

September 22, 2021

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

RE: Environmental Noise Monitoring – ABBA & Michael Jackson Tribute Concert

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 concert 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. Two SLMs used for the monitoring were configured to log average sound pressure levels every 5 seconds in the broadband or A-weighted scale. The meters' microphones were fitted with a windscreen to minimize wind disturbance. Each SLM meter was calibrated at a 114 decibel (dB) tone prior to and the calibration was checked following the noise monitoring.

Two SLMs were deployed for the ABBA and Michael Jackson (ABBA/Jackson) tribute concert event held at the CVE Grandstand on August 27, 2021. One SLM was placed on the east side boundary along the fenceline approximately 50 feet south of the Green Gate entrance. The monitoring location was noted as the East Meter location. The second SLM, identified as the West Meter, was placed along the western property boundary on the berm along Weston Way in direct line of sight of the Grandstand sound system tower. Both SLMs began collecting noise data from the beginning of the show until its conclusion.

The ABBA/Jackson tribute concert event began at 7:00 pm with 2 bands playing on the Grandstand stage during the 3-plus hour concert event. The weather during the event was fair skies with light winds out of the north up to 9 mph and temperatures in the mid 60's to low 70's throughout the event.

Noise monitoring began at approximately 7:00 pm on August 27th and concluded at approximately 10:30 pm that evening. The both sound levels meters monitored the noise levels continuously throughout the event to its conclusion. The noise monitoring data is presented for both meters in the attached charts and a summary of the monitoring data is provided below.

The table below presents the SLM East property line hourly average noise data, the maximum noise levels and the time duration of noise levels above maximum allowable noise level in minutes.

	Hour 1	Hour 2	Hour 3	Hour 4
Area Average (dBA)	71.1	72.7	74.1	73.3
Maximum Noise Level (dBA)	76.8	76.7	89.3	81.1
Sustained Noise Level > 83 dBA, (minutes)	0.0	0.0	0.1	0.0

The data presented above indicates the hourly average noise limit of 78 dBA was not exceeded along the east property boundary during the 3-plus hour monitoring period at the CVE Grandstand on August 27, 2021. The maximum noise level above 83 dBA was not exceeded along the east property boundary without exception during the concert event. The maximum noise limit is defined as a sustained maximum five-minute average of 83 dBA in the established noise criteria limits.

The West noise monitoring data presented below indicates the monitoring conducted along Weston Way during the concert event;

	Hour 1	Hour 2	Hour 3
Area Average (dBA)	60.4	61.6	68.1
Maximum Noise Level (dBA)	76.2	79.2	77.8
Sustained Noise Level > 83 dBA, (minutes)	0.0	0.0	0.0

The West monitoring intervals was conducted on the western property-line berm adjacent to Weston Way. The data listed above indicates the average area noise levels were all below the 78 dBA average limit during each monitoring segment along the property boundaries. The maximum noise levels were also maintained below the 83 dBA limit without exception.

The noise level data is presented in attached charts for the SLMs used during the ABBA and Michael Jackson Tribute Concert event held on August 27, 2021. The noise levels 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,

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