

**Vibration Monitoring Data-Monthly Summary**

<b>Month and Year:</b>	Jun-21
<b>Project:</b>	Central Station Main Works
<b>EPL Licence Number:</b>	21148
<b>EPL Web link:</b>	<a href="https://centralstationmetro.com/documents/">https://centralstationmetro.com/documents/</a>
<b>Specific EPL Monitoring Condition:</b>	M7.2- Vibration Monitoring

Monitoring Location:	Number of Monitoring Events during the Month	Attended/Continuous Monitoring	Event Based Monitoring? (Y/N)	Measured Parameter: Peak Particle Velocity (PPV) (mm/s)	Predicted Parameter: Peak Particle Velocity (PPV) (mm/s)	Comment
TCAC AKA. CEB (Central Electric Building)	1	Continuous	Y	22/6/2021 Max 1.87mm/s due to construction.	Project Screening criteria <25mm/s Target <25mm/s (based on activity)	Activity in the Northern Concourse throughout June consisted of Platform 8 releveling and finishes works. Works were not vibration intensive. Typical vibration below cited 12.5 mm/s level corresponding to a near-zero probability of damage.  No vibration levels above the BS 7385 criteria for reinforced or framed structures for industrial and heavy commercial buildings of 50mm/s observed.
Sydney Dental Hospital	1	Attended	Y	25/06/2021 Max 2.99mm/s due to construction.	Project Screening criteria <25mm/s Target <25mm/s (based on activity)	Location of monitoring: Sydney Dental Hospital southern basement stairs. Logger was set up to monitor detailed breaking works happening at 20-28 Chalmers St from 24/6/21.  No vibration levels above the BS 7385 criteria for reinforced or framed structures for industrial and heavy commercial buildings of 50mm/s observed.
20-28 Chalmers St	1	Continuous	Y	17/6/2021 Max due to construction 1.8mm/s	Project Screening criteria <25mm/s Target <7.5mm/s (based on activity)	Predominant vibration generating activity at Eastern Entrance was due to detailed excavation around the Sydney Dental Hospital footings. Generally a low vibration month.  Typical vibration below cited 12.5 mm/s level corresponding to a near-zero probability of damage.

**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.