

ACOUSTICS ADVISOR MONTHLY REPORT

SYDNEY METRO WEST (SSI 10038 and SSI 19238057¹)

For period:	September 2023	Authorisation:	Dave Anderson, Acoustics Advisor
Prepared by:	Dave Anderson		
Date of issue:	7 October 2023		

Acoustics Advisor	Alternate Acoustics Advisor(s)	
Dave Anderson	Larry Clark, David Hanson and Sav Shimada	
Document review		
Document	Reviewed	Endorsed / approved
Central Tunnelling Package (CTP), AFJV		
Various noise and vibration monitoring reports and records	Y	
Sydney Olympic Park DNVIS Rev 8	Y	15/9/23
Burwood DNVIS Rev 11	Y	15/9/23
System Wide (Tunnelling) DNVIS Rev 5	Under review	
North Strathfield DNVIS Rev 6	Under review	
Western Tunnelling Package (WTP), GLC		
Project-wide DNVIS Rev 6	Under review	
Westmead OOH I&M installation DNVIS Rev B	Y	13/9/23
6-monthly monitoring report	Under review	
Eastern Tunnelling Package (ETP), JCG¹		
Pyrmont Station DNVIS rev C	Under review	
Inspections / site visits		
Date	Location	Details
7 September	WTP Parramatta, Westmead	Dave Anderson OOH inspection of Parramatta discharge line works
	Notes: methodology now changed to Horizontal Directional Drilling (HDD) which is lower impact and quicker. Discussed noise mitigation with site supervisor and enviro. Spot noise readings on HDD rig suggest its sound power level is similar to a vacuum truck. Noise blankets in place (although removed later as a safety precaution due to high winds). No issues raised.	
14 September	CTP Five Dock, Burwood North	Larry Clark joined the ER inspection
	Notes: street sweeper observed parked, engine off	
19 September	Hunter Street	Dave Anderson OOH to witness road header cavern mining in building above
	Notes: access was provided to an unoccupied building for monitoring (formerly the Skinners Hotel, now in use as the site office during standard hours). Ground borne noise from road header audible between approx. 2045 and 2130. Spot readings were around 35 to 40dBA and the noise was not intrusive. The DNVIS estimated levels up to around 45dBA for this activity. No issues raised.	
20 September	WTP Parramatta, Westmead, Clyde Dive	Larry Clark joined the ER inspection
	Notes: inspected compressor enclosure at Westmead and discussed ongoing feasible and reasonable mitigation review. Discussed piling methodology at Parramatta.	
21 September	WTP Westmead	Dave Anderson OOH inspection of I&M works at Alexandra Ave
	Notes: compressor noise audible from outside Westmead station site (raised previously and under review), tonal gantry alarm also audible at times (shed not complete yet). I&M worksite inspected, saw cuts completed before 9.30pm, noise blankets in place. Vacuum truck was the dominant source. Spot readings of drill rig suggest sound power level around 102dBA (much lower than assumed in the DNVIS). No issues raised.	

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

Meeting		
Date	With	Purpose
5, 12, 19, 26 September	Sydney Metro, JCGJV, ER	Weekly environment meeting, ETP
11, 18, 25 September	AFJV, Sydney Metro, ER	Environment meeting, CTP
4 September	Sydney Metro, GLC, ATC	Fortnightly works status
6, 20 September	Sydney Metro, GLC, ER	Environment meeting, WTP
11 September	DPE, ER	Monthly meeting with DPE compliance
28 September	DPE, Sydney Metro, ER, AA	Monthly meeting with DPE
6 September	Sydney Metro, Independent Auditor	Acoustics Advisor Audit Interview

Noise and vibration issues, incidents, recommendations	
Date	Contract / Location and details
Ongoing	OOH ventilation noise at Five Dock exceeding NML – AFJV to respond to AA comments on feasible and mitigation document.
Ongoing	GLC investigated and responded to AA observation of WMD noise OOH exceeding NML with acoustic shed incomplete; discussion of feasible and mitigation continuing.

Examples of good practice in noise and vibration management	
Date	Contract / Location and details
September	CTP using surface miner for ongoing cavern excavation at Five Dock, possible ground borne noise and vibration benefits
7 and 21 September	WTP night shift supervisor showed good grasp of OOH noise mitigation principles and active supervision of work behaviours
September	ET comms and stakeholder team continuing proactive engagement with stakeholders about upcoming wrks and associated impacts

Notes	
Date	Contract / Location and details
Ongoing	Tunnelling of the Hunter Street cavern and turn-back tunnels continuing, including 24/7 works. North heading commencing early October.
Ongoing	Roadheader excavation at Westmead and Clyde
Ongoing	Hammering commenced at North Strathfield and Clyde Dive

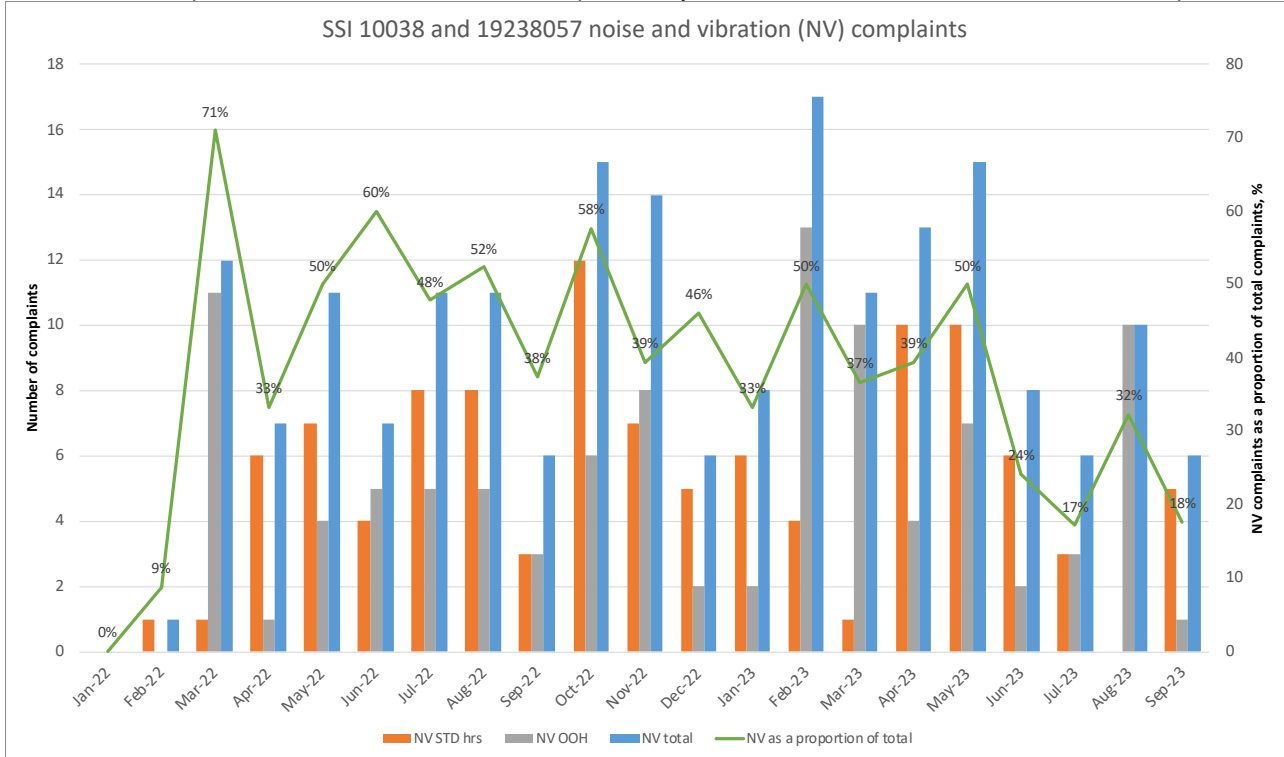
Noise and vibration complaints

6 noise and vibration complaints attributed to Sydney Metro during September:

- 1 from Burwood North regarding concrete trucks,
- 2 from Five Dock regarding noise from the Western site,
- 2 from Pyrmont², regarding demolition noise from the Western site,
- 1 from Hunter Street, regarding demolition noise

5 of the 6 complaints were from standard hours while one of the Five Dock complaints was about night-time (OOH) noise; this is under investigation.

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.



Ongoing and upcoming noise and vibration risks

- Ongoing management of noise impacts at Five Dock and Burwood North.
- Demolition concluding at Pyrmont, excavation starting
- Structural demolition starting at Hunter Street

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