

August 4, 2021

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

RE: Environmental Noise Monitoring – Outdoor High School Graduations

Dear Mr. Pierce:

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

Four high school graduation ceremonies were held outdoors on the CVE Midway Lawn with the event stage and accompanying sound system facing the eastern property boundary of the CVE facility. The graduation ceremonies occurred on Thursday, June 10th through Saturday, June 12th with one ceremony on Thursday evening, one on Friday afternoon and two ceremonies on Saturday afternoon and evening. Two SLMs were deployed for each ceremony, one located approximately 100 feet north of Gate G near the fenceline and the second SLM located 50 feet south of the Green Gate near the fenceline.

The weather was mainly clear for each event with temperatures ranging from the high 60's to the low 70's for Thursday and Friday's ceremonies and the high 70's for both Saturday events. The winds were generally in the 3 to 12 miles per hour and out of the north and west.

Noise monitoring was approximately 2 hours for each ceremony beginning prior to each ceremony and concluding after the field had cleared of participants and spectators. The noise monitoring data is presented in the attached charts and a summary of the monitoring data is provided below. The table below presents the SLM property line hourly average noise data, the maximum noise levels and the time duration of noise levels above maximum allowable noise level in minutes.

Table 1: Center for Technology, Essex

	Gate G		Green Gate			
	Hour 1	Hour 2	Hour 3	Hour 1	Hour 2	Hour 3
Hourly Average (dBA)	51.0	50.6	51.4	49.3	48.6	50.2
Max Noise Level (dBA)	74.4	80.5	68.6	72.6	79.5	66.1
Time Above Max Level (min)	0.0	0.0	0.0	0.0	0.0	0.0

Table 2: Champlain Valley High School

	Gate G		Greer	ı Gate	
	Hour 1	Hour 2	Hour 1	Hour 2	
Hourly Average (dBA)	54.1	54.4	53.7	53.5	
Max Noise Level (dBA)	88.2	75.4	78.3	75.2	
Time Above Max Level (min)	0.1	0.0	0.0	0.0	

Table 3: South Burlington High School

	Gate G		Greer	ı Gate	
	Hour 1	Hour 2	Hour 1	Hour 2	
Hourly Average (dBA)	51.5	52.6	51.0	54.1	
Max Noise Level (dBA)	73.1	69.6	76.4	72.9	
Time Above Max Level (min)	0.1	0.0	0.0	0.0	

Table 4: Essex High School

	Gate G		Greer	ı Gate
	Hour 1	Hour 2	Hour 1	Hour 2
Hourly Average (dBA)	52.0	51.2	51.7	48.8
Max Noise Level (dBA)	70.0	75.5	71.0	71.0
Time Above Max Level (min)	0.1	0.0	0.0	0.0

The data presented above indicates the hourly average noise limits were not exceeded for any of the graduation ceremonies over the 3 days. The maximum noise level was also not exceeded along the east property boundary during any of the events. The maximum noise limit is defined as a sustained maximum five-minute average in the established noise criteria limits.

The noise level data are presented in each of the attached charts for the SLMs used during the four high school graduation ceremonies held on June 10 through June 12, 2019. The noise levels

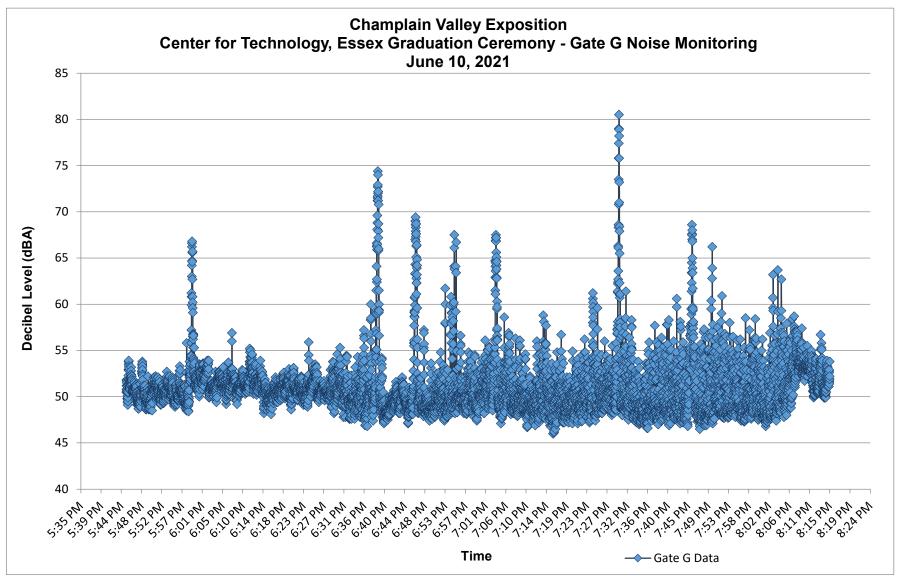
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measured throughout the event did not exceed the established noise level criteria without exception. The established noise level criteria used for monitoring outdoor events held at the Champlain Valley Exposition are defined in the Noise Indemnification Agreement between the Champlain Valley Exposition and the Village of Essex Junction.

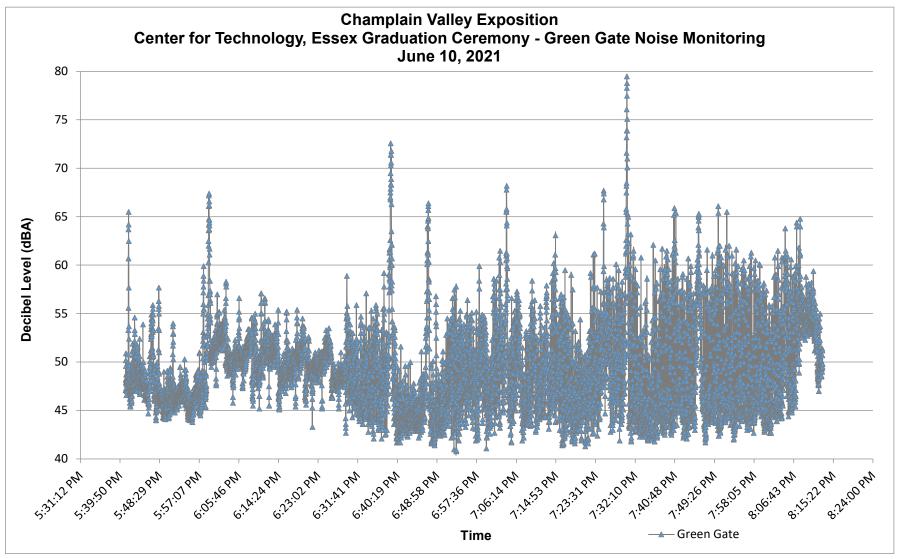
Best regards,

Principal

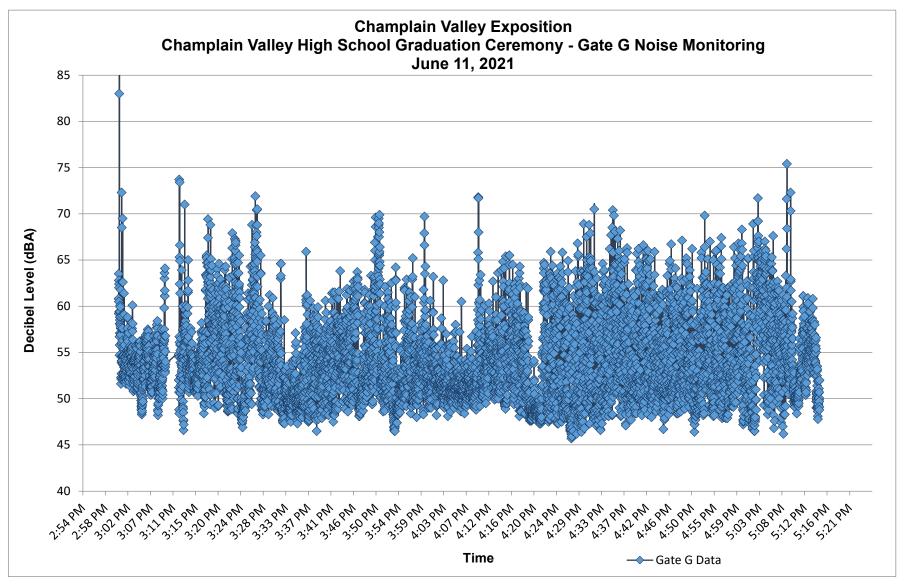
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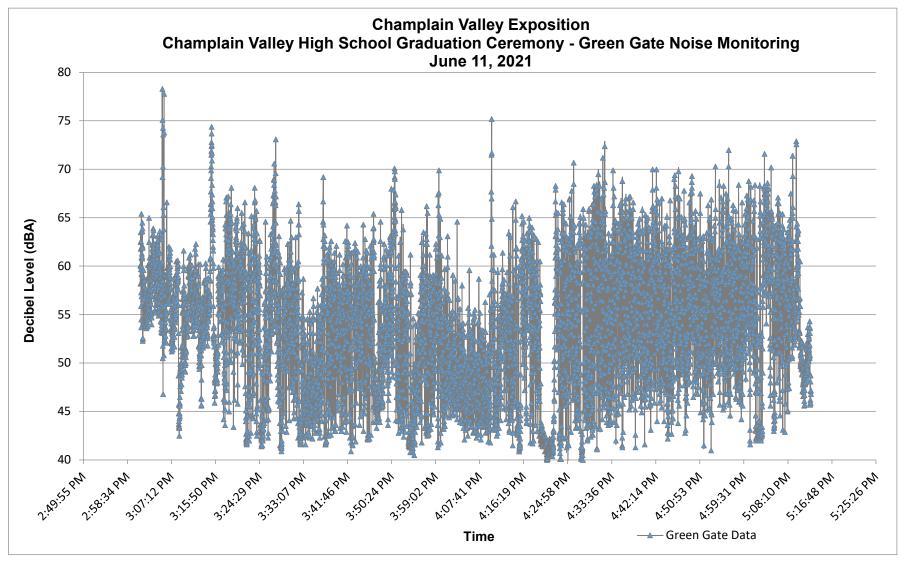
	Hour 1	Hour 2	Hour 3
Hourly Avg	51.0	50.6	51.4
Max Levels	74.4	80.5	68.6
Exceeding Limit (min)	0.0	0.0	0.0



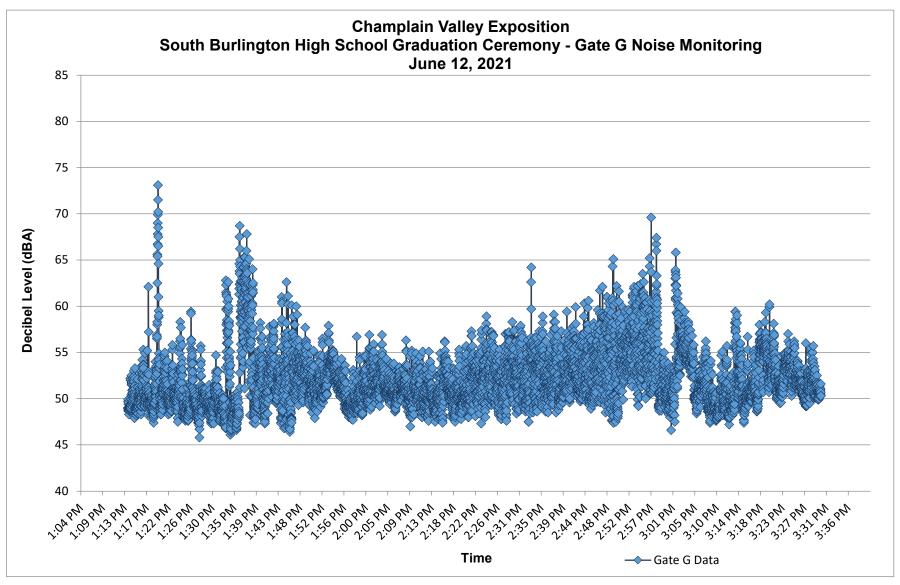
	Hour 1	Hour 2	Hour 3
Hourly Avg	49.3	48.6	50.2
Max Levels	72.6	79.5	66.1
> 83 dBA (sustained time > 83 dB, in minutes)	0.0	0.0	0.0



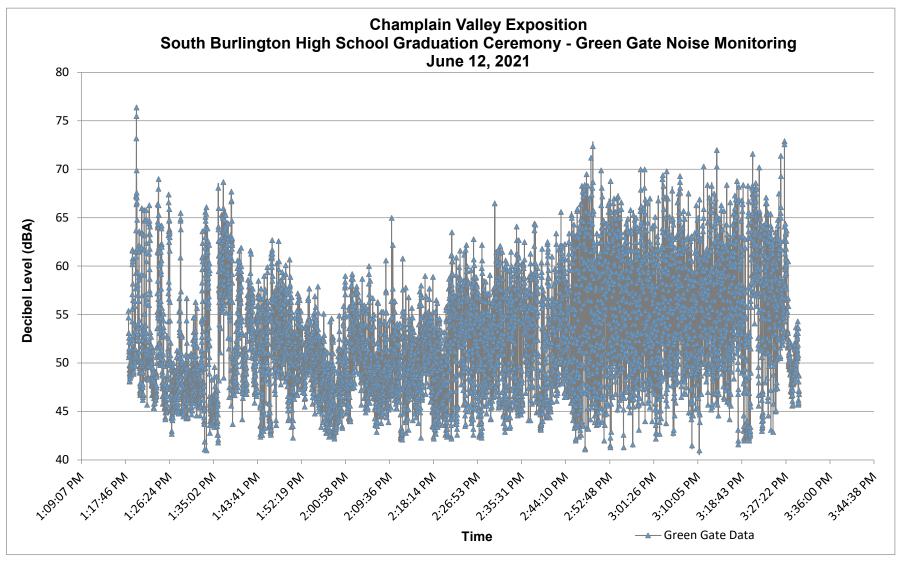
	Hour 1	Hour 2
Hourly Avg	54.1	54.4
Max Levels	88.2	75.4
Exceeding Limit (min)	0.1	0.0



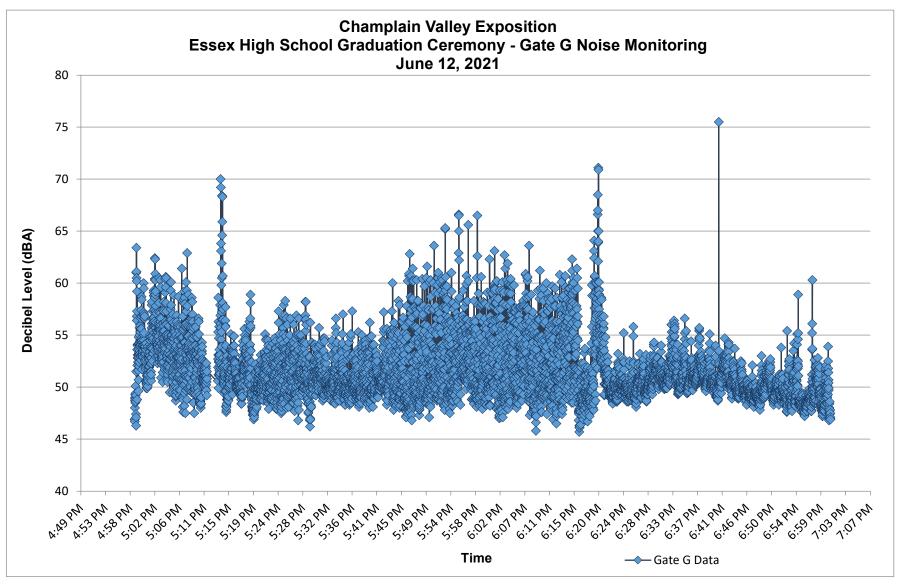
	Hour 1	Hour 2
Hourly Avg	53.7	53.5
Max Levels	78.3	75.2
> 83 dBA (sustained time > 83 dB, in minutes)	0.0	0.0



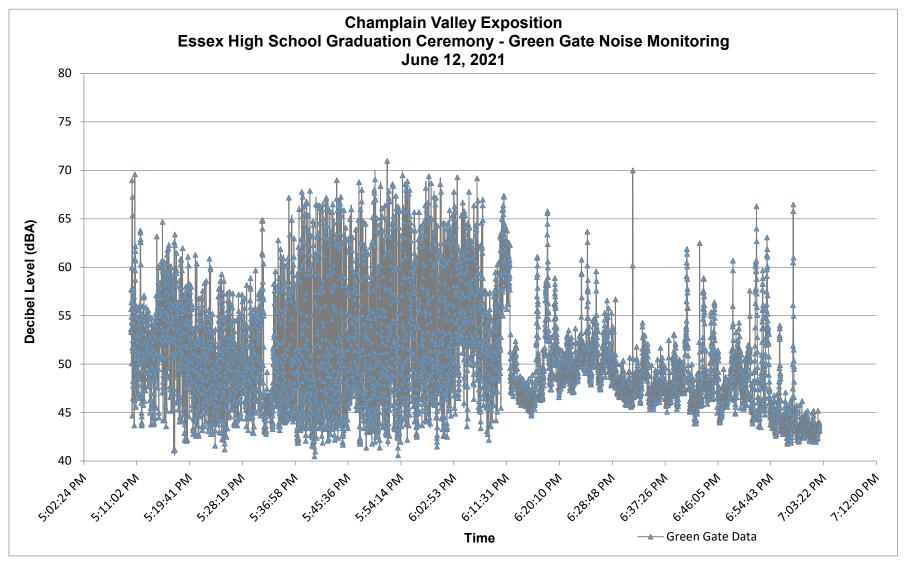
	Hour 1	Hour 2
Hourly Avg	51.5	52.6
Max Levels	73.1	69.6
Exceeding Limit (min)	0.0	0.0



	Hour 1	Hour 2
Hourly Avg	51.0	54.1
Max Levels	76.4	72.9
> 83 dBA (sustained time > 83 dB, in minutes)	0.0	0.0



	Hour 1	Hour 2
Hourly Avg	52.0	51.2
Max Levels	70.0	75.5
Exceeding Limit (min)	0.0	0.0



	Hour 1	Hour 2
Hourly Avg	51.7	48.8
Max Levels	71.0	71.0
> 83 dBA (sustained time > 83 dB, in minutes)	0.0	0.0