

# ACOUSTICS ADVISOR MONTHLY REPORT

## SYDNEY METRO WEST (SSI 10038 and SSI 19238057<sup>1</sup>)

For period:	July 2024	Authorisation:	Dave Anderson, Acoustics Advisor
Prepared by:	Dave Anderson		
Date of issue:	7 August 2024		

Acoustics Advisor		Alternate Acoustics Advisor(s)	
Dave Anderson		Larry Clark, David Hanson and Sav Shimada	
Document review			
Document	Reviewed	Endorsed / approved	
<b>Central Tunnelling Package (CTP), AFJV</b>			
Weekly Noise Reports 21/06/24, 28/06/24, 5/7/24 and 12/7/24	Y	N/A	
DNVIS North Strathfield Rev 9	Y	25/7/24	
DNVIS Sydney Olympic Park Rev 9	Y	Under review	
Bi-annual monitoring report January to June 2024	Y	Under review	
GBNV monitoring 25 Nelson Road	Y	N/A	
<b>Western Tunnelling Package (WTP), GLC</b>			
Attended noise and vibration monitoring reports at Bailey St, Westmead	Y	N/A	
Attended noise monitoring reports at Bailey St and Hassall St, Westmead.	Y	N/A	
Attended noise monitoring reports for 27 June, 3 and 10 July at Sydney Olympic Park	Y	N/A	
Unattended noise monitoring report for 21 and 22 July at Sydney Olympic Park			
DNVIS, Westmead to Sydney Olympic Park, Rev O	Y	19/7/24	
CEMP Rev D	Y	N/A	
<b>Westmead Utilities Relocation (WUR), Quickway</b>			
Works now completed			
<b>Eastern Tunnelling Package (ETP), JCG<sup>1</sup></b>			
Monitoring records and data	Y	N/A	
Further detail for complaints at Pymont East 22 July 2024	Y	N/A	

Inspections / site visits		
Date	Location(s)	Details
4 July	Sydney Olympic Park, Parramatta, Westmead	Larry Clark OOH inspection. Sydney Metro, GLC environment and DPHI compliance representatives in attendance.
		No noise or vibration issues or actions arising.
9 July	Hunter Street and Pymont	Dave Anderson joined ER inspection
		Noted need to relocate real time noise monitor at Pymont West site. Realtime monitor has since been relocated to site boundary.
10 July	Pymont East	Larry Clark OOH inspection.
		Music radio on site audible across Edward Street. Construction team were toolboxed on noise mitigation requirements.
10 July	Burwood North	Larry Clark OOH inspection during driveway works at Burwood North south site. Sydney Metro and AFJV environment representatives in attendance.
		Excavator with a tonal alarm identified and replaced for the next OOH shift.
10 July	Sydney Olympic Park	Larry Clark OOH inspection.
		Telehandler with a tonal alarm identified and rectified the next day.

<sup>1</sup> Sydney Metro West Concept and Stage 1 (SSI 10038), Sydney Metro West Stage 2: Bays to Sydney CBD (SSI 19238057) shown in italics

17 July	Clyde Dive	Larry Clark joined ER inspection.
	Quiet operation of electric tower crane observed. Discussion on vac truck and water lance breakback of piles, instead of noisier usual jackhammer method, future slab protection works.	
17 July	Burwood North	Larry Clark witnessed OOH concrete delivery trial.
	Observations provided and subsequently satisfactorily addressed.	
18 July	Sydney Olympic Park and North Strathfield	Larry Clark joined ER Inspection.
	No noise or vibration issues or actions arising.	
18 July	Pyrmont East	<i>Dave Anderson attended OOH inspection to witness monitoring of concrete deliveries (approx 8 to 9pm)</i>
	No noise or vibration issues or actions arising.	
30 July	Pyrmont	<i>Dave Anderson joined ER inspection</i>
	<i>JCG checking noise levels from street sweeper and will confirm status of exhaust system on vac truck.</i>	

### Meeting

Date	With	Purpose
1, 8, 15, 22, 29 July	AFJV, Sydney Metro, ER	Environment meeting, CTP
1, 15, 29 July	Sydney Metro, GLC, ATC	Fortnightly works status
2, 9, 16, 23, 30 July	Sydney Metro, JCGJV, ER	Weekly environment meeting, ETP
8 July	DPHI, ER	Monthly meeting with DPHI compliance
10, 24 July	Sydney Metro, GLC, ER	Environment meeting, WTP
12, 26 July	Quickway, Metro, ER	Westmead Utilities Scope – Environment meeting
25 July	DPHI, Sydney Metro, ER	Monthly meeting with DPHI post-approvals

### Noise and vibration issues, incidents, recommendations

Date	Contract / Location and details
22 July	<p><i>ETP / Pyrmont East. Dust scrubber ventilation system commenced commissioning, but validation monitoring identified sound power level was greater than assumed in the DNVIS, and 7 complaints were received (3 during the night and the rest the following morning).</i></p> <p><i>After the first complaint, scrubber fan noise was reduced by running it at 50% capacity from approx. 0030hrs. Two further complaints were received, and the fan was switched off around 0230hrs.</i></p> <p><i>Additional mitigation was implemented on 23 July and JCG's monitoring indicated approximately 20dBA of noise reduction. There have been no further complaints about the issue.</i></p>

### Examples of good practice in noise and vibration management

Date	Contract / Location and details
17 July	WTP Clyde Dive: vac truck and water lance used for pile breakback, rather than noisier jackhammer method

### Ongoing and upcoming noise and vibration risks

ETP:	<ul style="list-style-type: none"> <li>Demolition at Hunter Street now close to street level, leading to higher noise impacts for some nearby receivers.</li> <li>Shaft excavation, including hammering (prior to acoustic shed) at Pyrmont West</li> <li>Cavern excavation underway 24/7 at Pyrmont East</li> </ul>
CTP:	<ul style="list-style-type: none"> <li>Tunnelling and cross passage ground borne noise and vibration</li> <li>Upcoming TBM breakthrough, dismantle and removal at Sydney Olympic Park.</li> </ul>
WTP:	<ul style="list-style-type: none"> <li>TBM dismantle and removal at Sydney Olympic Park</li> </ul>

## Noise and vibration complaints

28 noise and vibration complaints attributed to Sydney Metro during July:

- 3 from Westmead
- 1 from Five Dock
- 11 from Pyrmont, 7 of which related to OOH noise on 22 July
- 5 from Hunter St, from businesses about daytime noise, vibration and respite hours
- 8 relating to WTP TBM dismantling work at Sydney Olympic Park

Note: The chart shows noise and vibration (NV) complaints in standard hours and out of hours (OOH) periods. Some complaints relate to both time periods so the total number of NV complaints may be less than the sum of standard and OOH complaints.

