

Vibration Monitoring Data-Monthly Summary

Month and Year:	Oct-20					
Project:	Central Station Main Works					
EPL Licence Number:	21148					
EPL Web link:	https://centralstationmetro.com/documents/					
Specific EPL Monitoring Condition:	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	Max: 15.24mm/s 5/10/20, 14:29	Project Screening criteria <25mm/s Target <15mm/s (based on activity)	For the month of October 2020, there were no exceedances of the project screening criteria of 25mm/s. Elevated levels of vibration were observed between the 1st and 5th , 8th and 9th, 11th, and the 19th to 22nd October 2020. The elevated vibration levels were typically below 10mm/s with the max reaching 16mm/s. The Northern Concourse area experienced vibration intensive works associated with (demolition of concrete slab and walls).
CENA68	16 (Daily)	Continuous	Y	typically< 1mm/s, max 1 occasion 5.19mm/s on the 8/10/20	3mm/s	Brokk was used in the northern concourse to break out the old escalator concrete slab. Elevated vibration levels were observed from typical background levels, typically below the set target screening level of 3mm/s. On one occasion works were occurring very close to CENA68. No damage resulting from impact observed.
30 Chalmers St	1	Continuous	Y	78.4mm/s (localised bump) Attributed to construction work <8mm/s	Project Screening criteria <25mm/s Target <7.5mm/s (based on activity)	The works at the Eastern Entrance throughout October 2020 consisted predominantly of the removal of excavated shale. Hammering/breaking occurred throughout the month, however for no more than 2 to 3hrs per day.

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.