

January 14, 2019

Kirk Ringkamp  
**Sysco Tannis**  
2390 Stevenage Drive, Ottawa  
K1G 3W1

Dear Mr. Ringkamp:

Re: Noise Monitoring Assessment  
Sysco Tannis – 2390 Stevenage Drive  
GWE File No.: 18-121

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## 1. INTRODUCTION & TERMS OF REFERENCE

Gradient Wind Engineering Inc. (Gradient Wind) was retained by Sysco Tannis to undertake a stationary noise assessment of the proposed redevelopment of their facilities located at 2390 Stevenage Drive in Ottawa, Ontario. This report summarizes the methodology, results, and recommendations related to stationary noise monitoring performed at the site, as supplement to Gradient Wind's Stationary Noise Assessment report, dated December 17, 2018. The purpose of the monitoring program was to address concerns raised by the public during the November 29, 2018 public meeting. The assessment was performed conforming to the City of Ottawa<sup>1</sup> and Ministry of the Environment, Conservation and Parks (MECP) NPC-300<sup>2</sup>, and supporting guidelines.

The focus of this stationary noise monitoring assessment is a proposed redevelopment of an industrial facility. Sysco Tannis is a food production facility which supplies dry and refrigerated goods, typically to restaurant clientele. The site is surrounded by an industrial park to the north, east and west. To the south is open space with residential neighborhood beyond. The nearest points of reception are the adjacent dwellings along Sai Crescent and Hunterswood Crescent. Figure 1 illustrates the site plan and surrounding context. Existing sources of stationary noise include rooftop air handling equipment and operations of trucks at the loading docks and parking area, which includes the use of refrigerated trailers (reefers).

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<sup>1</sup> City of Ottawa Environmental Noise Control Guidelines, January 2016

<sup>2</sup> Ministry of the Environment and Climate Change (MOECC), Environmental Noise Guideline – Publication NPC-300, August 2013

## 1. METHODOLOGY

### 1.1 Background

Noise can be defined as any obtrusive sound. It is created at a source, transmitted through a medium, such as air, and intercepted by a receiver. Noise may be characterized in terms of the power of the source or the sound pressure at a specific distance. While the power of a source is characteristic of that particular source, the sound pressure depends on the location of the receiver and the path that the noise takes to reach the receiver. Measurement of noise is based on the decibel unit, dBA, which is a logarithmic ratio referenced to a standard noise level ( $2 \times 10^{-5}$  Pascals). The 'A' suffix refers to a weighting scale, which better represents how the noise is perceived by the human ear. With this scale, a doubling of power results in a 3 dBA increase in measured noise levels and is just perceptible to most people. An increase of 10 dBA is often perceived to be twice as loud.

### 1.2 Stationary Noise Criteria

The equivalent sound energy level,  $L_{eq}$ , provides a weighted measure of the time varying noise levels, which is well correlated with the annoyance of sound. It is defined as the continuous sound level, which has the same energy as a time varying noise level over a selected period of time. For stationary sources, the  $L_{eq}$  is commonly calculated on an hourly interval, while for roadways, the  $L_{eq}$  is calculated on the basis of a 16-hour daytime / 8-hour nighttime split.

Noise criteria taken from ENCG apply to outdoor points of reception (POR). A POR is defined under NPC-300 as “any location on a noise sensitive land use where noise from a stationary source is received”<sup>3</sup>. A POR can be located on an existing or zoned for future use premises of permanent or seasonal residences, hotels/motels, nursing/retirement homes, rental residences, hospitals, camp grounds, and noise sensitive buildings such as schools and places of worship. The recommended maximum noise levels for a Class 2 area in a suburban environment at a POR are outlined in Table 1 below. Since the facilities peak operations are during the nighttime, the nighttime noise criterion governs.

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<sup>3</sup> NPC – 300, page 14

**TABLE 1: EXCLUSIONARY LIMITS FOR CLASS 2 AREA**

Time of Day	Outdoor Points of Reception	Plane of Window
7:00 – 19:00	50	50
19:00 – 23:00	45	50
23:00 – 7:00	N/A	45

### 1.3 Noise Monitoring

Assessment of stationary noise impacts at the adjacent developments was determined through on-site noise monitoring over a period of approximately 10 days. Noise levels were measured using a single Brüel and Kjær (B&K) noise monitoring station, model 365-C-DMO. The unit consists of an integrating sound level meter (Type 2250), a weather-proof microphone (Type 4952), wireless modem, power pack and batteries. Because there was no power at the site, the unit was powered by a solar panel and 12-volt marine battery. The monitoring station setup is illustrated in Photograph 1. The station monitored continuously 24-hours per day with data sent wirelessly over an LTE / 3G network to B&K’s cloud storage service, “Noise Sentinel on Demand”. Noise measurements were conducted from December 12<sup>th</sup> through to December 21<sup>st</sup>, 2018. A 10-day time frame was selected to capture a statistically relevant set of data, allowing for daily changes in facility operations and meteorological conditions. The consistency within the data set proved 10-day measurement period was sufficient. The location of the noise monitoring station is illustrated in Figure 1 and Photograph 1-2. The Brüel and Kjær (B&K) noise monitoring station is illustrated in Photograph 3 below. The top of the berm south of the facility was selected as the measurement location. This site was selected as it was at the same approximate elevation as the 2<sup>nd</sup> storey bedroom windows of the residences south of the facility. The site was located halfway between the Sysco facility and the residences, to ensure that the facility was being assessed and not just ambient noise. The location also considered security of the equipment. Audio recordings of higher noise events were recorded and analyzed to deterring the nature of the source of noise.

The following equation was used to extrapolate sound pressure levels at the measurement locations to points of reception on surrounding noise sensitive land, for comparison with theoretical values calculated in Predictor, as per the methodology set out in the Stationary Noise Assessment report.

$$L_2 = L_1 - 20 \log(R_2/R_1) \quad (1)$$

Where:

$L_1$  is the measured sound level

$L_2$  is the extrapolated sound level

$R_1$  is the distance from source to measurement location

$R_2$  is the distance from source to point of reception



**PHOTOGRAPH 1: VIEW OF MICROPHONE LOOKING NORTH**





**PHOTOGRAPH 2: VIEW OF MICROPHONE LOOKING SOUTH**



**PHOTOGRAPH 3: INTERNAL COMPONENTS OF NOISE MONITORING STATION**

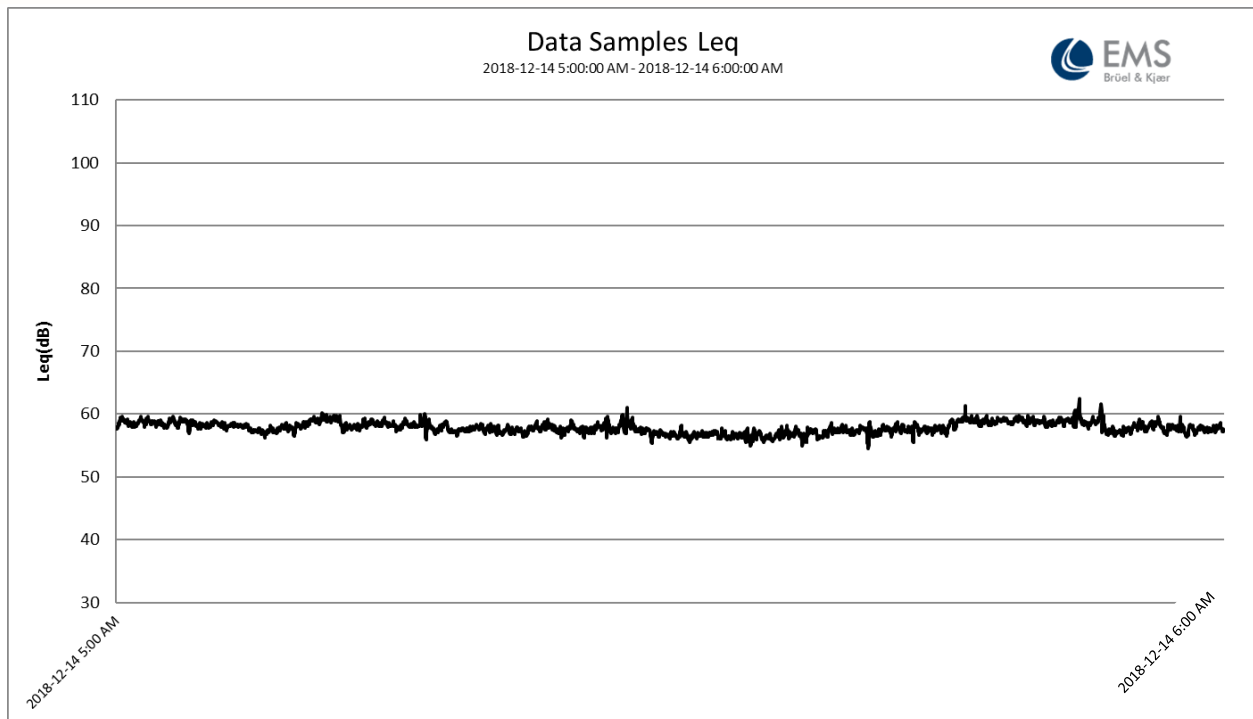
## 2. NOISE MONITORING RESULTS

Based on the on-site monitoring, the hourly equivalent sound pressure levels ( $L_{eq}$ ) for each day are presented alongside the  $L_{a50}$  and  $L_{a95}$  percentile averages for each hour in Appendix A. The hourly meteorological conditions for each hour are also recorded. Under MECP guidelines noise measurements should not be conducted during periods of high winds (more than 10 km/h) or precipitation. Although recorded by the remote monitor, these periods have been ignored as indicated by the grey highlight in Appendix A. As can be seen from the on-site monitoring results in Table 2, the highest hourly equivalent sound pressure levels ( $L_{eq}$ ) was found to be 58 dBA at the measurement site, which occurred between 5:00 AM to 6:00 AM on December 14, 2018. Extrapolating this value back to the closest point of reception using Equation 1 gives an  $L_{eq}$  of 52 dBA, which corresponds well with the theoretical calculations summarized in the stationary noise report.

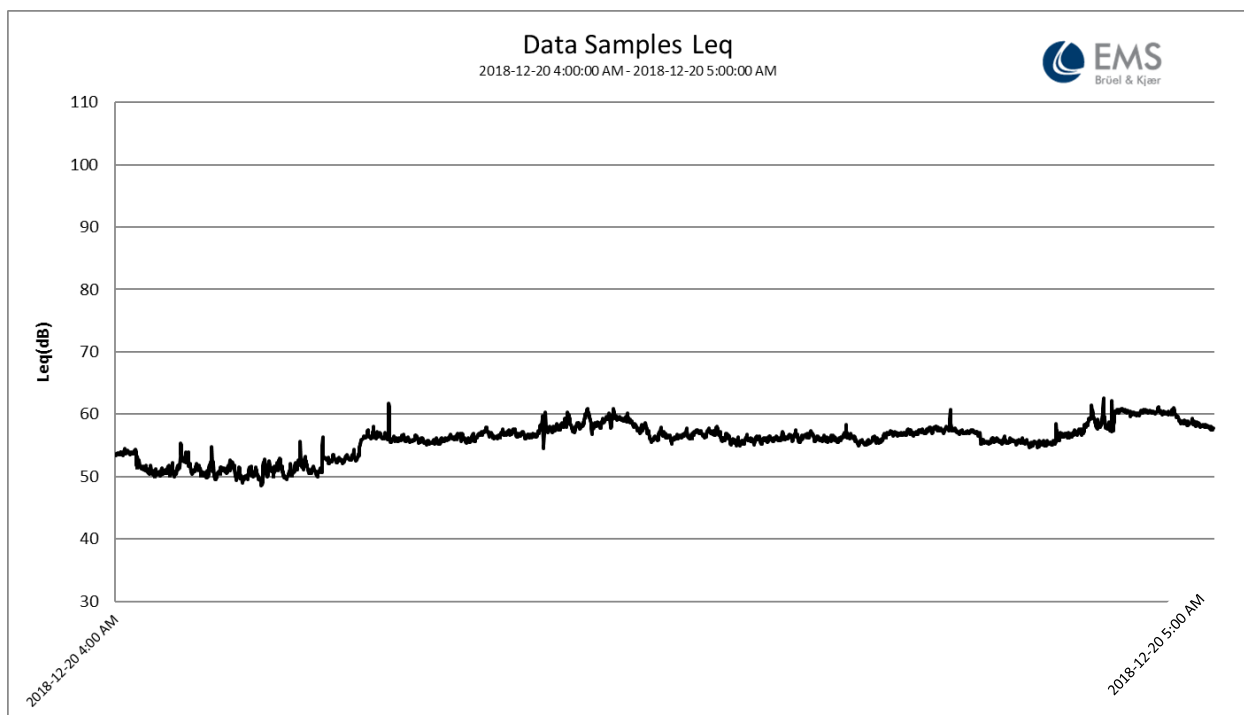
A review of the audio recordings confirmed the primary source of noise at the measurement location was associated with idling diesel engines, typical of the HVAC equipment on refrigerated trailers. A sample of the hourly time history  $L_{eq}$  is presented in Charts 1 and 2 below. The highest noise levels occur during the early morning hours between 5 and 6 AM, which coincides with Sysco's peak operations.

**TABLE 2: NOISE MONITORING EXTERIOR NOISE LEVELS SUMMARY**

Statistic	1-Hour $L_{ieq}$ (dBA)
Highest	58
Lowest	41
Average	52
Standard Deviation	4



**CHART 1: HOURLY TIME HISTORY – TYPICAL SAMPLE MAXIMUM RECORDED  $L_{eq}$  58 dBA**



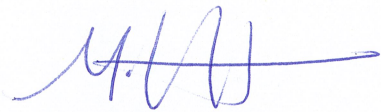
**CHART 2: HOURLY TIME HISTORY – TYPICAL SAMPLE OF HIGHER RECORDED  $L_{eq}$  56 dBA**



In conclusion, the results of the on-site monitoring program showed good correlation with the theoretical noise modelling conducted for the Sysco Tannis facility at 2390 Stevenage Drive. Should you have any questions, or wish to discuss our findings further, please call us (613) 836-0934 or contact us by e-mail at [joshua.foster@gradientwind.com](mailto:joshua.foster@gradientwind.com). In the interim, we thank you for the opportunity to be of service.

Sincerely,

**Gradient Wind Engineering Inc.**



Michael Lafortune, C.E.T.  
Environmental Scientist  
GWE18-121 – Noise Monitoring



Joshua Foster, P.Eng.  
Principal







# GRADIENTWIND

ENGINEERS & SCIENTISTS



## APPENDIX A

### MONITORING DATA SUMMARY

Date	Time	Laeq	LA50	LA95	Temp (°C)	Rel Hum (%)	Wind Dir (10s deg)	Wind Spd (km/h)	Stn Press (kPa)	Weather
2018-12-12	13:00	50	50	45	-6	59	8	9	100.82	Clear
	14:00	48	47	44	-6.5	64	9	10	100.87	NA
	15:00	48	47	44	-7.1	68	9	13	100.93	NA
	16:00	51	50	47	-8.3	74	9	11	101.01	Clear
	17:00	52	52	50	-9.2	82	8	10	101.05	NA
	18:00	49	48	46	-10.8	83	10	10	101.08	NA
	19:00	50	49	46	-11.8	80	8	12	101.1	Clear
	20:00	51	49	46	-11.8	68	7	16	101.13	NA
	21:00	52	50	47	-12.1	63	8	14	101.19	NA
	22:00	56	56	53	-12.7	67	7	15	101.19	Mainly Clear
	23:00	56	55	52	-13.1	72	7	24	101.18	NA
2018-12-13	0:00	55	55	53	-13.8	77	6	17	101.22	NA
	1:00	55	55	53	-14.3	78	8	10	101.23	Clear
	2:00	55	55	53	-14.6	76	6	16	101.26	NA
	3:00	55	55	53	-14.8	79	6	19	101.31	NA
	4:00	56	56	52	-15.1	80	7	17	101.29	Mainly Clear
	5:00	58	56	51	-15.6	81	6	18	101.29	NA
	6:00	53	52	49	-15.6	82	6	22	101.32	NA
	7:00	54	54	51	-15.7	82	6	18	101.36	Mainly Clear
	8:00	55	55	53	-15.7	81	6	19	101.38	NA
	9:00	55	53	49	-14.9	78	6	18	101.44	NA
	10:00	53	52	49	-13.3	73	5	16	101.51	Mainly Clear
	11:00	51	50	48	-12.2	69	7	17	101.48	NA
	12:00	50	50	47	-11.2	69	4	15	101.43	NA
	13:00	50	49	47	-10.5	69	6	14	101.41	Mostly Cloudy
	14:00	50	49	47	-9.8	68	4	10	101.43	NA
	15:00	53	51	48	-9.6	71	5	14	101.5	NA
	16:00	49	48	46	-9.5	70	4	16	101.54	Mostly Cloudy
	17:00	50	50	46	-9.4	70	7	12	101.58	NA
	18:00	48	47	44	-9.4	74	5	10	101.6	NA
	19:00	48	47	45	-9.6	74	7	14	101.56	Cloudy
	20:00	53	53	45	-8.9	74	7	13	101.58	NA
	21:00	56	55	52	-8.6	74	7	14	101.55	NA
	22:00	57	56	54	-8.5	74	6	10	101.54	Mainly Clear
	23:00	56	56	54	-8.2	74	3	9	101.57	NA
2018-12-14	0:00	55	55	50	-8	76	6	12	101.46	NA
	1:00	52	52	46	-7.8	74	8	7	101.49	Cloudy
	2:00	54	53	47	-7.6	75	7	9	101.47	NA
	3:00	55	54	53	-8.4	77	7	11	101.36	NA
	4:00	58	58	56	-8	78	5	12	101.31	Cloudy
	5:00	58	58	56	-7.7	78	6	11	101.29	NA
	6:00	57	57	50	-7.5	80	5	12	101.27	NA
	7:00	52	52	49	-7.5	82	5	12	101.26	Cloudy
	8:00	54	54	52	-6.7	82	7	14	101.19	NA
	9:00	52	51	49	-5.8	82	4	8	101.25	NA
	10:00	53	52	49	-4.5	83	11	10	101.18	Cloudy
	11:00	50	49	48	-2.5	83	6	5	101.06	NA
	12:00	50	48	47	-1.1	87	6	4	100.95	Snow,Fog
	13:00	49	48	47	-0.7	93	5	4	100.88	Freezing Rain,Fog
	14:00	51	51	49	-0.2	96	9	7	100.78	Freezing Rain,Fog
	15:00	51	49	47	0.1	97	7	3	100.77	Rain
	16:00	50	49	47	0.1	97	9	6	100.7	Rain,Fog
	17:00	50	49	46	0	98	6	8	100.66	Rain,Fog
	18:00	49	48	46	0.2	98	2	3	100.72	Rain,Fog
	19:00	48	47	46	0.1	98	9	5	100.66	Rain,Fog
	20:00	48	47	46	0.1	98	10	4	100.6	Rain,Fog
	21:00	47	47	46	1.3	98	21	10	100.52	Fog
	22:00	46	46	44	2.1	98	23	10	100.48	Fog
	23:00	45	45	43	1.9	98	25	8	100.54	Fog

2018-12-15	0:00	47	45	43	1.8	98	23	10	100.51	Fog
	1:00	51	44	42	1.8	94	24	12	100.54	Mostly Cloudy
	2:00	43	43	41	1.1	93	26	12	100.56	NA
	3:00	42	42	40	1.2	96	21	13	100.67	NA
	4:00	42	42	41	1.4	93	21	9	100.66	Cloudy
	5:00	44	43	42	1.4	93	23	12	100.71	NA
	6:00	44	44	42	1.2	93	24	13	100.87	NA
	7:00	45	45	43	1.3	91	25	12	100.93	Cloudy
	8:00	46	46	45	1	89	26	10	100.98	NA
	9:00	45	45	44	1	88	25	10	100.98	NA
	10:00	44	44	42	1.8	85	28	15	101.03	Mostly Cloudy
	11:00	43	41	39	2.2	82	30	11	101.02	NA
	12:00	42	39	37	2.6	79	29	4	101	NA
	13:00	41	39	37	2.8	78	30	5	101.02	Mostly Cloudy
	14:00	41	39	37	2.9	80	29	5	101.03	NA
	15:00	42	41	39	2.9	78	23	6	101.07	NA
	16:00	43	43	41	1.9	83	36	2	101.11	Mostly Cloudy
	17:00	47	47	44	1	85	33	3	101.1	NA
	18:00	48	48	46	0.6	87	29	8	101.18	NA
	19:00	50	49	47	-1.1	93	35	3	101.19	Mostly Cloudy
	20:00	50	49	47	-1.6	95	2	10	101.16	NA
	21:00	51	49	48	-1.1	92	3	11	101.19	NA
	22:00	53	49	47	-1.7	93	4	13	101.15	Mostly Cloudy
	23:00	48	48	46	-2	93	5	9	101.16	NA
2018-12-16	0:00	47	46	44	-2.6	91	5	9	101.09	NA
	1:00	45	45	43	-3.2	92	4	12	101.01	Mainly Clear
	2:00	45	45	43	-3.9	93	4	15	100.97	NA
	3:00	45	44	42	-4	93	4	12	100.97	NA
	4:00	43	43	41	-4.8	94	4	14	100.92	Mainly Clear
	5:00	45	44	42	-3.5	93	4	17	100.9	NA
	6:00	47	47	45	-3.5	93	4	18	100.87	NA
	7:00	48	48	47	-3.2	92	3	18	100.85	Mostly Cloudy
	8:00	50	50	48	-3.6	92	4	16	100.8	NA
	9:00	52	51	49	-3	91	4	16	100.76	NA
	10:00	49	48	46	-1.4	87	5	21	100.64	Mostly Cloudy
	11:00	49	48	45	-0.4	83	5	19	100.54	NA
	12:00	47	47	45	0.1	80	4	22	100.41	NA
	13:00	48	47	44	0.5	77	10	11	100.39	Cloudy
	14:00	48	47	45	0.4	79	9	10	100.35	NA
	15:00	48	47	45	0.2	81	5	10	100.33	NA
	16:00	49	48	46	-0.1	83	5	8	100.27	Mostly Cloudy
	17:00	54	49	46	-0.1	82	8	18	100.19	NA
	18:00	48	47	43	-0.4	84	10	14	100.13	NA
	19:00	51	49	44	-0.8	87	10	7	100.09	Cloudy
	20:00	51	49	42	-0.8	88	11	6	100	NA
	21:00	46	45	42	-1.2	91	7	5	99.96	NA
	22:00	53	53	47	-0.9	89	12	6	99.87	Cloudy
	23:00	55	55	53	-0.8	91	33	9	99.82	NA
2018-12-17	0:00	56	56	53	-0.7	92	7	4	99.68	NA
	1:00	54	53	49	-1	93	13	4	99.53	Cloudy
	2:00	55	55	52	-0.8	93	13	8	99.45	NA
	3:00	55	55	54	-0.7	94	15	6	99.37	Fog
	4:00	55	55	54	-0.6	95	17	7	99.29	Fog
	5:00	55	54	51	-0.6	95	21	6	99.23	Fog
	6:00	53	51	45	-0.3	88	29	8	99.19	NA
	7:00	52	52	49	-0.4	86	31	12	99.2	Cloudy
	8:00	53	52	50	-0.6	87	24	5	99.17	NA
	9:00	58	57	51	-0.5	89	24	9	99.18	Freezing Drizzle
	10:00	59	59	51	-0.2	90	25	10	99.19	Freezing Drizzle
	11:00	55	54	50	0.1	89	27	13	99.16	Snow
	12:00	53	53	50	-0.1	91	28	20	99.1	Snow
	13:00	53	52	47	-0.1	90	29	20	99.08	Snow
	14:00	52	51	49	0.3	86	29	16	99.12	Snow
	15:00	52	51	48	0.2	85	29	25	99.18	Snow
	16:00	50	49	46	-1.6	78	33	36	99.33	Snow
	17:00	54	52	46	-2.5	64	33	31	99.44	Snow
	18:00	50	48	46	-3.7	71	33	45	99.56	Snow
	19:00	51	49	45	-5.5	76	31	34	99.7	Snow
	20:00	54	54	49	-6.6	72	31	39	99.81	Blowing Snow
	21:00	56	56	53	-7.2	74	31	28	99.87	Blowing Snow
	22:00	57	56	54	-7.6	68	31	31	99.93	Mostly Cloudy
	23:00	57	57	54	-7.7	68	31	30	100	NA



2018-12-18	0:00	57	57	54	-8.1	65	31	34	100.05	NA
	1:00	55	55	53	-8.3	66	31	34	100.11	Mostly Cloudy
	2:00	57	56	50	-8.6	70	31	26	100.21	NA
	3:00	54	54	51	-9.1	75	29	22	100.27	NA
	4:00	56	55	53	-9.2	69	29	25	100.37	Mostly Cloudy
	5:00	56	56	53	-9.3	70	31	29	100.45	NA
	6:00	55	54	51	-9	69	31	31	100.52	NA
	7:00	54	54	52	-8.7	68	31	22	100.62	Cloudy
	8:00	55	54	51	-8.7	69	31	21	100.64	NA
	9:00	54	53	46	-8.7	70	30	17	100.71	NA
	10:00	49	45	43	-8.9	71	29	21	100.77	Mostly Cloudy
	11:00	51	47	45	-7.8	66	29	21	100.74	NA
	12:00	47	47	45	-7	63	30	34	100.74	NA
	13:00	48	46	43	-7.1	64	29	29	100.7	Clear
	14:00	48	46	43	-6.8	65	28	26	100.69	NA
	15:00	48	46	43	-6.8	65	29	19	100.71	NA
	16:00	50	50	44	-7.2	64	28	17	100.73	Mostly Cloudy
	17:00	53	51	46	-8	68	28	18	100.75	NA
	18:00	50	49	43	-8.4	66	29	16	100.74	NA
	19:00	54	53	41	-9.4	69	28	16	100.78	Mainly Clear
	20:00	52	51	49	-10.6	74	21	7	100.74	NA
	21:00	51	48	43	-11.2	77	36	2	100.7	NA
	22:00	54	54	49	-11.2	78	25	6	100.69	Mainly Clear
	23:00	53	53	51	-11.4	77	20	8	100.6	NA
2018-12-19	0:00	53	53	50	-12.4	82	19	6	100.59	NA
	1:00	52	52	50	-12.1	81	16	5	100.54	Mainly Clear
	2:00	54	54	52	-11.2	78	18	10	100.53	NA
	3:00	54	53	53	-11.6	81	17	9	100.51	NA
	4:00	55	55	53	-11.4	81	17	8	100.42	Mainly Clear
	5:00	56	56	54	-11.5	81	16	8	100.42	NA
	6:00	54	53	51	-11.6	83	7	4	100.43	NA
	7:00	53	53	49	-10.2	82	3	7	100.34	Cloudy
	8:00	52	51	49	-9.6	81	1	11	100.36	NA
	9:00	53	52	50	-9.2	79	6	9	100.39	NA
	10:00	51	51	48	-7.9	80	15	5	100.29	Cloudy
	11:00	51	50	49	-6.3	80	15	7	100.27	NA
	12:00	51	50	48	-4.7	82	17	8	100.18	NA
	13:00	51	51	49	-3.3	81	7	4	100.12	Cloudy
	14:00	51	50	48	-2.2	81	13	7	100.08	NA
	15:00	51	51	49	-2.1	80	8	11	100.06	NA
	16:00	52	52	50	-3	84	8	10	100.06	Mostly Cloudy
	17:00	53	52	50	-3.5	86	8	9	100.07	NA
	18:00	53	52	50	-3.9	88	7	9	100.08	NA
	19:00	52	51	49	-4.1	88	7	9	100.1	Mostly Cloudy
	20:00	51	51	48	-5.7	90	8	8	100.11	NA
	21:00	50	50	48	-4.2	91	9	7	100.11	NA
	22:00	49	49	47	-4.5	90	6	9	100.09	Mostly Cloudy
	23:00	50	50	47	-4.8	91	4	10	100.08	NA
2018-12-20	0:00	51	49	47	-6.5	92	5	13	100.09	NA
	1:00	53	52	49	-7.1	92	5	14	100.09	Mainly Clear
	2:00	51	50	49	-7.6	93	5	11	100.13	NA
	3:00	56	55	53	-7.9	92	8	7	100.13	NA
	4:00	57	56	51	-7.2	91	11	7	100.1	Mostly Cloudy
	5:00	56	56	52	-8	91	5	9	100.09	NA
	6:00	56	56	54	-7.7	91	7	9	100.14	NA
	7:00	56	56	55	-8.2	89	4	10	100.17	Clear
	8:00	57	57	55	-8.4	89	7	7	100.18	NA
	9:00	58	57	55	-7	89	6	10	100.27	NA
	10:00	55	55	53	-4.7	86	6	11	100.25	Mostly Cloudy
	11:00	55	54	53	-2.7	80	5	10	100.23	NA
	12:00	54	52	49	-0.2	72	7	11	100.11	NA
	13:00	53	51	48	1.1	67	7	14	100	Mostly Cloudy
	14:00	51	50	48	1.4	67	8	10	100	NA
	15:00	53	52	50	1	72	5	15	99.93	NA
	16:00	55	54	52	0.9	66	6	14	99.98	Mostly Cloudy
	17:00	55	55	52	0.5	68	7	14	99.89	NA
	18:00	51	51	49	0.4	65	8	15	99.8	NA
	19:00	51	49	47	0.5	66	7	19	99.71	Mostly Cloudy
	20:00	52	51	47	0.4	71	6	10	99.74	NA
	21:00	50	49	47	0.4	74	7	12	99.64	NA
	22:00	52	49	47	0.7	76	7	14	99.6	Cloudy
	23:00	55	55	52	0.8	82	7	16	99.57	NA

2018-12-21	0:00	55	55	50	-0.1	93	5	18	99.43	Freezing Rain,Fog
	1:00	54	54	49	-0.3	96	5	19	99.28	Freezing Rain,Fog
	2:00	57	57	54	-0.1	97	5	21	99.18	Freezing Rain,Fog
	3:00	58	58	56	0.2	97	6	26	99.03	Rain,Fog
	4:00	58	58	56	0.4	97	6	32	98.77	Rain,Fog
	5:00	60	59	57	1.2	97	6	37	98.5	Rain,Fog
	6:00	57	56	53	1.7	97	6	28	98.32	Rain,Fog
	7:00	56	56	54	2.4	97	7	32	98.15	Rain,Fog
	8:00	56	56	54	2.5	97	7	31	98.11	Rain,Fog
	9:00	56	55	52	2.5	97	8	27	98.06	Rain,Fog
	10:00	54	54	52	3	98	7	17	98.04	Rain,Fog
	11:00	55	55	53	3.4	98	5	13	97.96	Rain,Fog
	12:00	55	55	53	3.8	98	7	24	97.78	Rain,Fog
	13:00	55	54	52	4.1	98	5	14	97.67	Rain,Fog
Maximum		60	59	57	High winds/precipitation during measurement period, falling outside MECP recommended meteorological conditions for measurement of noise					
Minimum		41	39	37						
Average		52	51	48						
Standard Dev.		4	4	4	Measured worst-case hour					