

July 6, 2025

Christopher Yuen Community Development Director City of Essex Junction 2 Lincoln Street Essex Junction, Vermont 05452

RE: Environmental Sound Monitoring – Relay for Life

Dear Mr. Pierce:

Vermont Air Testing Services (VATS) was retained by the City 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 2025 summer concert and fair season. Sound monitoring was performed using a 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 meter's microphone was fitted with a windscreen to minimize wind disturbance. The meter was calibrated to a 114 decibel (dB) tone prior to and following the noise monitoring event.

One SLM was deployed for the Relay for Life event held at CVE beginning on June 13, 2025, through the early morning of June 14<sup>th</sup>. A single SLM was used to monitor the event and the SLM was placed on the east side boundary near the fence line adjacent to the access road approximately 50 feet south of the Green Gate entrance. The Relay for Life event was 12-hour continuous event held overnight in the Midway area of the CVE grounds. An event stage and sound system were set up immediately adjacent to the Ware Administration building with the relay participants staged along the pathways throughout the Midway area.

The weather at the start of the event was mostly cloudy with light winds out of the north up to 7 mph and temperatures in the mid 60's. Throughout the remainder of the event the skies remained cloudy with light rain around 4 AM and he temperatures decreased into the mid 50's.

Sound monitoring began at approximately 7:15 pm on Friday, June  $13^{th}$  and continued to almost 8:00 am the following morning on June  $14^{th}$ . The sound monitoring data is presented in the attached chart and a summary of the monitoring data is provided below.

It should be noted that the regulated maximum noise levels change during the course of the event. The maximum hourly average sound level from 7 pm to 12 am was 78 dBA with the maximum 5-minute average sound level defined at 83 dBA, which corresponds to Hours 1 through 5. The allowable sound levels decreased to 55 dBA and 65 dBA, respectively for the midnight hour (Hour 6). The allowable noise levels decreased to 50 dBA and 60 dBA, respectively, beginning at 1 am until the 7 am time frame (Hours 7 through 12). The table below presents the SLM property line hourly average sound data, the maximum sound levels and the time duration of sound levels above maximum allowable noise level in minutes.

	Hour											
	1	2	3	4	5	6	7	8	9	10	11	12
Hourly Average (dBA)	55.7	54.5	45.6	49.4	51.6	51.4	49.3	49.2	48.1	50.0	47.4	41.8
Max Sound Level (dBA)	67.1	63.6	55.2	61.1	59.8	60.7	59.8	57.6	61.2	57.8	58.8	58.2
Time Above Max Level (min)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0

The data presented above indicates the hourly average sound limits were not exceeded at any time during the monitoring event. The 60.0 dBA maximum sound level was exceeded along the east property boundary during Hour 9 for 1.8 minutes.

The sound level data is presented in the attached chart for the SLM used during the Relay for Life monitoring event held on June 13, 2025, through June 14, 2025. The sound levels measured throughout the event did not exceed the established sound level criteria apart from the maximum sound level being exceeded during Hour 9 of the event. out 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 City of Essex Junction. In addition, the 12 am through 7 am noise criteria limits are specified in the City of Essex Junction Land Development Code, Chapter 7, Section 718.

Best regards,

Principal

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