

**Vibration Monitoring Data-Monthly Summary**

<b>Month and Year:</b>	Jul-20					
<b>Project:</b>	Central Station Main Works					
<b>EPL Licence Number:</b>	21148					
<b>EPL Weblink:</b>	<a href="https://centralstationmetro.com/documents/">https://centralstationmetro.com/documents/</a>					
<b>Specific EPL Monitoring Condition:</b>	M7.2- Vibration Monitoring					
<b>Monitoring Location:</b>	<b>Number of Monitoring Events during the month</b>	<b>Attended/Continuous Monitoring</b>	<b>Event Based Monitoring? (Y/N)</b>	<b>Measured Parameter: Peak particle Velocity (PPV) (mm/s)</b>	<b>Predicted Parameter: Peak Particle Velocity (PPV) (mm/s)</b>	<b>Comment</b>
TCAC	1	Continuous	Y	48.7mm/s	<7.5mm/s	On four days vibration detected exceeded 7.5mm/s, however these exceedances occurred on days and time periods that no construction works were occurring. i.e Thursday at 02:00 and Sunday at 22:00). Peaks in vibration are not attributed to construction but instead localised bumps of the geophone or footsteps.
30 Chalmers St	1	Continuous	Y	38.47mm/s	<25mm/s	The works at the Eastern Entrance throughout July 2020 consisted of the removal of excavated shale using a crane, canopy tube drilling, waterproofing and concrete pours. There was only one instance where vibration exceeded 25mm/s, however this was attributed to a localised bump of the vibration meter by construction personnel and not CSM works.

**Definitions**

**Attended:** Operator attended measure at either the façade of sensitive receiver, internal dwelling of a sensitive receiver or at a location of interest, typically in anticipation of an event.

**Continuous:** Real time vibration data recording the peak within a 1 min intervals, 24/7.

**Event:** The peak particle velocity (PPV) measured in mm/s of any measuring interval either during attended monitoring or a period of interest reviewed from the continuous data. The period is typically selected to monitor works as the works occur, or to validate predictions of planned works, or in response to a complaint, or due to an unexplained elevated PPV in the continuous data noise trace.