard engineering reference texts. 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 MOE guideline NPC-205.

The analysis indicates that the sound emissions of the proposed facility will be within the sound level limits as set out in MOE guideline NPC-205 during normal 'predictable worst case' operations at the nearest residential receptors.

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
R1	Upper storey window of two storey home approx. 800 metres SE of station	37	N	45	Y