



August 11, 2021

Robin Pierce
Community Development Director
Village of Essex Junction
2 Lincoln Street
Essex Junction, Vermont 05452

RE: Environmental Sound Monitoring – Wolfsgart 2021

Dear Mr. Pierce;

Vermont Air Testing Services (VATS) was retained by the Village of Essex Junction to perform perimeter environmental sound monitoring at the Champlain Valley Exposition (CVE) for selected outdoor events held at the facility throughout the 2021 summer outdoor event season. Sound monitoring was performed using Quest Technologies Sound Pro DL Type II integrating/logging sound level meter (SLM) setup to collect broadband sound level readings. The SLM used for the monitoring was configured to log average sound pressure levels every 5 seconds in the broadband or A-weighted scale. The SLM microphone was fitted with a windscreen to minimize wind disturbance. The SLM was calibrated to a 114 decibel (dB) tone prior to and following the sound monitoring event.

One SLM was deployed overnight for the Wolfsgart event held at CVE on July 30th and July 31st, 2021. A single SLM was used to monitor each night of the event and the SLM was placed along the eastern boundary fence line approximately 50 feet south of the Green Gate entrance. The Wolfsgart event was an overnight camping event with activities held throughout the evening primarily in the parking and RV camping areas at the fairgrounds. A sound system was set up in the parking area adjacent to the Midway lawn. The weather throughout both Friday and Saturday night events was fair to partly cloudy skies with light to moderate winds out of the south and west up to 10 mph and temperatures ranging in the mid 60's to the high 50's. Sound monitoring began at approximately 8:00 pm each evening and concluded the following morning at 8:00 am. The sound monitoring data is presented in the attached charts and a summary of the monitoring data is provided below.

The maximum hourly average sound level from 8 pm to midnight, which correlates to Hours 1 through 4 and Hour 12, was 78 dBA with the maximum 5-minute average sound level defined at 83 dBA. Hour 5 maximum hourly decibel level was 55dBA with a 5-minute maximum of 65 dBA. Hours 6 through 11, 1 am to 7 am, were limited to a 50 dBA hourly average with 60 dBA. The table below presents the Friday night SLM property line hourly average sound data, the maximum sound levels and the time duration of sound levels above maximum allowable sound level in minutes.

	Hour											
	1	2	3	4	5	6	7	8	9	10	11	12
Hourly Average (dBA)	54.8	56.6	55.5	50.8	48.6	47.0	43.8	42.4	42.4	43.2	44.3	46.6
Max Sound Level (dBA)	64.8	69.2	69.2	60.6	58.8	57.3	53.7	48.5	50.2	57.9	62.2	62.6
Time Above Max Level (min)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0

The data presented above indicates the hourly average sound limits were not exceeded at any time during the monitoring event. The maximum sound level was not exceeded along the east property boundary throughout the event. The maximum sound limit is defined as a sustained maximum five-minute average in the established sound criteria limits.

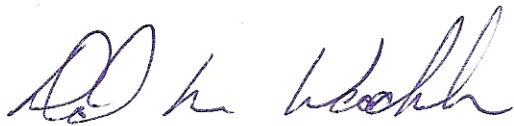
The Saturday night monitoring data is presented in the following table:

	Hour											
	1	2	3	4	5	6	7	8	9	10	11	12
Hourly Average (dBA)	56.2	57.6	55.0	48.2	46.3	44.7	43.4	43.2	41.8	42.4	43.8	42.6
Max Sound Level (dBA)	71.9	70.0	72.6	58.1	57.3	54.5	50.1	61.6	44.4	54.1	53.8	54.1
Time Above Max Level (min)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0

Again, the data presented above indicates the hourly average sound limits were not exceeded at any time during the monitoring event. The maximum sound level was also not exceeded per the definition of Max Sound Level along the east property boundary throughout the Saturday into Sunday event.

The sound level data is presented in attached charts for the SLM used during the Wolfsgart monitoring event held on July 30th and July 31st, 2021. The sound levels measured throughout the event did not exceed the established sound level criteria without exception. The established sound level criteria used for monitoring outdoor events held at the Champlain Valley Exposition are defined in the Sound Indemnification Agreement between the Champlain Valley Exposition and the Village of Essex Junction.

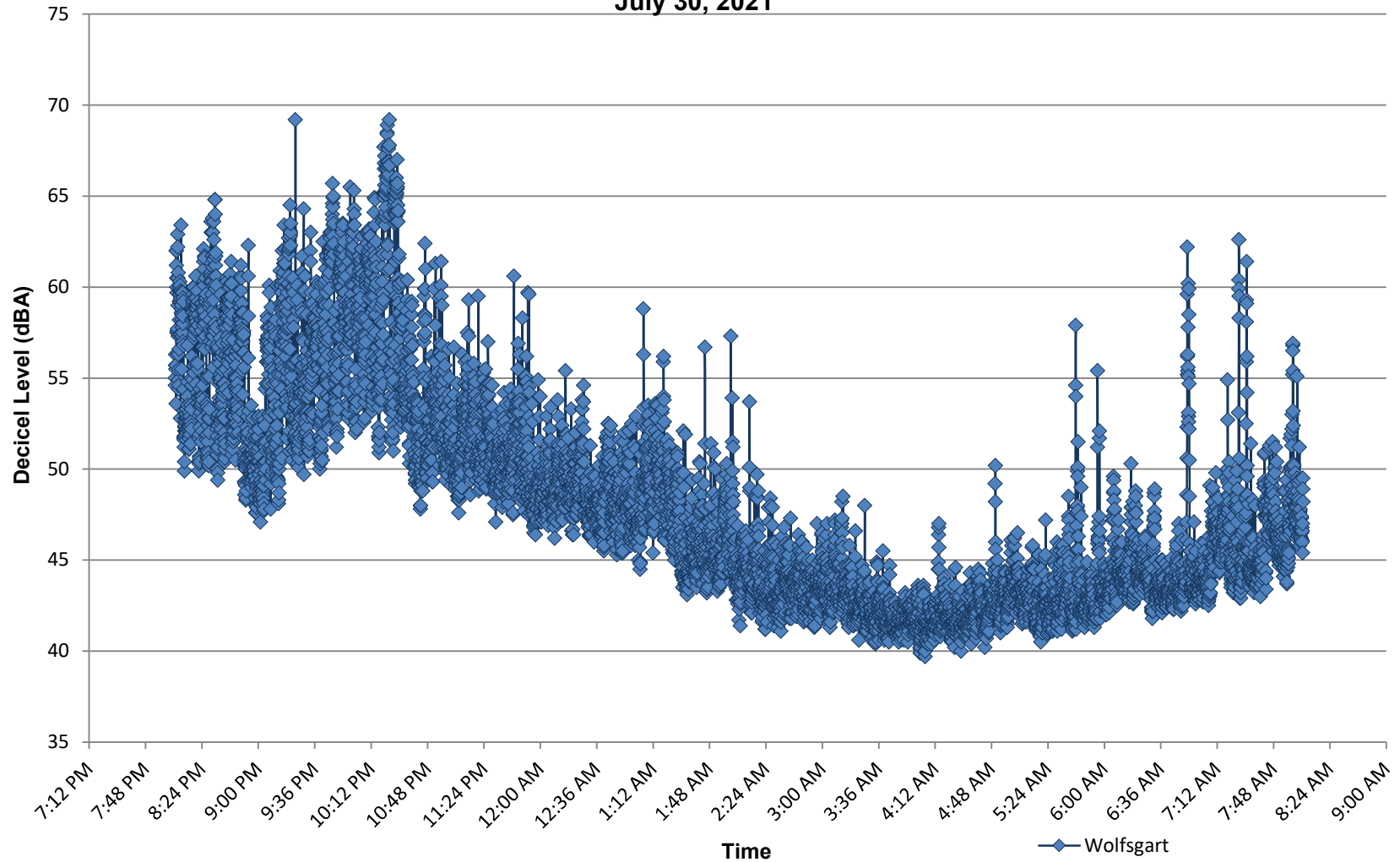
Best regards,



Principal

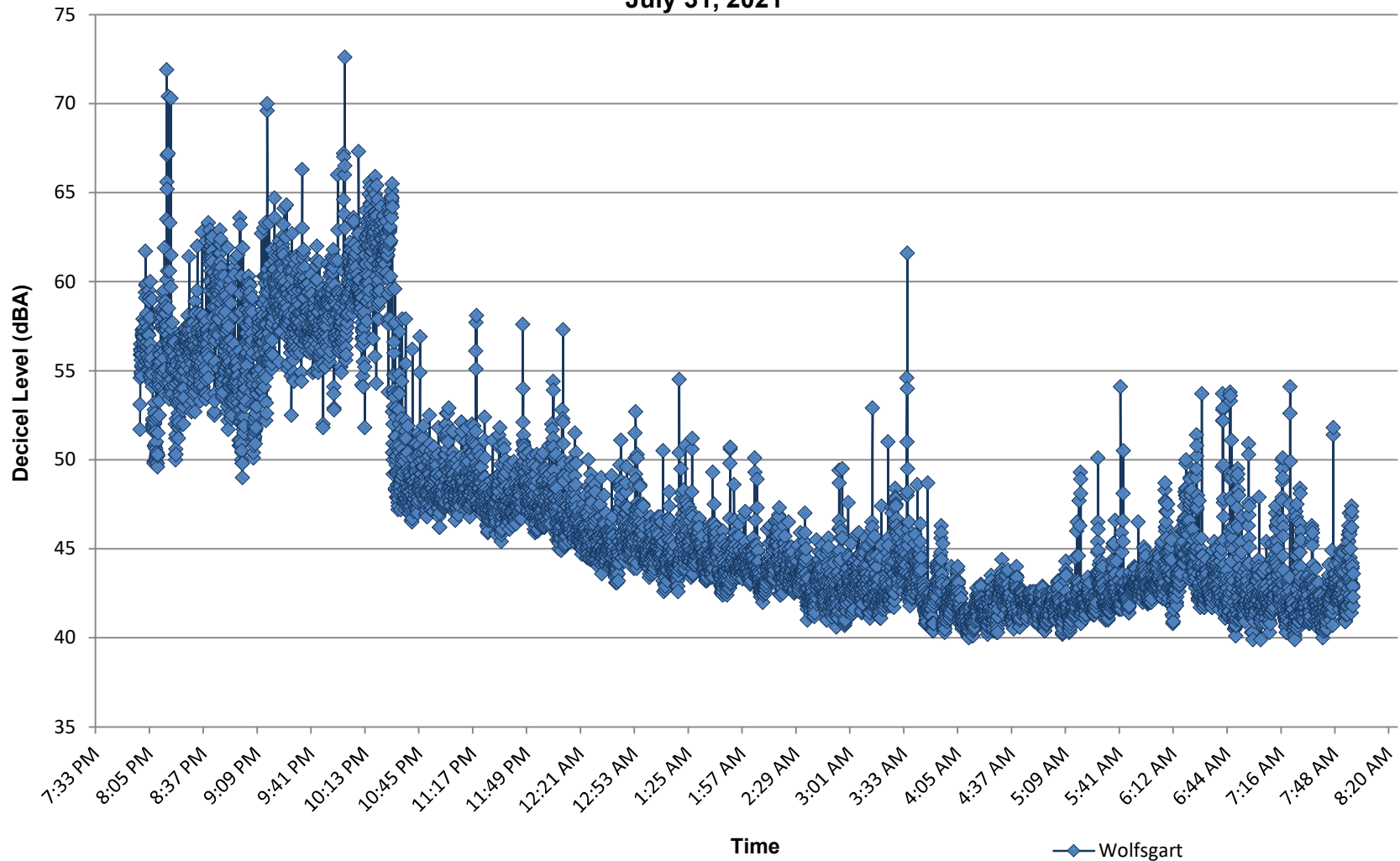
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**Champlain Valley Exposition
Wolfsgart - East Boundary Noise Monitoring
July 30, 2021**



	Hour 1	Hour 2	Hour 3	Hour 4	Hour 5	Hour 6	Hour 7	Hour 8	Hour 9	Hour 10	Hour 11	Hour 12
Hourly Avg	54.8	56.6	55.5	50.8	48.6	47.0	43.8	42.4	42.4	43.2	44.3	46.6
Max Levels	64.8	69.2	69.2	60.6	58.8	57.3	53.7	48.5	50.2	57.9	62.2	62.6
Exceeding Limit (min)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
	Hour 1 to Hour 4, Hour 12			Hour 5	Hour 6 to Hour 11		Hour 1 to Hour 4, Hour 12: 9 pm to 12 am, 7 am to 8 am					
Max Hourly Averages:	78 dBA			55 dBA	50 dBA		Hour 5: 12 am to 1 am					
Max Levels (5 min average):	83 dBA			65 dBA	60 dBA		Hour 6 to Hour 11: 1 am to 7 am					

**Champlain Valley Exposition
Wolfsgart - East Boundary Noise Monitoring
July 31, 2021**



	Hour 1	Hour 2	Hour 3	Hour 4	Hour 5	Hour 6	Hour 7	Hour 8	Hour 9	Hour 10	Hour 11	Hour 12
Hourly Avg	56.2	57.6	55.0	48.2	46.3	44.7	43.4	43.2	41.8	42.4	43.8	42.6
Max Levels	71.9	70.0	72.6	58.1	57.3	54.5	50.1	61.6	44.4	54.1	53.8	54.1
Exceeding Limit (min)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Hour 1 to Hour 4, Hour 12		Hour 5		Hour 6 to Hour 11		Hour 1 to Hour 4, Hour 12: 9 pm to 12 am, 7 am to 8 am						
Max Hourly Averages:	78 dBA		55 dBA		50 dBA		Hour 5: 12 am to 1 am					
Max Levels (5 min average):	83 dBA		65 dBA		60 dBA		Hour 6 to Hour 11: 1 am to 7 am					