

EXECUTIVE SUMMARY

HGC Engineering was retained by Union Gas Limited to undertake an Acoustic Assessment of the Oil Springs East Pool Station in Enniskillen Township, 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). The assessment considers all existing operable sound sources at the facility.

Source sound level measurements of existing sources were conducted at the facility on June 20, 2007. The measured 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-232.

The measurements and analysis indicate that noise emissions from the Oil Springs East Pool Station are within the applicable limits, as set out in MOE publication NPC-232, during a predictable worst case hour of operation at the station.

Table A2: Point of Reception Noise Impact Table

Source ID	Source Name	R1 Dist [m]	R1 L _{EQ} [dBA]
U1	Recip. 1 Combustion Exhaust	622	16
U2	Recip. 2 Combustion Exhaust	611	13
NS-01	Recip. 1 Radiator	618	32
NS-02	Recip. 2 Radiator	613	33
NS-03	Compressor Building East Roof Exhaust	625	11
NS-04	Compressor Building West Roof Exhaust	620	12
NS-05	Compressor Building East Ventilation Louvre (North)	635	--
NS-06	Compressor Building East Ventilation Louvre (South)	626	14
NS-07	Compressor Building West Ventilation Louvre (North)	620	10
NS-08	Compressor Building West Ventilation Louvre (South)	611	15
NS-09	Open Overhead Door 1	632	9
NS-10	Open Overhead Door 2	626	15

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	30 metres from single storey dwelling (in direction of station) approx. 625 metres SW of station	36	N	40	Y