HS2

April 2026

Construction noise and vibration Monthly Report – April 2026

London Borough of Ealing

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Non-Technical Summary

This Noise and Vibration Monitoring Report fulfils HS2 Limited's commitment detailed in the Environmental Minimum Requirements (EMRs), Annex 1, Code of Construction Practice, to present the results of noise and vibration monitoring carried out within London Borough of Ealing during the month of Apr 2026.

Within this period monitoring was undertaken at the following worksites:

- Atlas Road Logistics Tunnel Site (ref.: AR) where general maintenance works, transfer of tunnel segments, conveyor sections, ventilation ducting and consumables for the Euston Tunnels, and tunnelling support works including the operation of the conveyors and gantry cranes works were underway.

- Old Oak Common depot worksite located in the London Borough of Hammersmith and Fulham (LBHF), ref. OOC where general site activities including movement of plant and survey works, steel fixing and general carpentry works, concrete works including scabbling and local concrete breaking, blockwork, backfilling, road sweeping, utility works, demolition of the abutment wall, ramp construction, MEPH works and attenuation tank works were underway.

- Westgate Ventilation Shaft worksite (ref.: WVS) where general site maintenance, installation of cladding and construction of the internal walls to the Head House, application of sprayed coatings, construction of cross passage and ventilation adits, coring for pipework or drainage and concrete casting works were underway.

- Mandeville Road Ventilation Shaft worksite (ref.: MRVS) where Installation of gabion baskets for a retaining wall, concrete element construction, installation of steel elements, operation of the TfL compound, steel-fixing and shuttering works and operation of tower crane were underway

- Flat Iron compound worksite (ref.: FIC) where the operation of lorry holding area, operation of concrete batching plant, stockpiling of concrete rubble, demolition of concrete conveyor base foundations and the assembly of a crane works were underway.

- Green Park Way Ventilation Shaft worksite (ref.: GPWVS) where general site operations including maintenance and road sweeping, electrical works, shaft dewatering works, wire sawing works to remove gantry crane base slab & lifting out concrete blocks for off-site disposal, construction works for tunnel collars, preparation works for the construction of the ventilation basement, preparation works for construction of the ATS foundations, construction of new permanent Network Rail access including gates, reinforced concrete works including primarily steel-fixing and shuttering activities were undertaken.

- Willesden Euro Terminal worksite (ref.: WET) where general site maintenance, operation of conveyor system, delivery of tunnel segments by rail and for temporary storage, loading and trans-shipping segments to the ARLT site and stockpile management works were undertaken.

- Victoria Road Crossover Box worksite (ref.: VRCB) where support activities for tunnelling works, construction of the permanent walkways and cross passage door frames, excavation and pile trimming, intermittent breaking out ground slab, operation of craneage, ventilation fans and water treatment plant, Head House construction and secondary lining installation works were underway.

The HS2 threshold levels for significant noise impacts, which are defined in Information Paper E23 (https://www.gov.uk/government/publications/hs2-information-papersenvironment) were exceeded six (6) times during the reporting period.

There was 1 exceedance of trigger levels as defined in section 61 consents during the reporting period at monitoring position N031b. Further details can be found in Table 6 of this report.

11 complaints were received during the monitoring period. A description of complaints, the results of investigations and any actions taken are detailed in Table 8 of this report.

Abbreviations and Descriptions

The abbreviations, descriptions and project terminology used within this report can be found in Table 1.

Table 1: Table of Abbreviations

Acronym/Term	Definition
LAeq,T	See equivalent continuous sound pressure level.
Ambient Sound	A description of the all-encompassing sound at a given location and time which will include sound from many sources near and far. Ambient sound can be quantified in terms of the equivalent continuous sound pressure level, LpAeq,T
Decibel(s), or dB	Between the quietest audible sound and the loudest tolerable sound there is a million to one ratio in sound pressure (measured in Pascal (Pa)). Because of this wide range, a level scale called the decibel (dB) scale, based on a logarithmic ratio, is used in sound measurement. Audibility of sound covers a range of approximately 0-140dB.
Decibel(s) A-weighted, or dB(A)	The human ear system does not respond uniformly to sound across the detectable frequency range and consequently instrumentation used to measure sound is weighted to represent the performance of the ear. This is known as the 'A weighting' and is written as 'dB(A)'.
Equivalent continuous sound pressure level, or LAeq,T	An index used internationally for the assessment of environmental sound impacts. It is defined as the notional unchanging level that would, over a given period of time (T), deliver the same sound energy as the actual time-varying sound over the same period. Hence fluctuating sound levels can be described in terms of an equivalent single figure value, typically expressed as a decibel level.
Exclusion of data	Measurement of noise levels can be affected by weather conditions such as prolonged periods of rain, winds speeds higher than 5m/s and snow/ice ground cover. Noise levels measured during these periods are considered not representative of normal noise conditions at the site and, for the purposes of this report, are excluded from the assessment of exceedances and calculation of typical noise levels and are also greyed out in charts. Identifiable incongruous noise and vibration events not attributable to HS2 construction noise are also excluded.
Façade	A facade noise level is the noise level 1m in front of a large reflecting surface. The effect of reflection, is to produce a slightly higher (typically +2.5 to +3 dB) sound level than it would be if the reflecting surface was not there.
Free-field	A free-field noise level is the noise level measured at a location where no reflective surfaces, other than the ground, lies within 3.5 metres of the microphone position.
LOAEL	Lowest Observed Adverse Effect Level - the level above which adverse effects on health and quality of life can be detected.
Peak particle velocity, or PPV	Instantaneous maximum velocity reached by a vibrating element as it oscillates about its rest position. The PPV is a simple indicator of perceptibility and risk of damage to structures due to vibration. It is usually measured in mm/s.
SOAEL	Significant Observed Adverse Effect Level - the level above which significant adverse effects on health and quality of life occur.

Sound pressure level	The parameter by which sound levels are measured in air. It is measured in decibels. The threshold of hearing has been set at 0dB, while the threshold of pain is approximately 120dB. Normal speech is approximately 60dB at a distance of 1 metre and a change of 3dB in a time varying sound signal is commonly regarded as being just detectable. A change of 10dB is subjectively twice, or half, as loud.
Vibration dose value, or VDV	An index used to evaluate human exposure to vibration in buildings. While the PPV provides information regarding the magnitude of single vibration events, the VDV provides a measure of the total vibration experienced over a specified period of time (typically 16h daytime and 8h night-time). It takes into account the magnitude, the number and the duration of vibration events and can be used to quantify exposure to continuous, impulsive, occasional and intermittent vibration. The vibration dose value is measured in $m/s^{1.75}$.

1 Introduction

1.1.1 HS2 is required to undertake noise (and vibration) monitoring as necessary to comply with the requirements of the High Speed Rail (London-West Midlands) Environmental Minimum Requirements, including specifically Annex 1: Code of Construction Practice, in addition to any monitoring requirements arising from conditions imposed through consents under Section 61 of the Control of Pollution Act, 1974 or through Undertakings & Assurances given to third parties. Such monitoring may be undertaken for the following purposes:

- monitoring the impact of construction works;
- to investigate complaints, incidents and exceedance of trigger levels; or
- monitoring the effectiveness of noise and vibration control measures.

Monitoring data and interpretive reports are to be provided to each relevant local authority on a monthly basis and shall include a summary of the construction activities occurring, the data recorded over the monitoring period, any complaints received, any periods in exceedance of agreed trigger levels, the results of any investigations and any actions taken or mitigation measures implemented. This report provides noise data, and interpretation thereof, for monitoring carried out by HS2 within the London Borough of Ealing (LBE) area for the period 1-30 April 2026.

1.1.2 Active construction sites in the local authority area during this period include:

- Atlas Road Logistics Tunnel Site, ref.: AR (See plan 5 in Appendix A), where work activities included:
  - General maintenance works within the site
  - Transfer of stored segments, conveyor sections, ventilation ducting and consumables for the Euston Tunnels
  - Transfer of segments from the WET site
  - Tunnelling support works including the operation of the conveyors and gantry cranes
- Green Park Way Ventilation Shaft worksite ref.: GPWVS (See plan 2 in Appendix A), where work activities included
  - General site operations including maintenance and road sweeping
  - Electrical works
  - Shaft dewatering works including decommissioning of redundant dewatering wells (Satellite Shaft)
  - Ongoing wire sawing works to remove gantry crane base slab & lifting out concrete blocks for off-site disposal
  - Construction works for cast-in-situ concrete tunnel collars (connections between tunnels and the shafts).
  - Installation of formwork / platform
  - Preparation works for future construction of the Ventilation basement.
  - Preparation works for construction of future ATS Foundations.
  - Early construction works for the cast-in-situ concrete tunnel invert slabs in the bottoms of the two shafts.
  - Construction of new permanent Network Rail access including gates
  - Reinforced concrete works, primarily steel-fixing and shuttering works.
- Victoria Road Crossover Box worksite ref.: VRCB (See plan 6 in Appendix A), where work activities included

    - Support activities for tunnelling works including tunnel segment repairs and cleaning,
    - Construction of the permanent walkways and cross passage door frames
    - Excavation and pile trimming
    - Intermittent breaking out ground slab
    - Operation of craneage, ventilation fans and water treatment plant
    - Head House construction including installation of steel elements, construction of internal blockwork walls and painting primary steelwork
    - Installing plastic sheeting around Head House envelope.
    - Installation of the secondary lining
- Westgate Ventilation Shaft worksite ref.: WVS (See plan 3 in Appendix A), where work activities included
    - General site maintenance
    - Installation of cladding on the Head House Building and construction of the internal walls
    - Application of additional sprayed coatings on steelwork
    - Construction of cross passage and ventilation adits
    - Coring for pipework or drainage.
    - Concrete casting
- Willesden Euro Terminal worksite ref.: WET (See plan 5 in Appendix A), where work activities included
    - General site maintenance
    - Operation of conveyor system
    - Delivery of tunnel segments by rail and for temporary storage
    - Loading and trans-shipping segments to the ARLT site
    - Management of spoil stockpiles
- Mandeville Road Ventilation Shaft worksite ref.: MRVS (See plan 1 in Appendix A), where work activities included
    - Installation of gabion baskets for a retaining wall
    - Concrete element construction
    - Installation of steel elements
    - Operation of the TfL compound
    - Steel-fixing and shuttering works
    - Operation of tower crane
- Flat Iron compound worksite ref.: FIC (See plan 6 in Appendix A), where work activities included
    - Operation of lorry holding area
    - Operation of concrete batching plant
    - Stockpiling of concrete rubble for future crushing and screening
    - Demolition of concrete conveyor base foundations
    - Assembly of large crane for future removal of conveyor bridge over the railway lines and Victoria Road
- Old Oak Common depot worksite located in the London Borough of Hammersmith and Fulham (LBHF), ref. OOC (See plan 7 in Appendix A), where work activities included
    - General site activities including movement of plant and survey works
    - Steel fixing and general carpentry works

- Concrete works including scabbling and local concrete breaking
- Blockwork
- Backfilling
- Road Sweeping
- Utility works including digging, backfilling, excavating and laying pipe, pipe welding and installation
- Demolition of the abutment wall
- Ramp construction.
  MEPH works including cutting, grooving, and painting pipes and installation of electrical modules
- Attenuation tank works

1.1.3 The applicable standards, guidance, and monitoring methodology is outlined in the construction noise and vibration monitoring methodology report which can be found at the following location https://www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2. Noise and vibration monitoring reports for previous months can also be found at this location.

1.2 Measurement Locations

1.2.1 25 noise and 8 vibration monitoring installations were active in April in the London Borough of Ealing area. Tables 2a and 2b summarise the position of noise and vibration monitoring installations within the London Borough of Ealing area in April 2026.

1.2.2 Maps showing the position of noise and vibration monitoring installations are presented in Appendix B.

Table 2a: Noise Monitoring Locations

Worksite Reference	Measurement Reference	Address
MRVS	BLV-N001	45 Belvue Road
	N040	Badminton Close
	N040b	Badminton Close
	N058	Mandeville Road North hoarding, Northeast Part of Site
	N063	Mandeville Road, North Hoarding, Northwest part of Site
FIC	N029	Braitrim House, Victoria Road
	N042	Boden House Car Park
	N049	Flat Iron compound railway fence, Victoria Rd North Acton
VRCB	N031	School Road, outside Acton Business Centre
	N031b	School Road
	N050c	VRCB Welfare Cabin Rooftop
AR	N032	Shaftesbury Gardens
	N032b	Victoria Road
	N033	Outside The Collective, Atlas Road / Victoria Road
	N033b	Atlas Road Roundabout
	N060	Atlas Road next to Bashey Road
WET	N034	Stephenson Street (north)

	N035	Stephenson Street (south)
	N041a	Harley Road
GPWVS	N059	Greenpark Way East boundary on hoarding
	N064	Greenpark Way outside Tetris building
WVS	N062	Westgate Ventilation Shaft, on site hoarding in Northeast corner of site.
OOC	OOC-N01	Adjacent to 205 Old Oak Common Lane
	OOC-N02	Old Oak Common Lane, Hilltop Works
	OOC-N03	Wycombe Triangle at the rear of 63 Wells House Road

Table 2b: Vibration Monitoring Locations

Worksite Reference	Measurement Reference	Address
OOC	OOC-V03	Wells House Road Alleyway
	OOC-V05	75 Wells House Road
WET	V052b	37, Stephenson Street
	V057	Greenpark Way Eastern boundary
GPWVS	V053	Greenpark Way outside Tetris building (West of Site)
	V054	Carr Road rear garden
MRVS	V055b	Mandeville Road, North Hoarding, Northwest part of Site
	V056a	Wells House Road Alleyway

2 Summary of Results

2.1 Summary of Measured Noise and Vibration Levels

2.1.1 Table 3 presents a summary of the measured noise levels at each monitoring location over the reporting period. The LAeq,T is presented for each of the relevant time periods averaged over the calendar month, along with the highest single period LAeq,T that was found to occur within the month.

Table 3: Summary of Measured dB LAeq Data over the Monitoring Period

Worksite Reference.	Measurement Reference	Site Address	Free-Field or Façade Measurement	Weekday Average LAeq,T (Highest Day LAeq,T)					Saturday Average LAeq,T (Highest Day LAeq,T)					Sunday / Public Holiday LAeq,T (Highest Day LAeq,T)	
				0700 - 0800	0800 - 1800	1800 - 1900	1900 - 2200	2200 - 0700	0700 - 0800	0800 - 1300	1300 - 1400	1400 - 2200	2200 - 0700	0700 - 2200	2200 - 0700
MRVS	BLV-N001	45 Belvue Road	Free-field	55.5 (57.1)	59.4 (63.7)	55.0 (56.2)	54.4 (57.8)	50.9 (57.7)	54.2 (55.3)	54.8 (55.7)	53.3 (55.0)	54.7 (56.1)	50.2 (55.6)	54.6 (62.2)	50.7 (55.5)
	N040*	Badminton Close	Free-field	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
	N040b	Badminton Close	Free-field	58.1 (60.5)	64.5 (68.3)	59.0 (70.7)	57.2 (64.3)	55.7 (68.4)	56.2 (58.4)	57.1 (58.6)	55.8 (59.9)	56.3 (60.1)	54.7 (59.2)	56.8 (59.8)	55.6 (58.7)
	N058	Mandeville Road	Free-field	57.3 (60.6)	63.4 (66.7)	57.5 (63.2)	53.7 (60.3)	51.2 (58.3)	53.3 (54.2)	54.2 (54.6)	52.9 (55.8)	53.9 (57.2)	50.5 (57.1)	53.4 (58.1)	50.4 (55.2)
	N063	Mandeville Road,	Free-field	56.7 (58.5)	65.1 (69.1)	56.7 (61.4)	56.4 (59.5)	53.8 (59.1)	56.5 (57.6)	57.9 (59.8)	56.1 (58.6)	57.1 (60.4)	54.3 (60.0)	56.6 (59.8)	54.8 (63.8)
FIC	N029	Braitrim House, Victoria Road	Free-field	56.8 (61.7)	62.7 (66.3)	56.9 (63.3)	57.8 (69.0)	56.5 (74.5)	51.3 (53.1)	58.3 (65.6)	53.5 (55.2)	53.6 (58.0)	49.6 (58.3)	52.8 (60.4)	51.7 (60.8)
	N042	Boden House Car Park	Free-field	61.7 (70.0)	65.2 (73.1)	59.1 (73.7)	58.7 (71.3)	56.6 (65.4)	58.4 (60.3)	61.1 (64.5)	58.1 (61.1)	57.0 (60.3)	55.6 (60.5)	58.3 (62.4)	55.8 (60.5)
	N049	Flat Iron compound	Free-field	60.2 (70.5)	71.2 (88.2)	55.6 (62.9)	56.7 (63.5)	55.1 (63.0)	59.7 (66.3)	67.0 (75.2)	54.1 (56.1)	57.0 (74.7)	50.1 (56.4)	52.9 (59.1)	52.3 (61.1)
VRCB	N031*	School Road, outside Acton Business Centre	Free-field	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
	N031b	School Road	Free-field	62.3 (66.0)	63.2 (66.5)	58.9 (61.3)	61.0 (71.3)	57.9 (65.5)	60.9 (62.9)	61.9 (63.3)	60.9 (63.0)	59.5 (63.4)	57.5 (61.7)	59.9 (67.1)	61.7 (71.5)
	N050c	VRCB Welfare Cabin Rooftop	Free-field	62.3 (64.3)	63.5 (66.3)	60.7 (62.1)	61.2 (64.3)	58.3 (63.7)	61.1 (61.7)	62.1 (62.6)	60.6 (62.2)	60.6 (62.5)	58.5 (61.8)	60.9 (62.9)	58.5 (63.1)
AR	N032*	Shaftesbury Gardens	Free-field	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
	N032b	Victoria Road	Free-field	65.3 (68.0)	65.8 (66.8)	64.7 (69.4)	63.4 (65.3)	60.7 (66.5)	62.4 (63.1)	64.4 (64.4)	63.8 (65.1)	64.1 (65.9)	61.1 (65.4)	63.7 (67.7)	60.6 (65.3)
	N033*	Outside The Collective, Atlas Rd/Victoria Rd	Free-field	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)

	N033b	Atlas Road Roundabout	Free-field	62.0 (65.7)	63.5 (67.4)	57.6 (59.7)	57.6 (60.8)	57.3 (68.1)	59.2 (60.0)	59.3 (60.1)	58.5 (59.7)	58.4 (61.7)	57.3 (59.6)	58.6 (62.9)	57.1 (59.6)
	N060	Atlas Road next to Bashey Road	Free-field	55.7 (61.9)	63.1 (65.1)	55.4 (61.5)	61.6 (67.5)	62.6 (68.6)	55.3 (59.8)	63.3 (64.6)	62.6 (64.8)	60.4 (65.1)	58.8 (65.5)	61.5 (66.1)	62.0 (66.1)
WET	N034	Stephenson Street (north)	Free-field	54.6 (57.4)	56.0 (58.2)	55.1 (60.3)	54.5 (62.5)	51.2 (59.0)	53.4 (56.9)	53.8 (55.7)	52.6 (56.1)	53.0 (56.8)	49.4 (53.9)	54.4 (63.2)	49.1 (55.2)
	N035	Stephenson Street (south)	Free-field	55.1 (57.3)	55.4 (63.6)	51.0 (56.2)	50.6 (55.2)	48.5 (56.3)	49.2 (50.9)	51.7 (53.8)	49.6 (52.6)	51.2 (55.2)	48.6 (54.3)	51.4 (60.4)	47.8 (57.1)
	N041a	Harley Road	Free-field	61.4 (72.8)	63.3 (66.4)	62.6 (67.0)	61.7 (67.6)	57.2 (64.8)	58.5 (60.5)	61.9 (63.9)	63.2 (66.8)	64.9 (72.3)	60.8 (72.4)	64.1 (73.6)	56.0 (66.5)
GPWVS	N059	Greenpark Way East boundary on hoarding	Free-field	56.1 (62.2)	59.6 (63.5)	51.2 (54.3)	54.8 (63.7)	52.9 (62.4)	52.4 (53.9)	53.0 (56.7)	51.6 (54.6)	52.0 (56.1)	49.2 (55.4)	50.9 (55.5)	49.0 (58.4)
	N064	Greenpark Way outside Tetris building	Façade	55.2 (62.2)	56.5 (60.1)	54.7 (58.8)	53.1 (56.3)	50.9 (59.1)	52.3 (53.9)	52.6 (54.6)	52.6 (56.7)	53.4 (58.0)	50.2 (58.3)	52.4 (56.0)	49.8 (55.2)
WVS	N062	Westgate Ventilation Shaft	Free-field	60.1 (64.7)	62.4 (70.5)	58.5 (68.5)	57.3 (68.7)	55.4 (64.1)	58.3 (59.9)	60.3 (62.7)	59.6 (65.6)	58.6 (63.3)	56.1 (65.3)	58.8 (69.9)	54.0 (59.6)
OOC	OOC-N01	Adjacent to 205 Old Oak Common Lane	Free-field	67.4 (68.3)	67.6 (67.7)	65.5 (66.0)	64.8 (66.2)	61.5 (63.6)	60.4 (60.4)	63.7 (63.7)	65.4 (65.4)	64.9 (65.7)	60.8 (63.6)	64.1 (66.4)	60.9 (65.0)
	OOC-N02	Old Oak Common Lane, Hilltop Works	Free-field	58.6 (61.1)	67.0 (76.4)	62.5 (71.7)	58.7 (64.3)	53.7 (61.0)	53.0 (55.1)	66.9 (79.2)	61.1 (69.8)	58.7 (69.4)	50.5 (60.1)	57.5 (70.7)	52.2 (58.1)
	OOC-N03	Wycombe Triangle at the rear of 63 Wells House Road	Free-field	57.6 (59.7)	64.0 (66.4)	60.6 (63.8)	58.7 (60.0)	56.1 (65.3)	59.1 (59.1)	61.0 (61.0)	62.4 (62.4)	61.9 (62.6)	- (-)	61.0 (62.1)	54.6 (58.3)

*Missing data at N040, N032, N033 and N031 was due to loss of power throughout the month

2.1.2 Table 4: Summary of Measured PPV Data over the Monitoring Period presents a summary of the measured vibration levels at each monitoring location over the reporting period. The highest PPV measured during the monitoring along any axis is presented in the table.

Table 4: Summary of Measured PPV Data over the Monitoring Period

Worksite Reference	Measurement Reference	Monitor Address	Highest PPV measured in any axis, mm/s
GPWVS	V053	Green Park Way, Greenford	1.75 (Y-axis)
	V054	Green Park Way Ventilation Shaft	0.90 (Y-axis)
MRVS	V055b	Carr Road rear garden	1.89 (Y-axis)
	V056a	Mandeville Road	2.41 (Z-axis)
OOC	OOC-V03	Wells House Road Alleyway	2.29 (Y-axis)
	OOC-V05	75 Wells House Road	1.84 (X-axis)
WET	V052b	37, Stephenson Street	1.75 (Z-axis)
	V057	Green Park Way, Greenford	1.03 (Z-axis)

2.1.3 Appendix C presents graphs of the noise and vibration monitoring data over the month for each of the measurement locations. Noise data presented consists of the hourly LAeq values and, where relevant, the LAeq,T values (where the time period T has been taken to be the averaging period as specified in Table 1 of HS2 Information Paper E23). Vibration data presented consist of hourly PPV values. The full data set for the monitoring equipment can be found at the following location: https://data.gov.uk/dataset/24542ae7-dd44-444f-b259-871c4cc43b5e/environmental-monitoring-data.

2.2 Exceedances of the SOAEL

2.2.1 The significant observed adverse effect level (SOAEL) is defined in the 'Planning Practice Guidance – Noise' as the level above which "noise causes a material change in behaviour and/or attitude, e.g. avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area."

2.2.2 HS2 Phase One Information Paper E23: Control of Construction Noise and Vibration sets out the SOAELs for construction noise.

2.2.3 Where construction noise levels exceed the SOAEL, relevant periods will be identified, and summary statistics provided in order to evaluate ongoing qualification for noise insulation and temporary rehousing.

2.2.4 Table 5 presents a summary of recorded exceedances of the SOAEL at each measurement location over the reporting period, including the number of exceedances during each time period.

Table 5: Summary of Exceedances of SOAEL

Worksite Reference	Measurement Reference	Site Address	Day (Weekday, Saturday, Sunday, Night)	Time period	Number of exceedances of SOAEL
AR	N032	Shaftesbury Gardens	All days	All periods	No exceedances
	N032b	Victoria Road	All days	All periods	No exceedances
	N033	Outside The Collective, Atlas Road / Victoria Road	All days	All periods	No exceedances
	N033b	Atlas Rd Roundabout	All days	All periods	No exceedances
	N060	Atlas Road next to Bashey Road	All days	All periods	No exceedances
FIC	N029	Braitrim House, Victoria Road	All days	All periods	No exceedances
	N042	Boden House Car Park	All days	All periods	No exceedances
	N049	Flat Iron compound	Weekday	0800 - 1800	1
GPWVS	N059	Greenpark Way East boundary on hoarding	All days	All periods	No exceedances

	N064	Greenpark Way outside Tetris building	All days	All periods	No exceedances
MRVS	BLV-N001	45 Belvue Road	All days	All periods	No exceedances
	N040	Badminton Close	All days	All periods	No exceedances
	N040b	Badminton Close	All days	All periods	No exceedances
	N058	Mandeville Road	All days	All periods	No exceedances
	N063	Mandeville Road	All days	All periods	No exceedances
OOC	OOC-N01	Adjacent to 205 Old Oak Common Lane	All days	All periods	No exceedances
	OOC-N02	Old Oak Common Lane, Hilltop Work	Weekday Saturday	0800 - 1800 1800 - 1900 0800 - 1300	2 1 1
	OOC-N03	Wycombe Triangle at the rear of 63 Wells House Road	Night	2200 - 0700	1
VRCB	N031	School Road, outside Acton Business Centre	All days	All periods	No exceedances
	N031b	School Road	All days	All periods	No exceedances
	N050c	VRCB Welfare Cabin Rooftop	All days	All periods	No exceedances
WET	N034	Stephenson Street (north)	All days	All periods	No exceedances
	N035	Stephenson Street (south)	All days	All periods	No exceedances
	N041a	Harley Road	All days	All periods	No exceedances
WVS	N062	Westgate Ventilation Shaft	All days	All periods	No exceedances

2.2.5 For the purpose of assessing eligibility for noise insulation or temporary rehousing, multiple exceedances of the SOAEL in a 24-hour period would be counted as a single exceedance during that day. Over the reporting period, the overall number of SOAEL exceedances at each measurement location is shown in Table 6 and may be lower than the total sum of individual exceedances reported in Table 5 for each location.

Table 6: Summary of Total Exceedances of SOAEL

Worksite Reference	Measurement Reference	Monitor Address	Total of SOAEL exceedances in the month
FIC	N049	Flat Iron compound	1
OOC	OOC-N02	Old Oak Common Lane, Hilltop Work	4
	OOC-N03	Wycombe Triangle at the rear of 63 Wells House Road	1

2.3 Exceedances of Trigger Level

2.3.1 Table 7 provides a summary of exceedances of the S61 trigger noise levels determined to be due to HS2 related construction noise measured during the reporting period, along with the findings of any investigation.

Table 7: Summary of Exceedances of Trigger Levels

Complaint Reference Number (if applicable)	Worksite Reference	Date and Time Period	Identified Source	Results of Investigation (including noise monitoring results)	Actions Taken
	VRCB	20/04/2026 13:45	Breaking out hard standing / conveyor bases very close to monitor	No SOAEL exceedance at nearest noise sensitive receptors. No S61 exceedances predicted at nearest noise sensitive receptors based on the results at the monitor.	Noise mitigation measures reviewed and additional screening around the breaker scheduled for future similar works where this is viable.

2.4 Complaints

2.4.1 Table 8 provides a summary of complaint information related to noise and vibration received during the reporting period, along with the findings of any investigation.

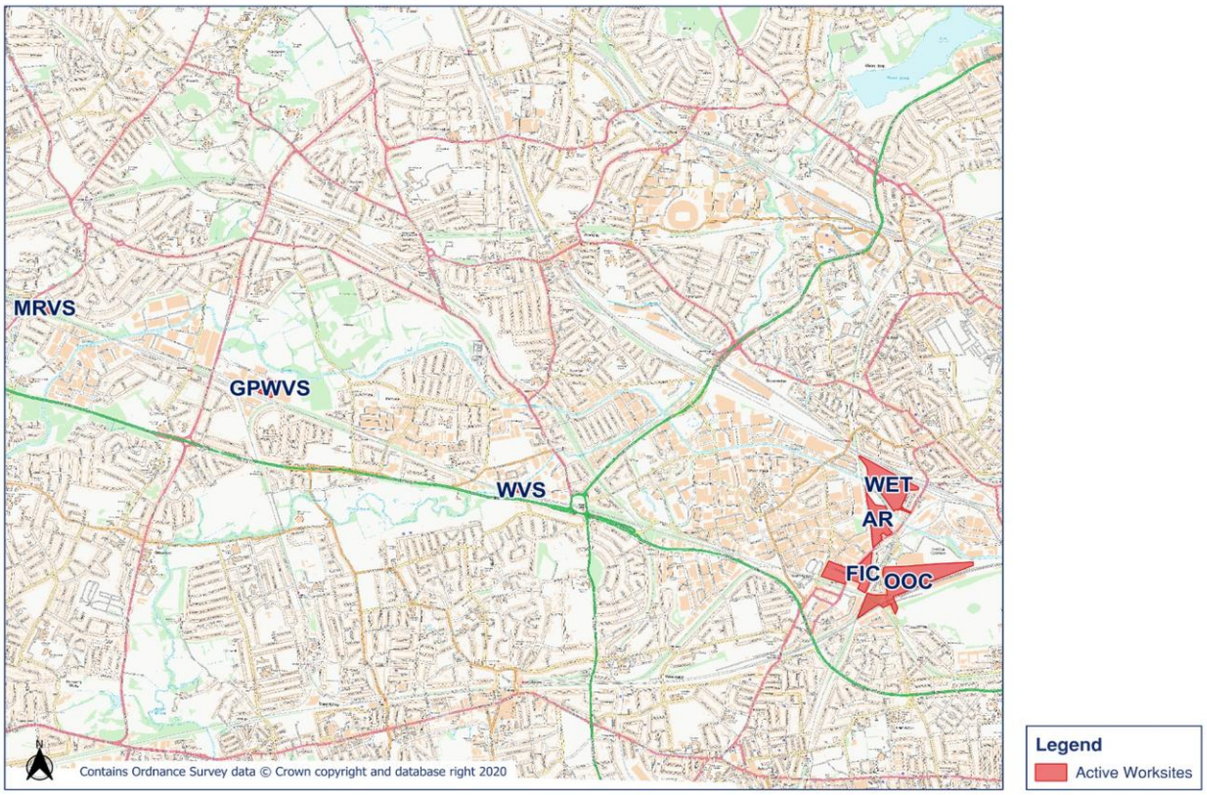
Table 8: Summary of Complaints

Complaint Reference Number	Worksite Reference	Description of Complaint	Results of Investigation	Actions Taken
HS2-26-132196-E-C and HS2-26-47308-C	WET	Complaint received about noise and dust from works at the WET site.	Investigation confirmed mitigation measures at the site were being employed.	Stakeholder informed of the results of the investigation. Workforce on site are being briefed regularly to reduce impact form the works.
HS2-26-132320-E	MRVS	Noise impact from use of a tower crane at night.	Investigation instigated and confirmed that the crane was only in use at night because lifting during the evening shift was stopped because of the strength of the wind in line Section 61 consent.	Stakeholder informed of the results of the investigation.
HS2-26-132865-E	MRVS	Vibration and Dust impacts from works at the site.	Investigation instigated and confirmed all onsite mitigation measures are in place. Workforce on site are being briefed regularly to reduce impact form the works.	Stakeholder informed of the results of the investigation.
HS2-26-132526-E	OOC	Stakeholder reports overnight machinery noise near bridges	Investigation instigated and confirmed that no works in the area reported by BBVS or Network Rail	Stakeholder informed of the results of the investigation.

HS2-26-47325-C	OOC	Stakeholder reports noise and shaking from 8am to 9.30am and notes has made enquiries and complaints before	Investigation instigated and there was a single excavator working on site near the property. There were no reported exceedances, and no unusual works were occurring. All works were consented.	Stakeholder informed of the results of the investigation.
HS2-26-47332-C	OOC	Stakeholder requests compensation for noise and vibration from station and water mains works near Wells House Road	Noise related to essential utility works being undertaken by Thames Water to repair a leaking pipe. These works are required to be completed urgently due to the nature of the infrastructure involved. The works are being carried out in accordance with the relevant consents in place.	Stakeholder informed of the results of the investigation.
HS2-26-132732-E	OOC	Stakeholder reports shaking at back of house opposite station site	Investigation instigated all works being undertaken in accordance with the consents in place, there were no reported exceedances, and no unusual works were occurring.	A response outlined current works on Old Oak Common Lane provided to the Stakeholder
HS2-26-132866-E	OOC	Stakeholder enquires about noise and vibration between 8am and 9.30am weekday	Investigation instigated all works being undertaken in accordance with the consents in place, there were no reported exceedances, and no unusual works were occurring.	A response provided to the Stakeholder apologising for the disturbance.
HS2-26-132910-E-C	OOC	Stakeholder reports noisy works at 11pm and on following night	Investigation instigated all works being undertaken in accordance with the consents in place, there were no reported exceedances, and no unusual works were occurring.	A response provided to the Stakeholder apologising for the disturbance together with an offered call to discuss what further support could be provided.
HS2-26-132963-E-C	OOC	Stakeholder woken after 1am by noisy machinery	Investigation instigated which did not identify any HS2 works taking place overnight in the area.	Stakeholder informed of the results of the investigation.

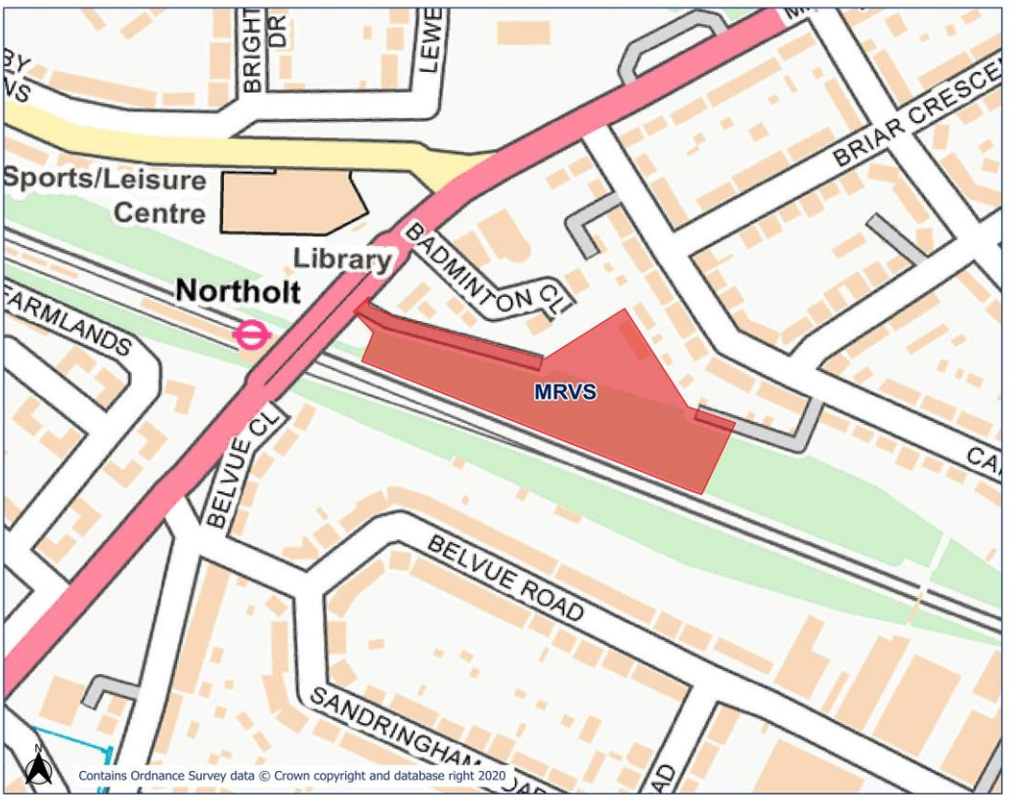
Appendix A Site Locations

HS2 Worksite Identification Plan - Overview



HS2

Worksite Identification Plan - 1

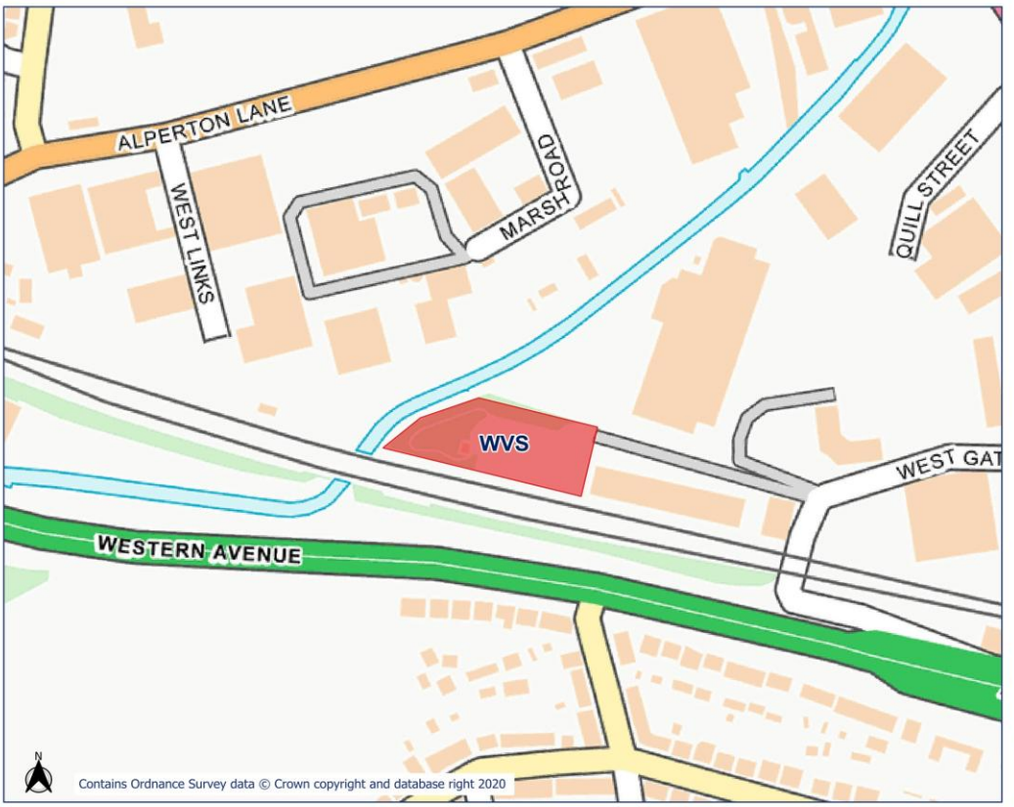


HS2

Worksite Identification Plan - 2

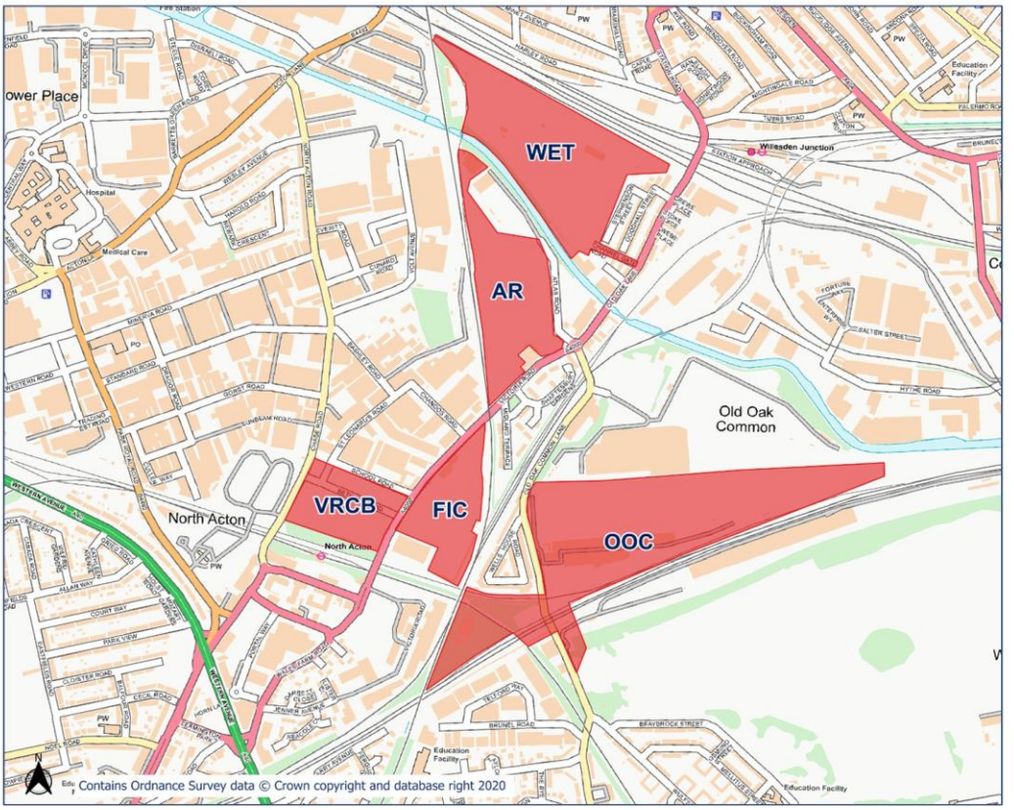
HS2

Worksite Identification Plan - 3

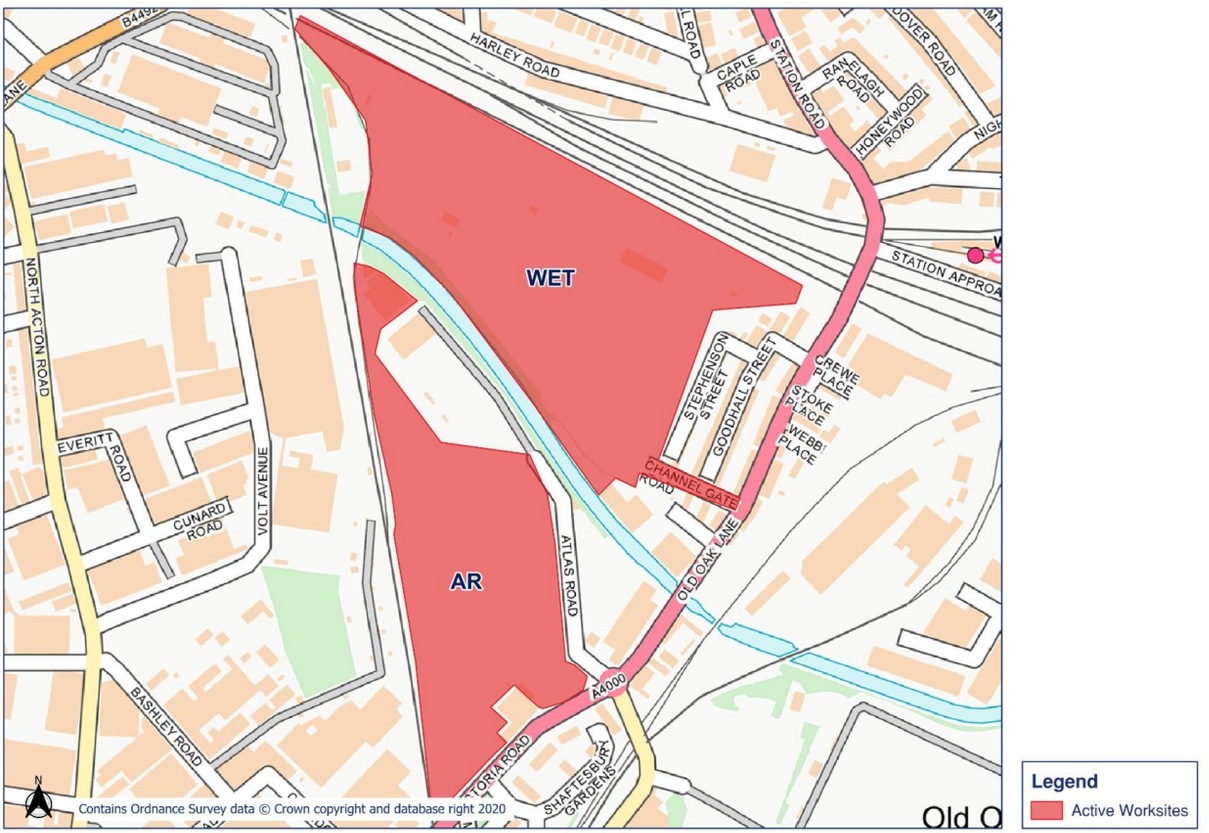


HS2

Worksite Identification Plan - 4

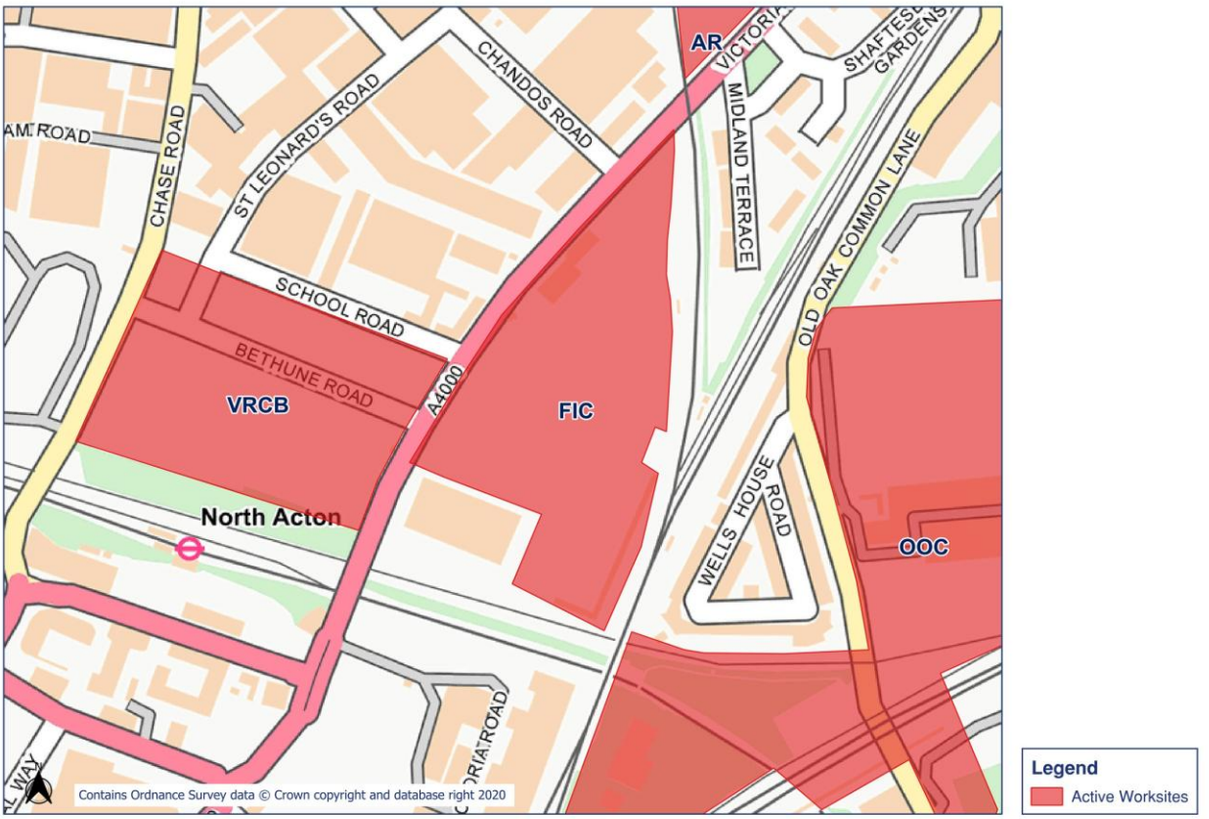


Worksite Identification Plan - 5



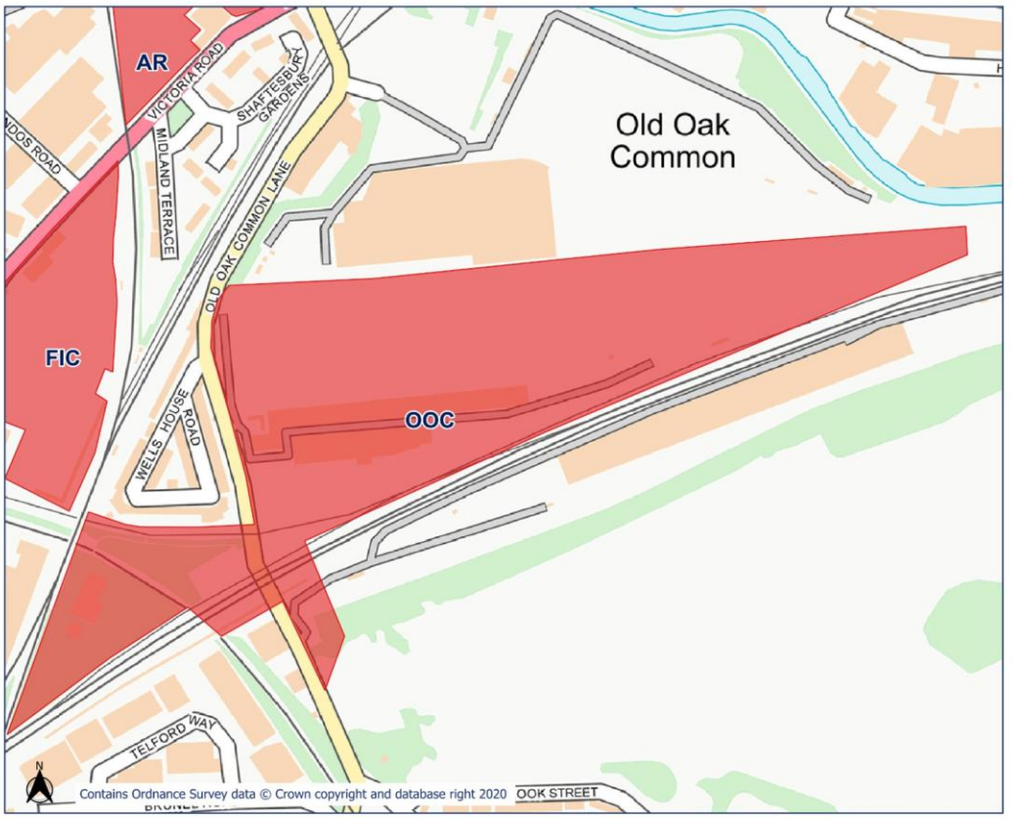
HS2

Worksite Identification Plan - 6



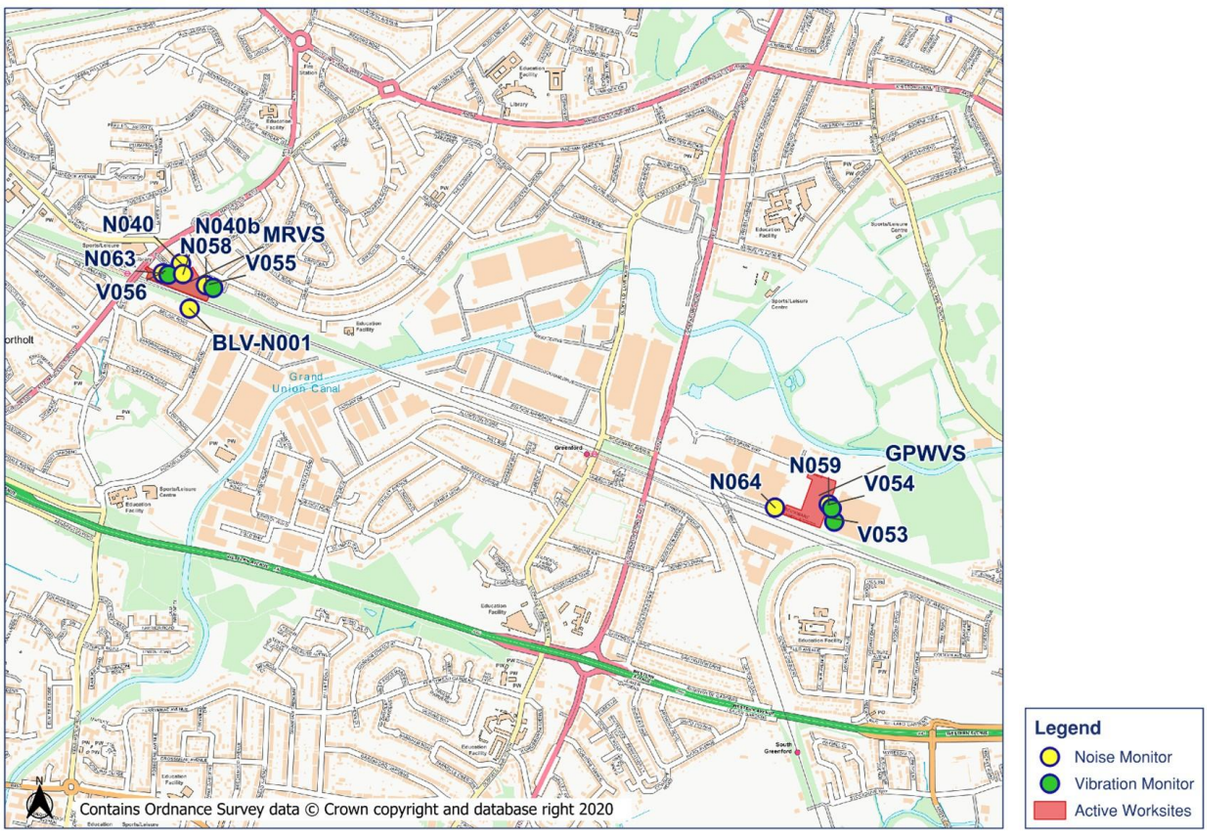
HS2

Worksite Identification Plan - 7

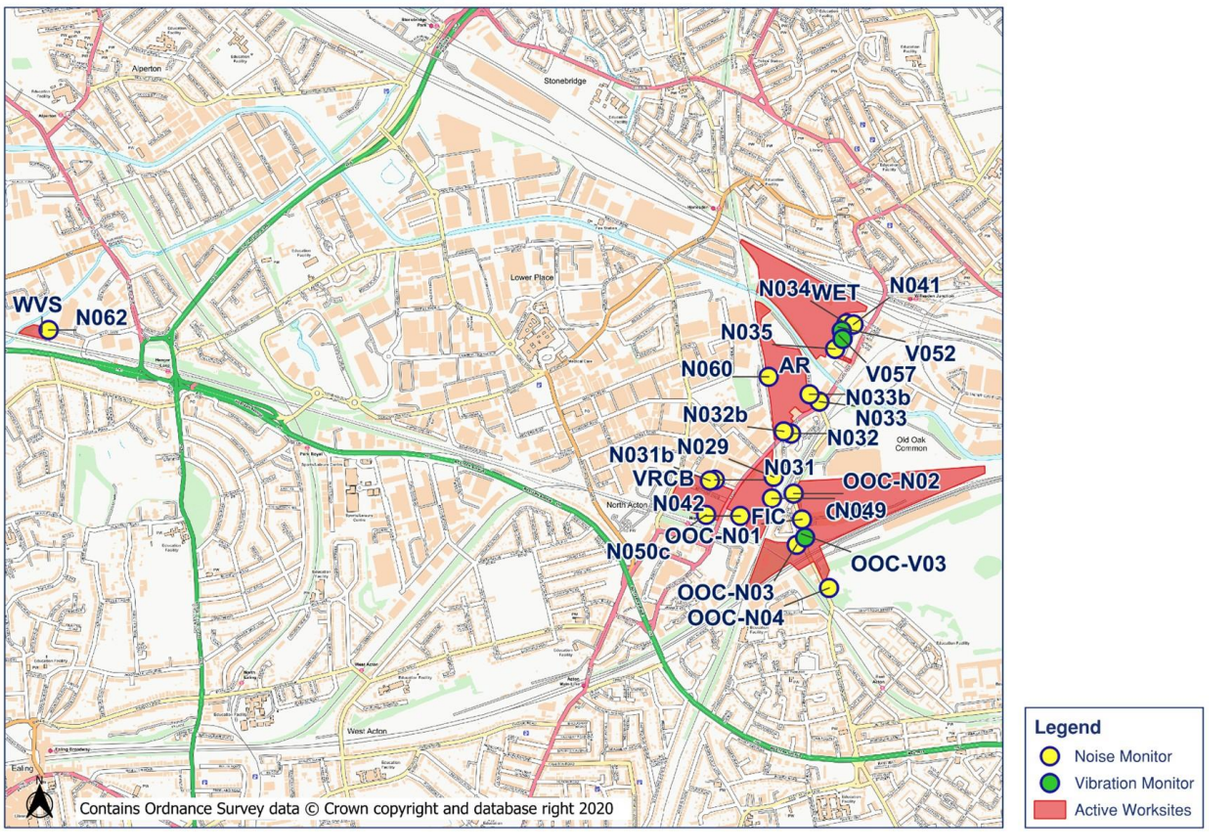


Appendix B Monitoring Locations

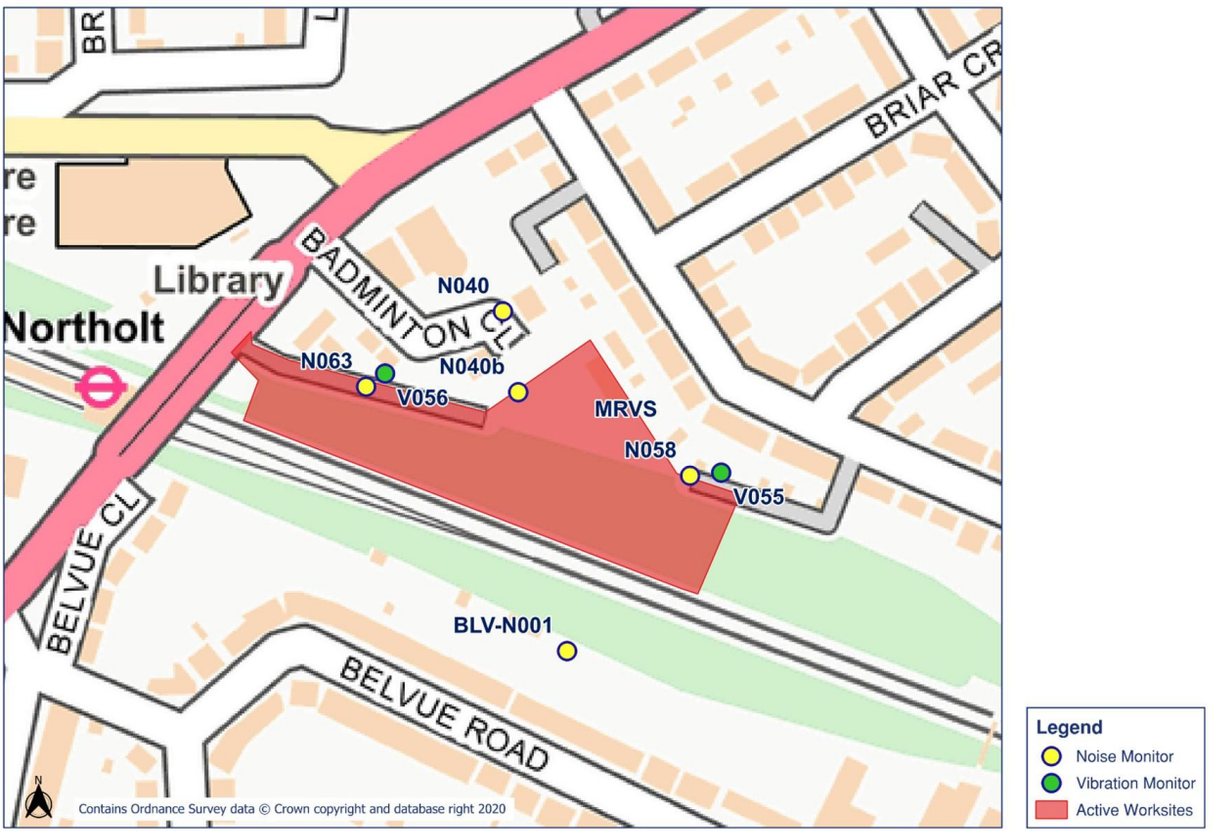
HS2 Noise and Vibration Monitoring Plan - Overview 1



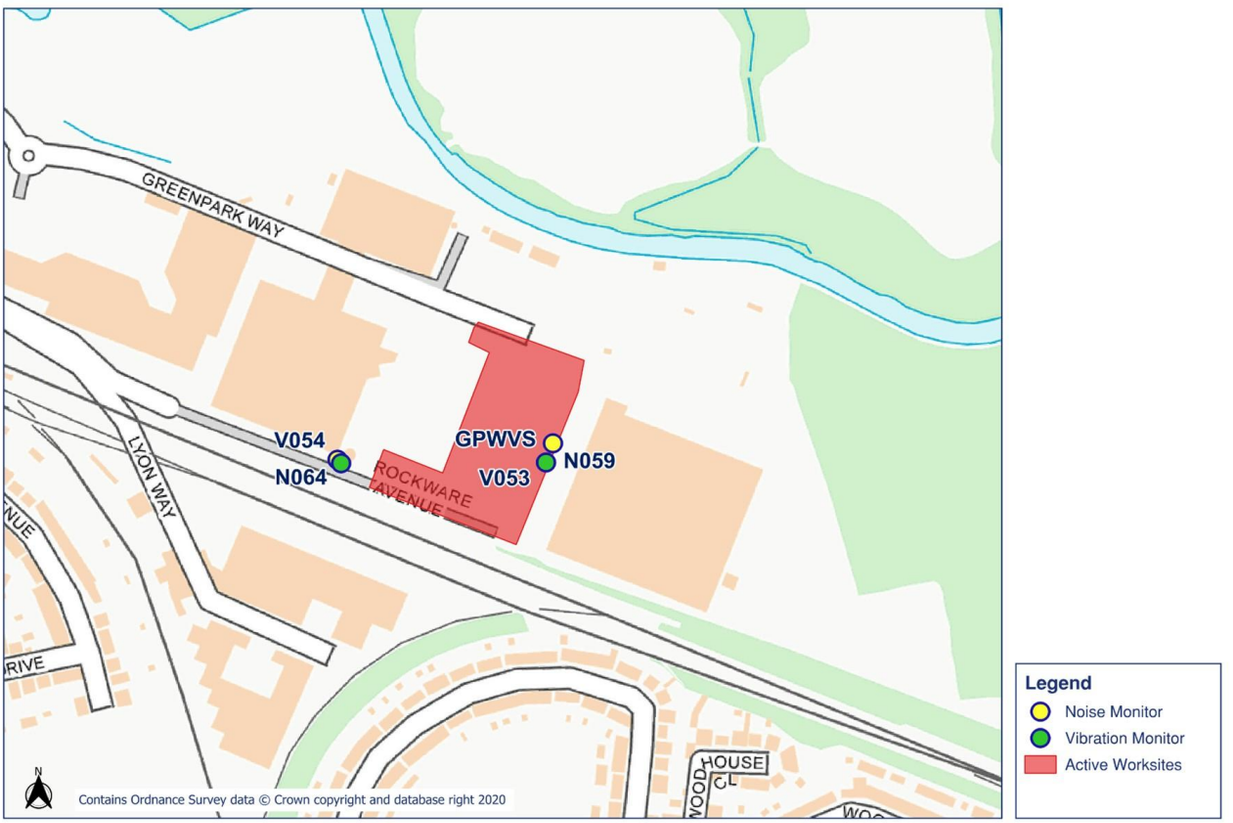
HS2 Noise and Vibration Monitoring Plan - Overview 2



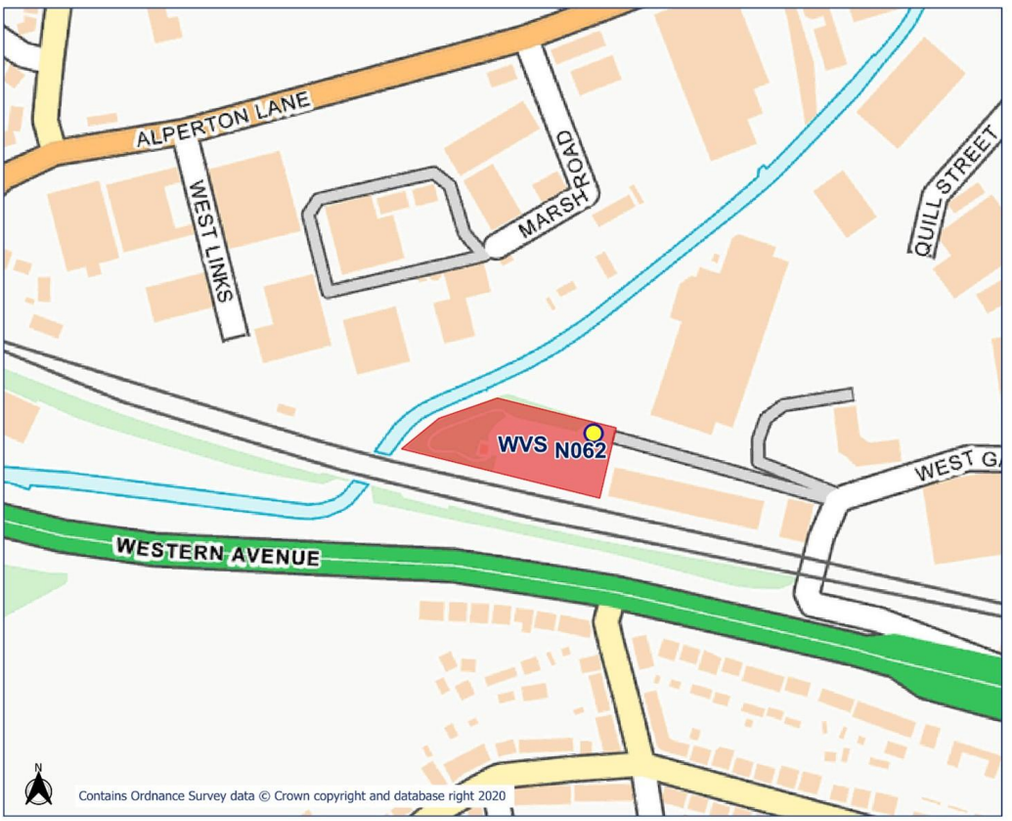
HS2 **Noise and Vibration Monitoring Plan - 1**



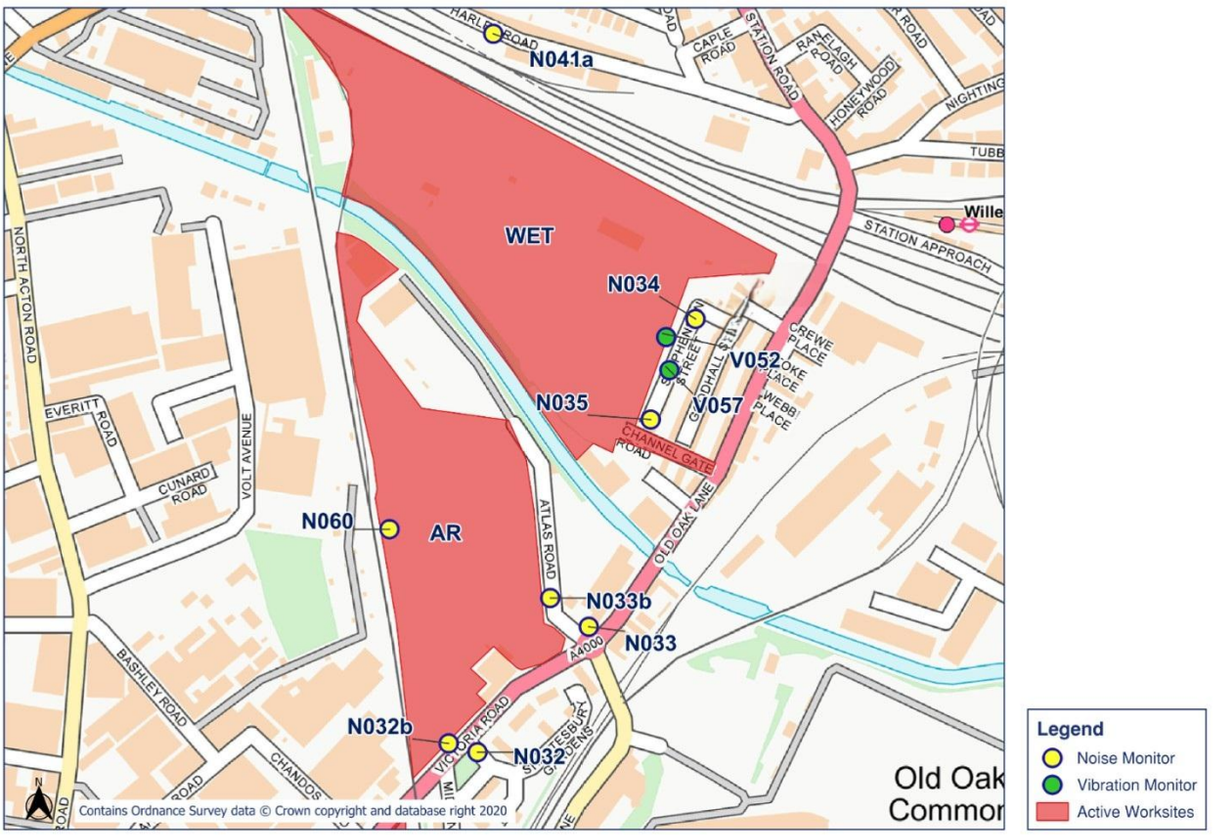
Noise and Vibration Monitoring Plan - 2



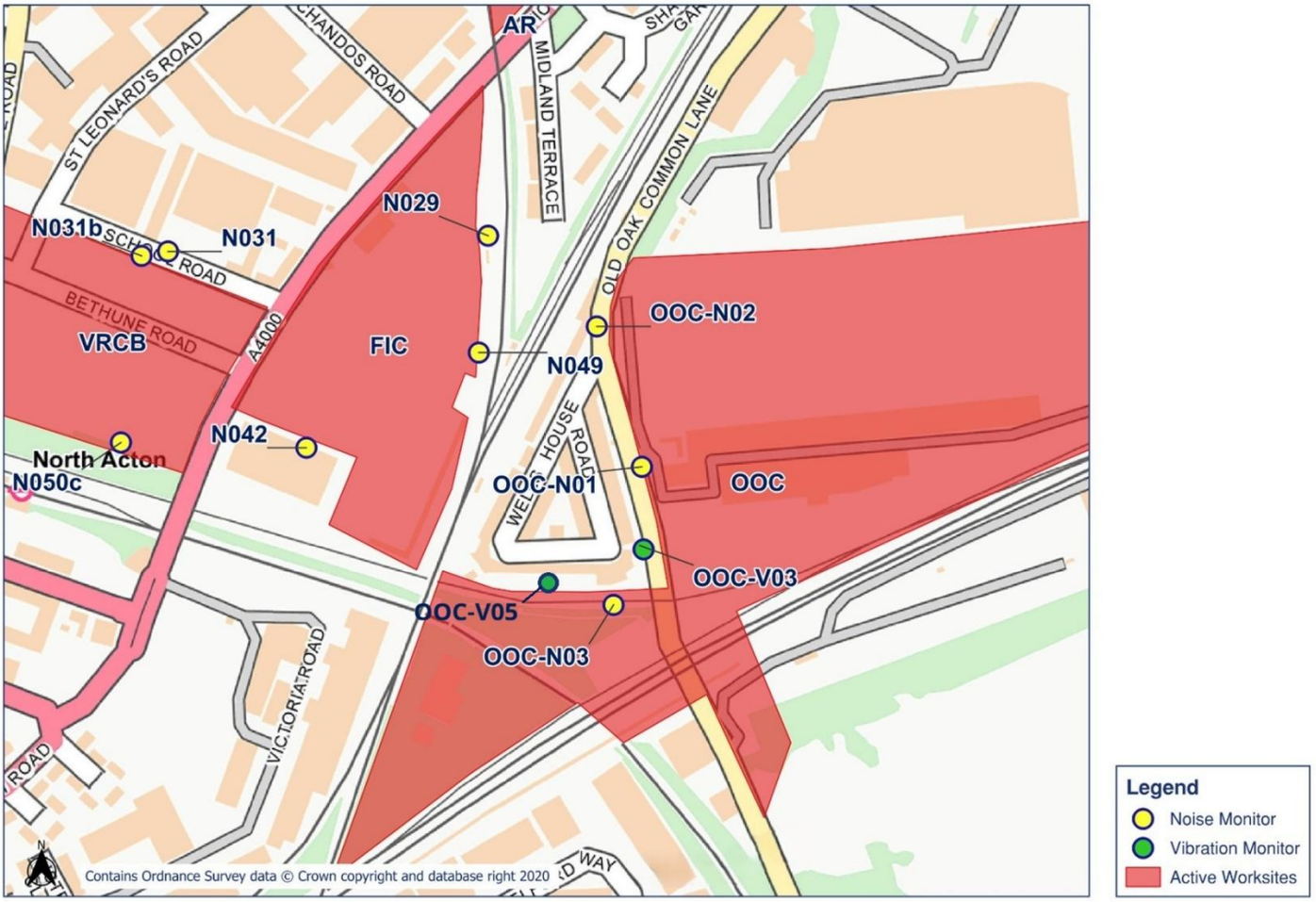
Noise and Vibration Monitoring Plan - 3



HS2 Noise and Vibration Monitoring Plan - 4



HS2 Noise and Vibration Monitoring Plan - 5

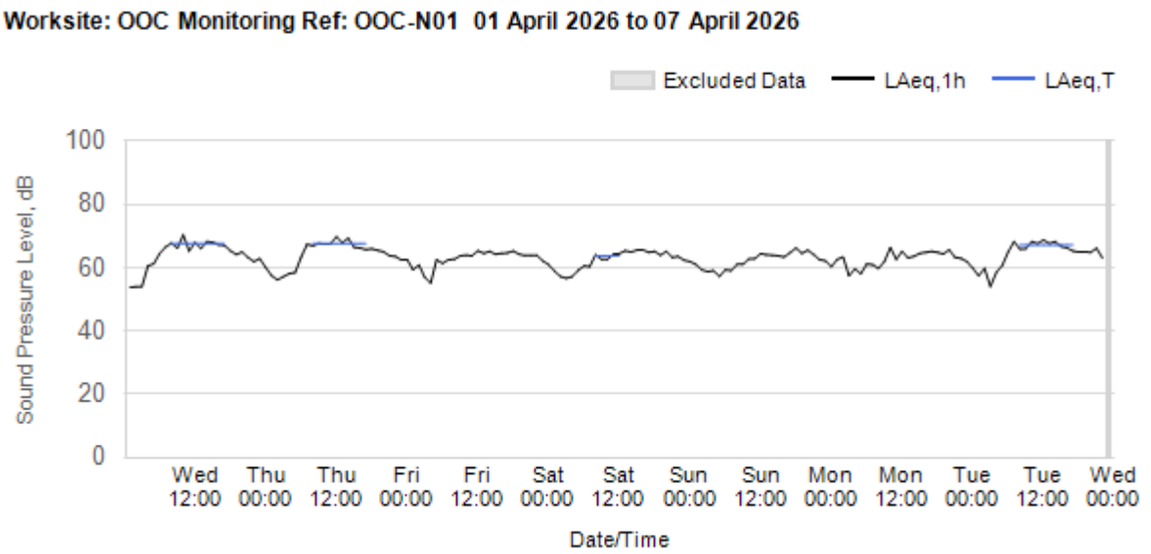


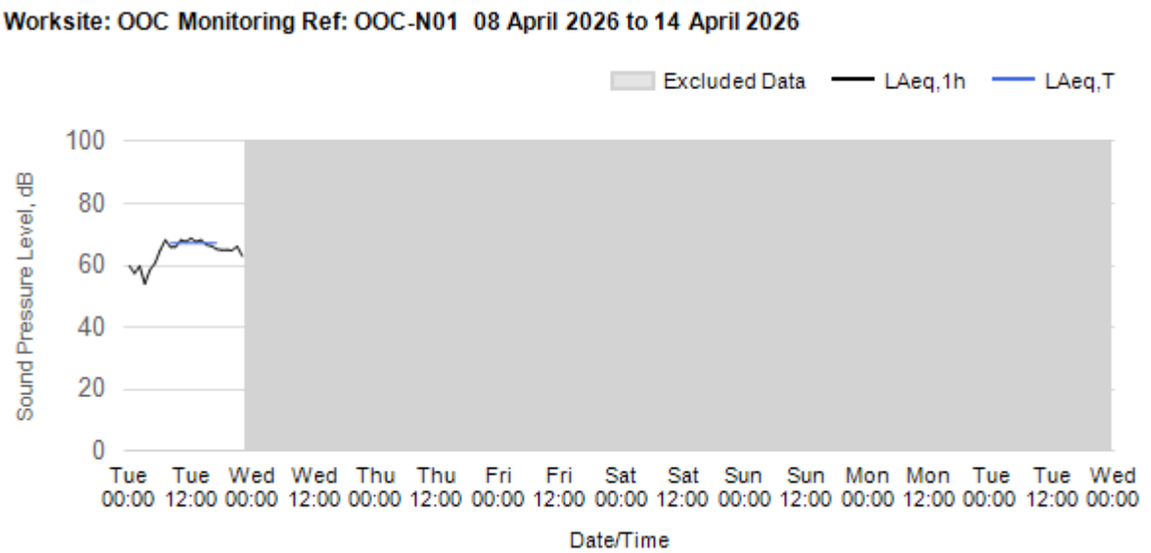
Appendix C Data

Noise

The following graphs show the hourly measured ambient noise level LAeq,1h and, where relevant, the averaged noise level LAeq,T values, where the time period T is as specified in Table 1 of HS2 Information Paper E23. Periods where noise levels are adversely affected by weather or only measured for part of the period, which are not representative of HS2 construction works, have been greyed out and excluded from the calculation of the LAeq,T values in in Table 3 of the main report.

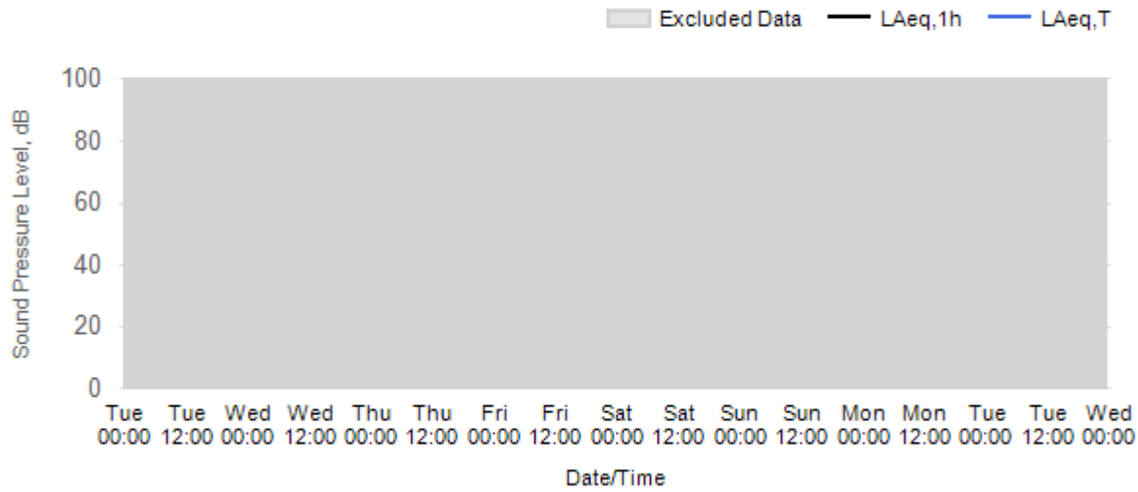
Worksite: OOC - Monitoring Ref: OOC-N01





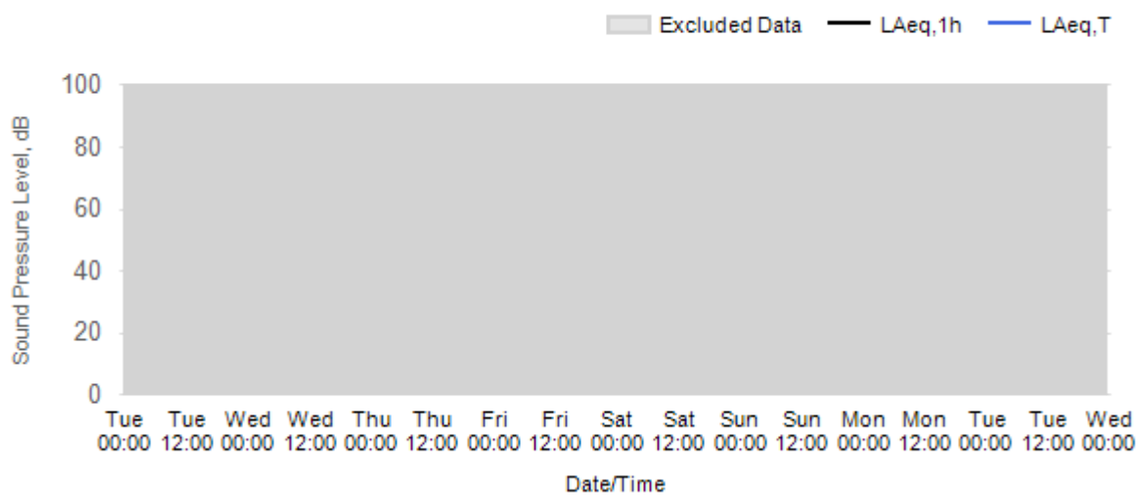
Note: no valid data recorded at the monitoring location due to a fault with the device

Worksite: OOC Monitoring Ref: OOC-N01 15 April 2026 to 21 April 2026



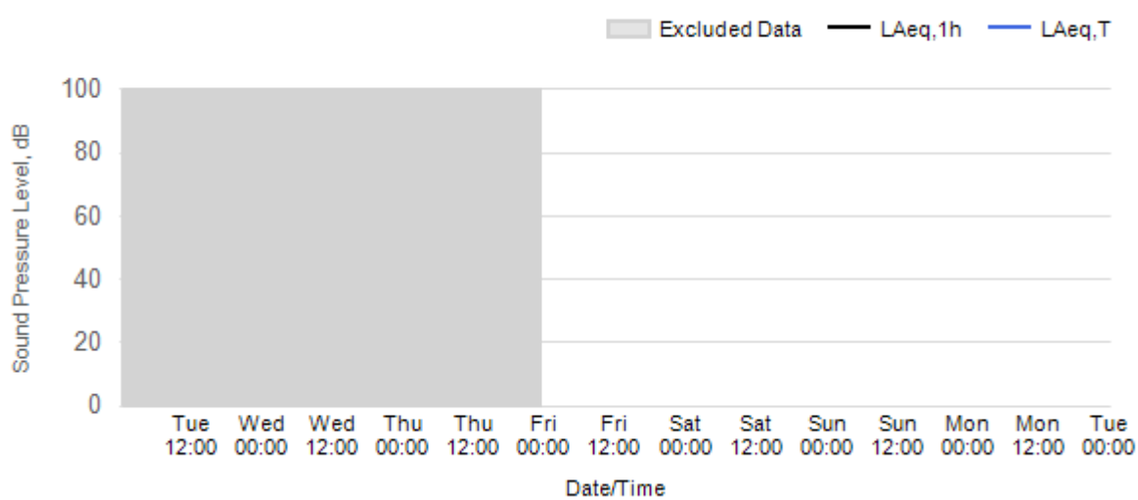
Note: no valid data recorded at the monitoring location due to a fault with the device

Worksite: OOC Monitoring Ref: OOC-N01 22 April 2026 to 28 April 2026



Note: no valid data recorded at the monitoring location due to a fault with the device

Worksite: OOC Monitoring Ref: OOC-N01 29 April 2026 to 5 May 2026



Note: no valid data recorded at the monitoring location due to a fault with the device

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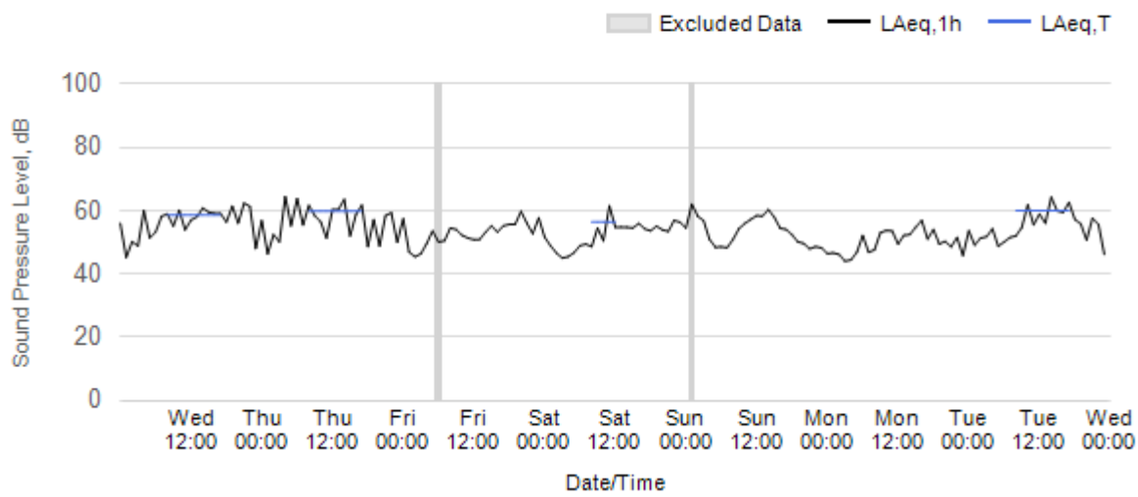
Worksite: FIC Monitoring Ref: N029 01 April 2026 to 07 April 2026



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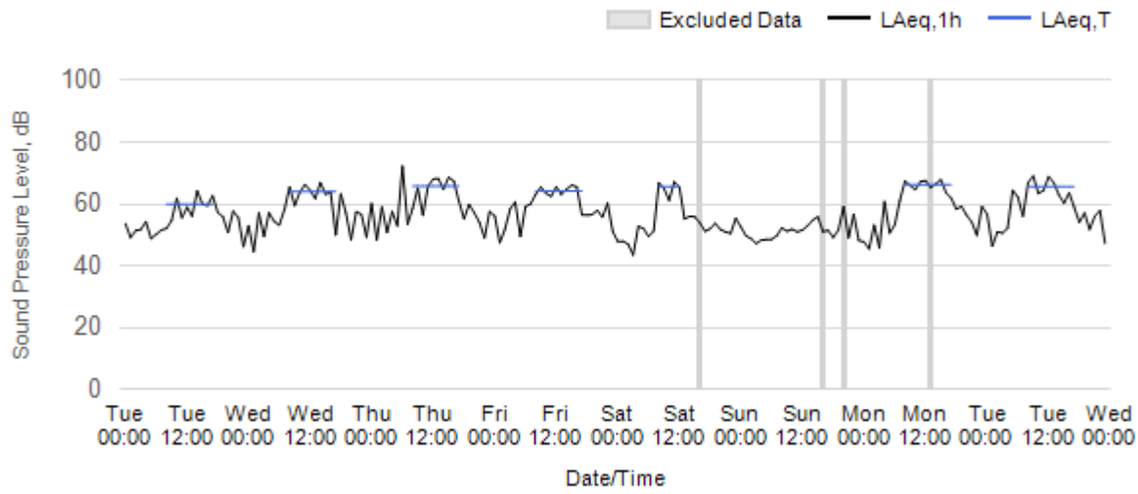

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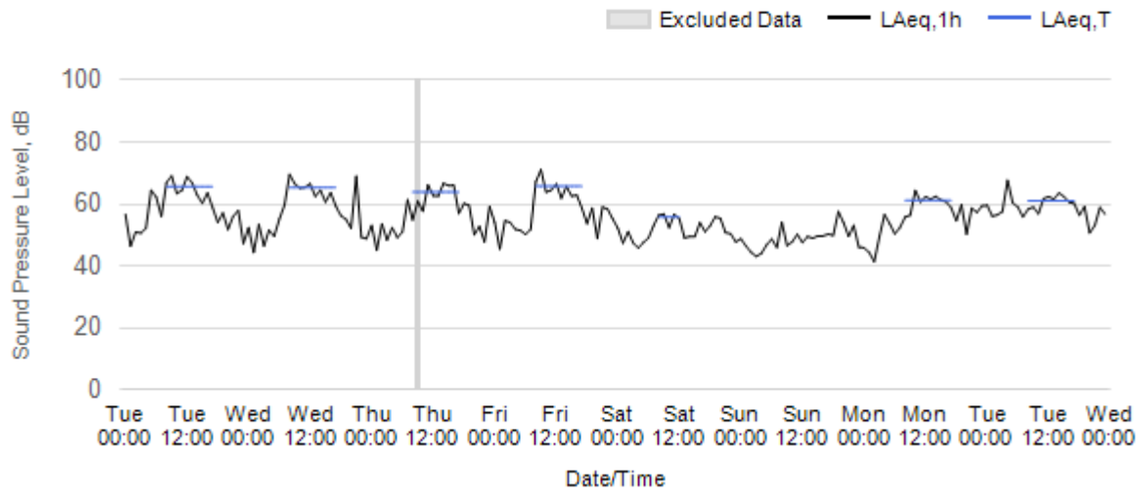

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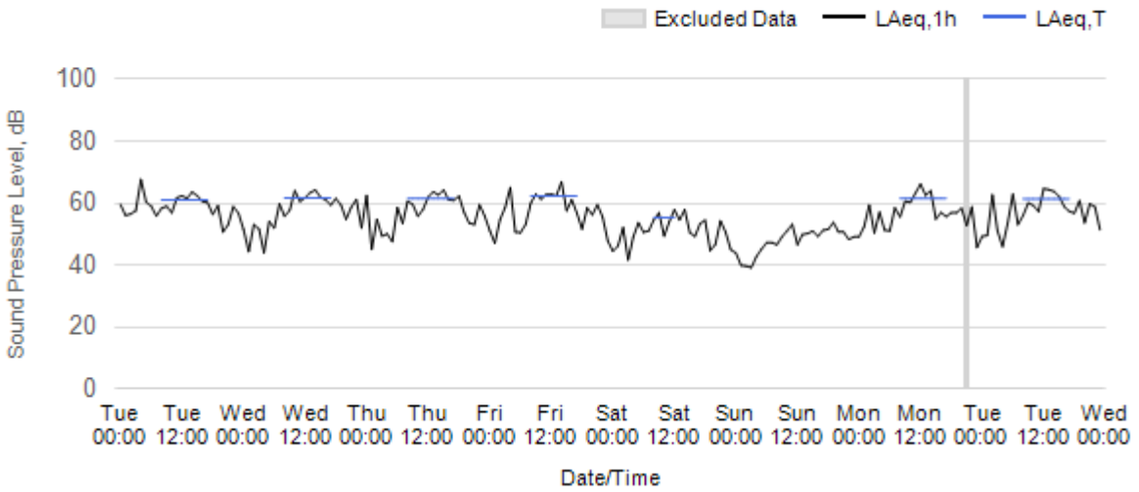

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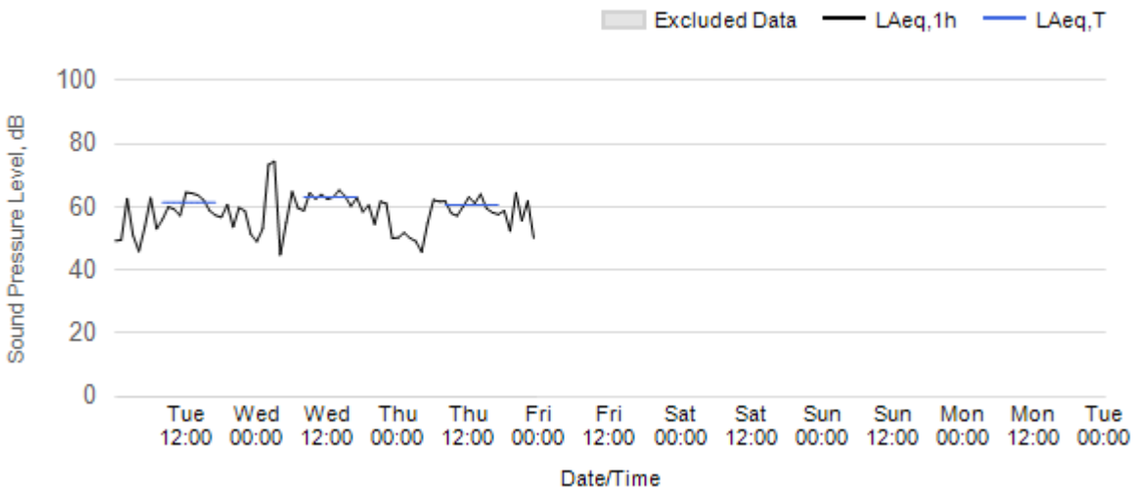
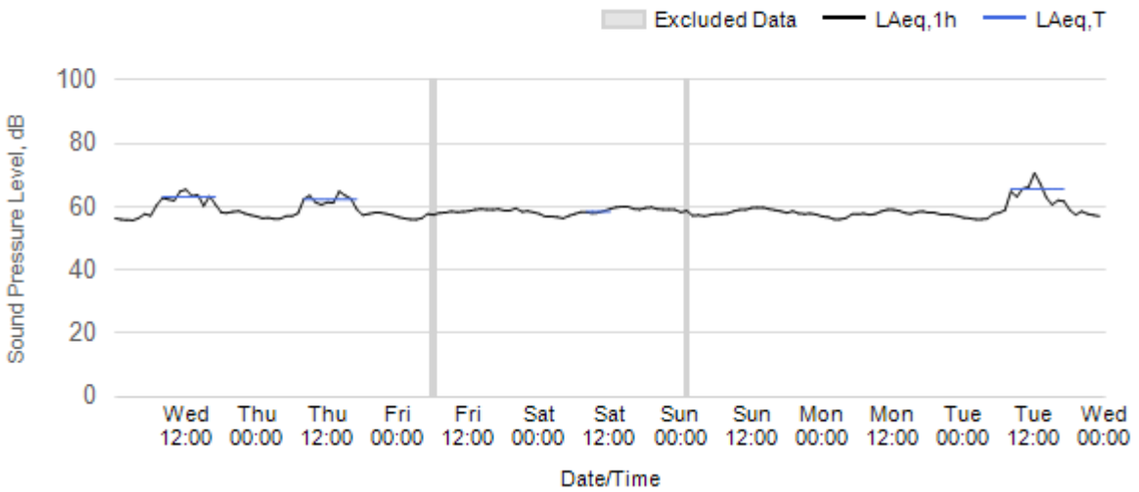


Worksite: MRVS - Monitoring Ref: N040b

Worksite: MRVS Monitoring Ref: N040b 01 April 2026 to 07 April 2026



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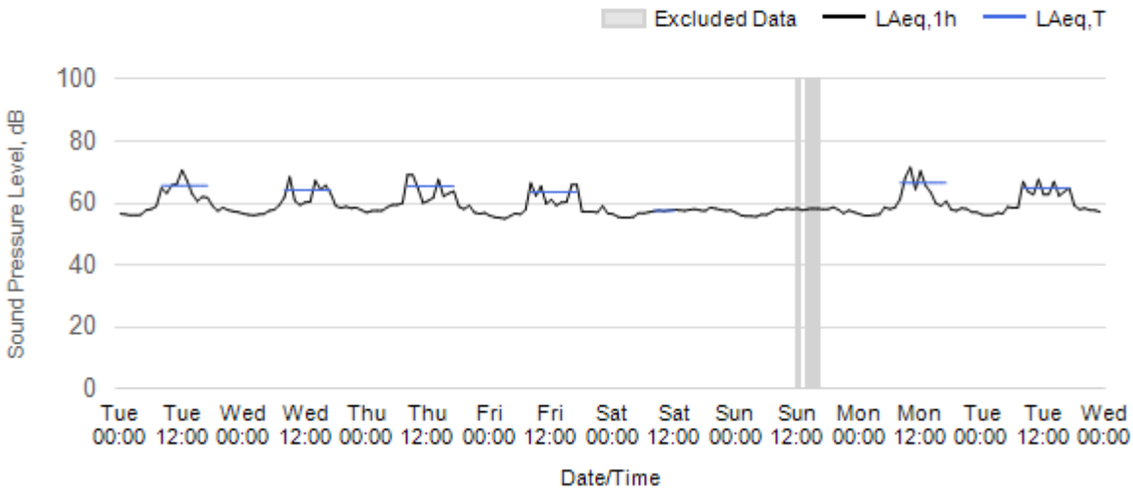

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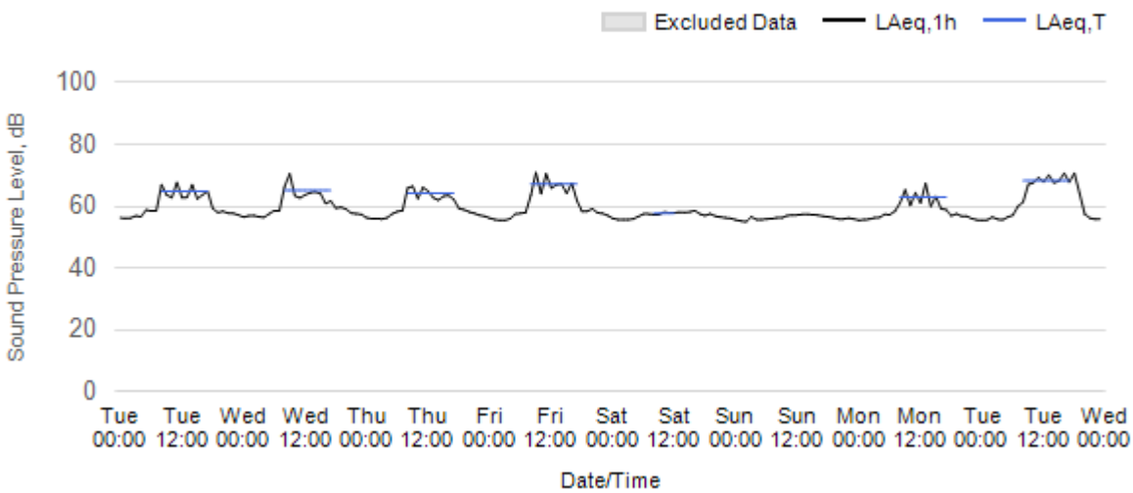

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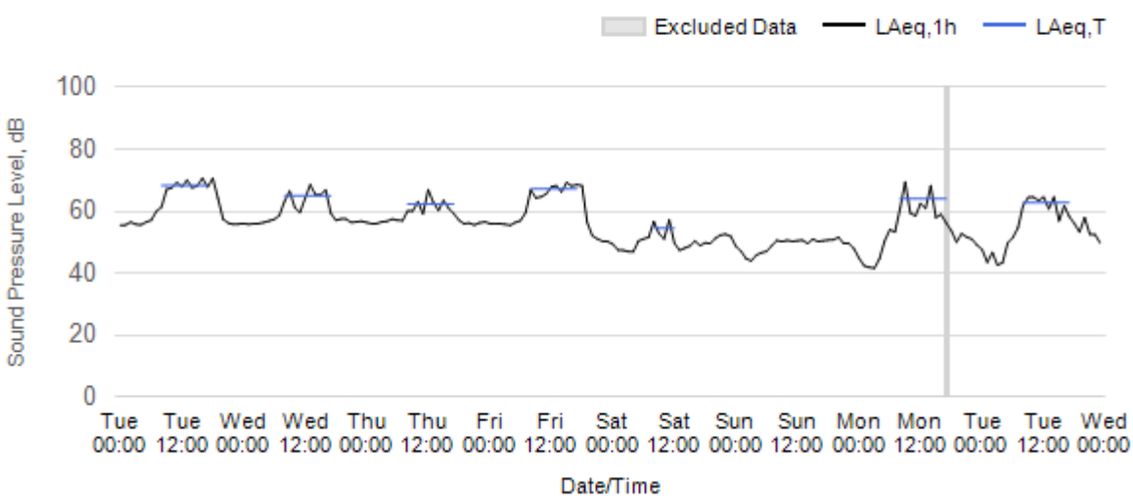

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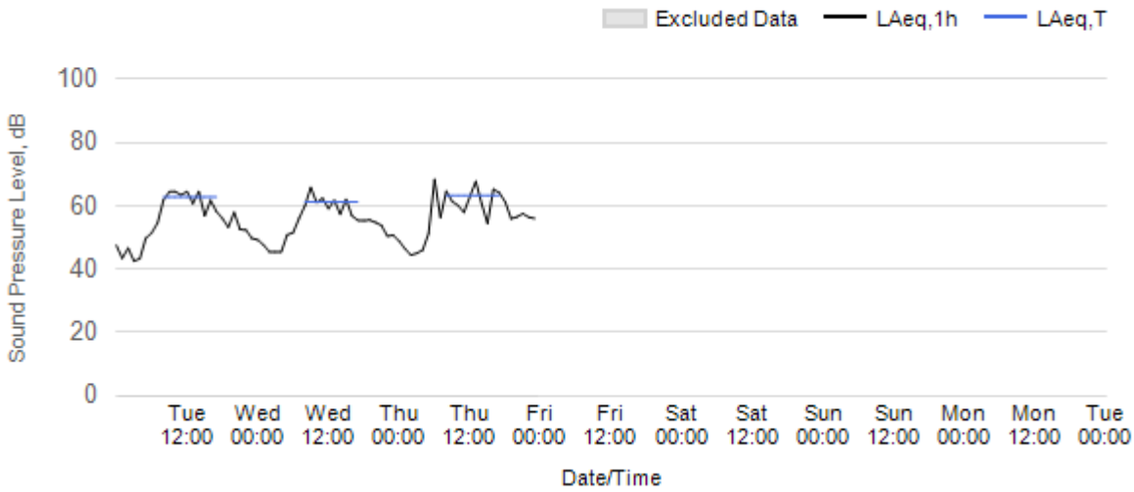
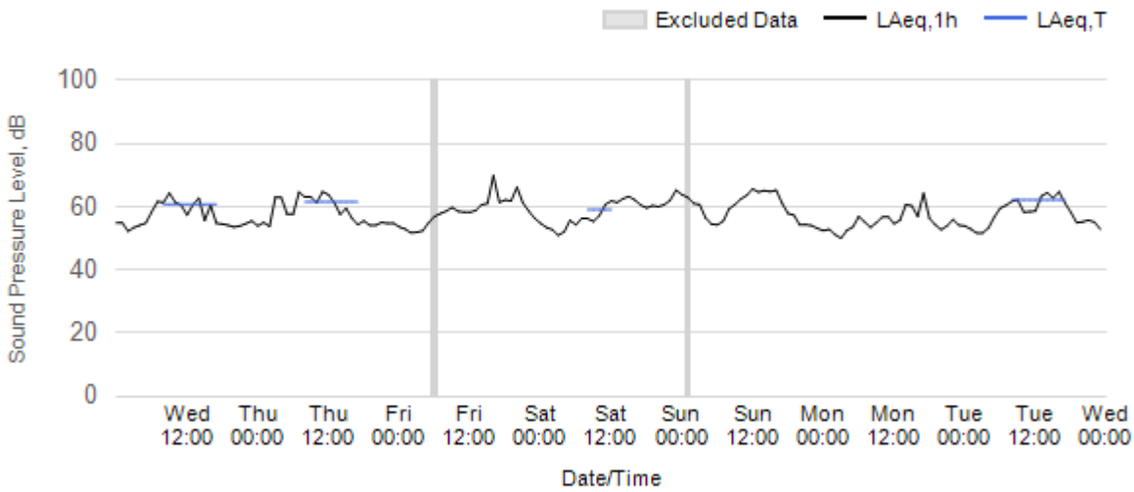


Worksite: WVS - Monitoring Ref: N062

Worksite: WVS Monitoring Ref: N062 01 April 2026 to 07 April 2026



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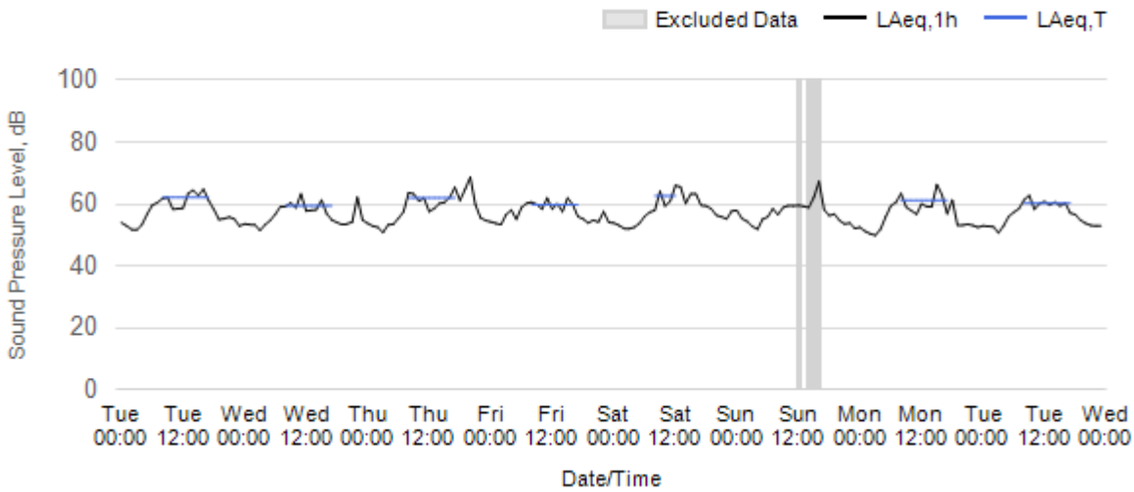

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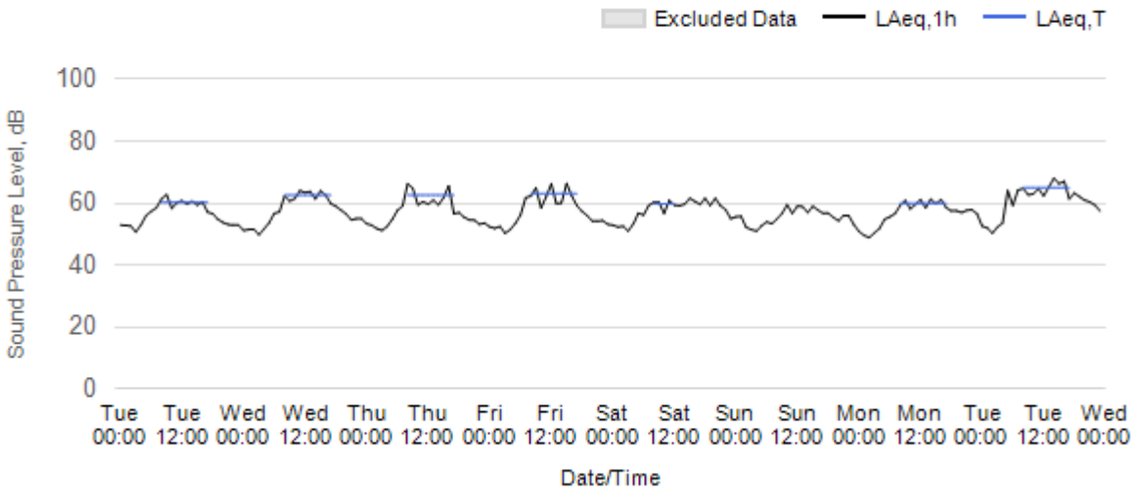

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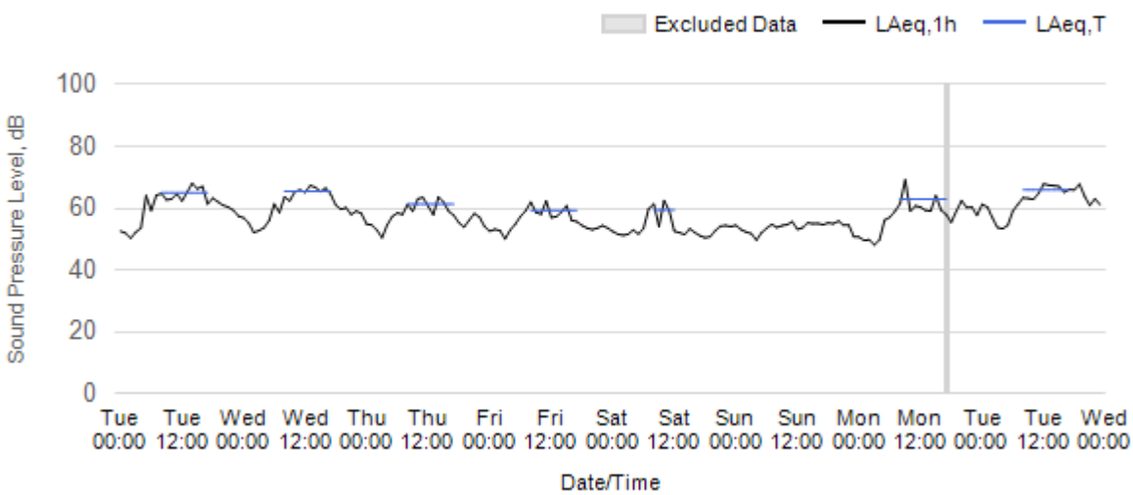

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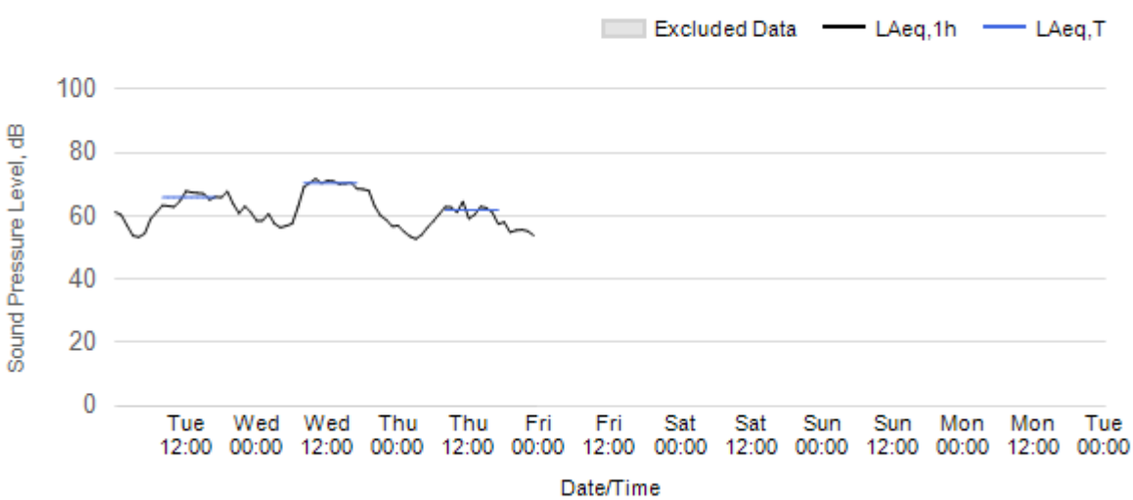


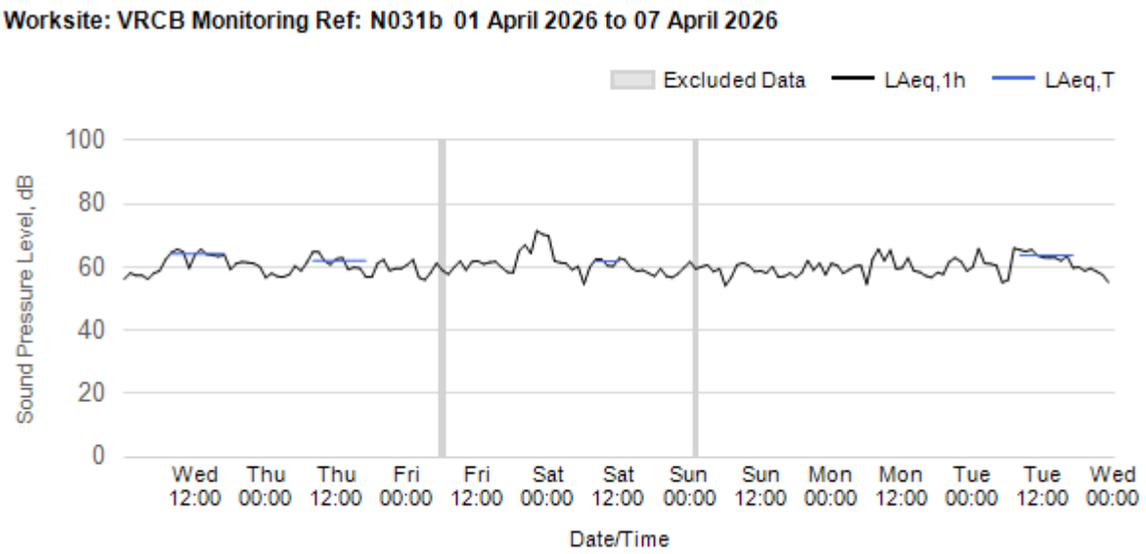
Worksite: VRCB - Monitoring Ref: N031

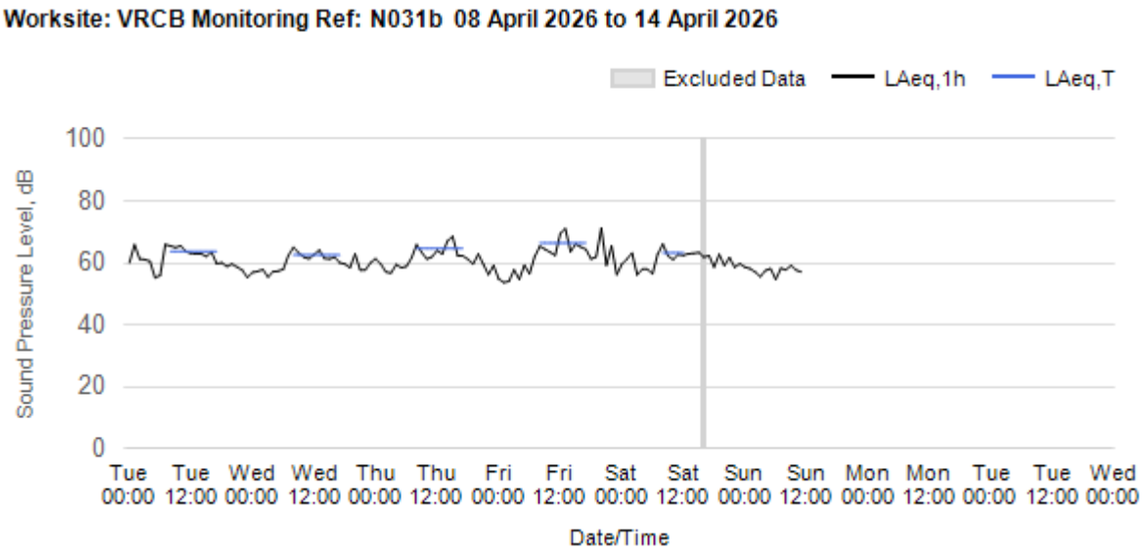
Note: No data measured throughout the month due to loss of power to the lighting column which supplies power to the monitoring station.

Worksite: MRVS - Monitoring Ref: N040

Note: No data measured throughout the month due to loss of power to the lighting column which supplies power to the monitoring station.

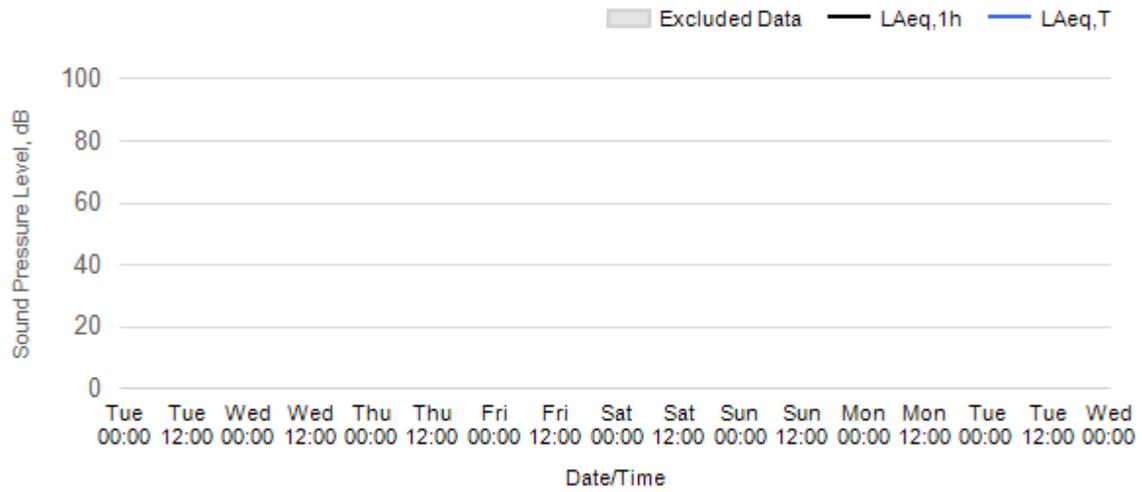
Worksite: VRCB - Monitoring Ref: N031b





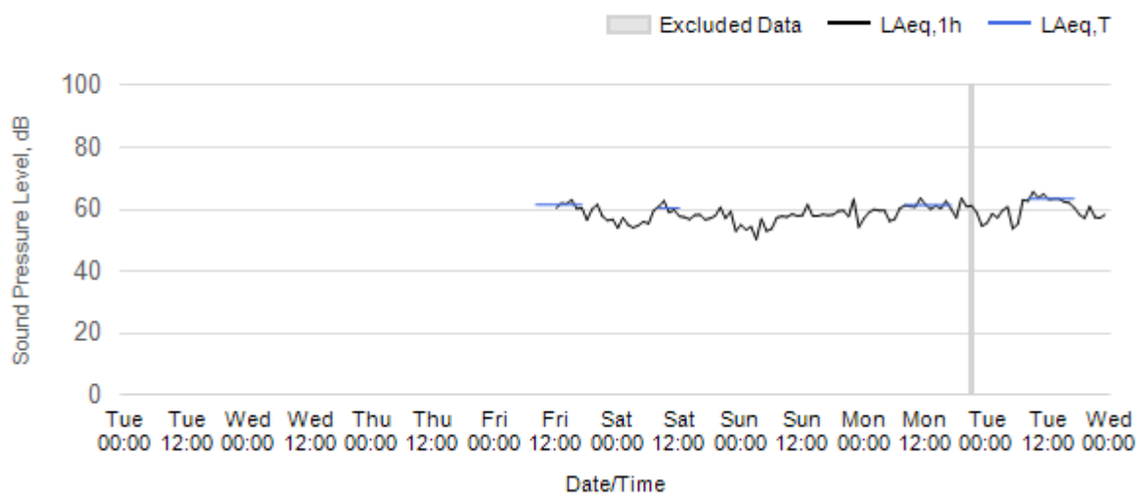
Note: Missing data was due to a loss of power at the monitoring station

Worksite: VRCB Monitoring Ref: N031b 15 April 2026 to 21 April 2026



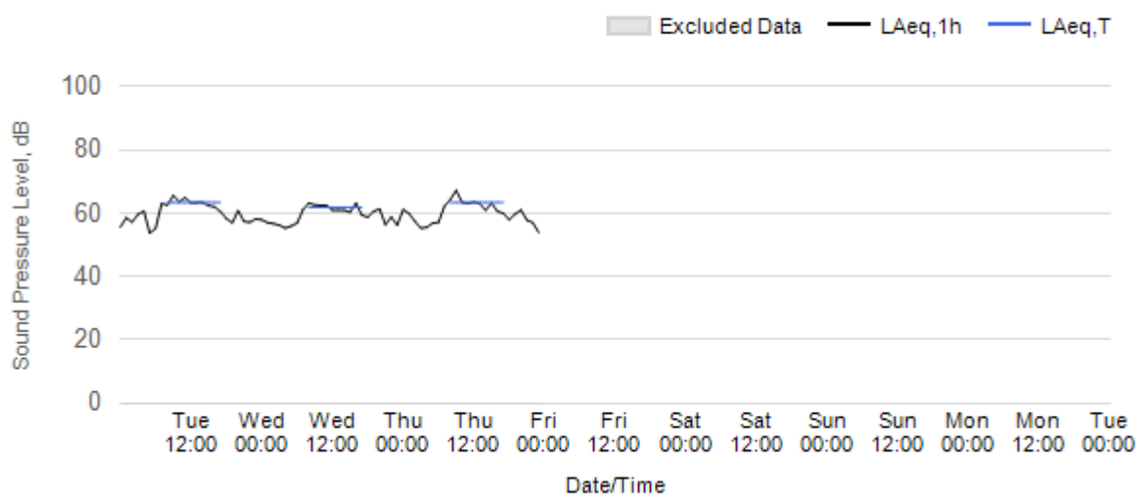
Note: Missing data was due to a loss of power at the monitoring station

Worksite: VRCB Monitoring Ref: N031b 22 April 2026 to 28 April 2026



Note: Missing data was due to a loss of power at the monitoring station

Worksite: VRCB Monitoring Ref: N031b 29 April 2026 to 5 May 2026



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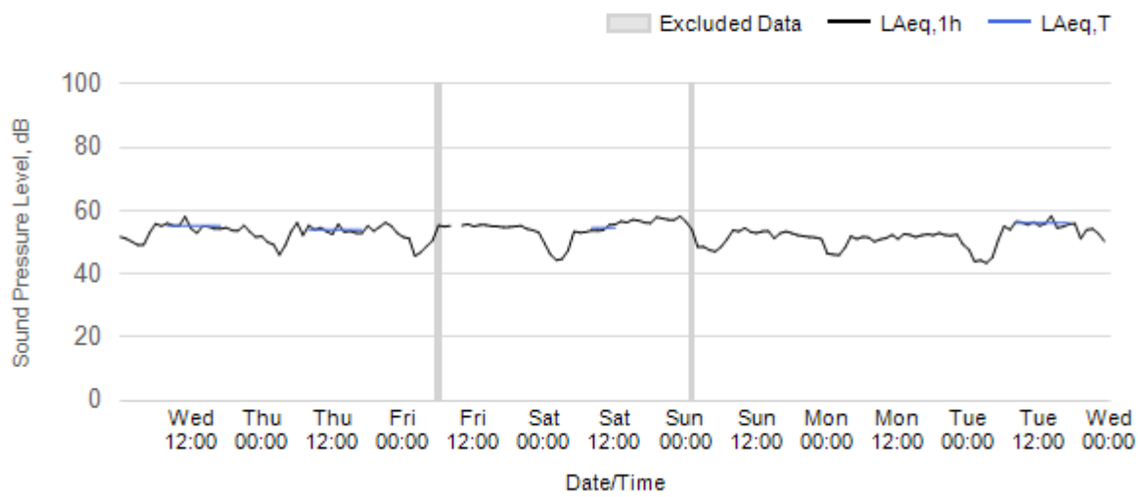
Worksite: GPWVS Monitoring Ref: N064 01 April 2026 to 07 April 2026



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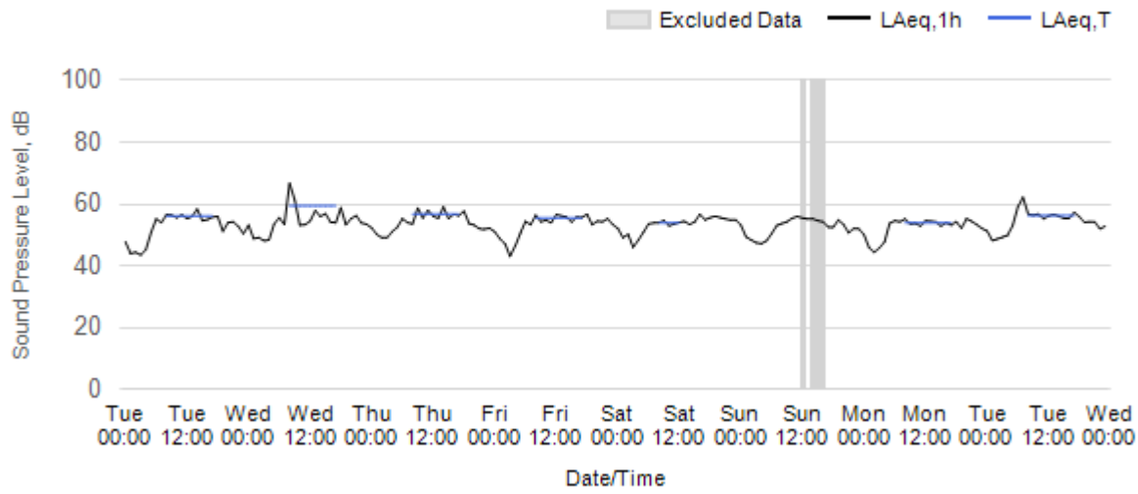

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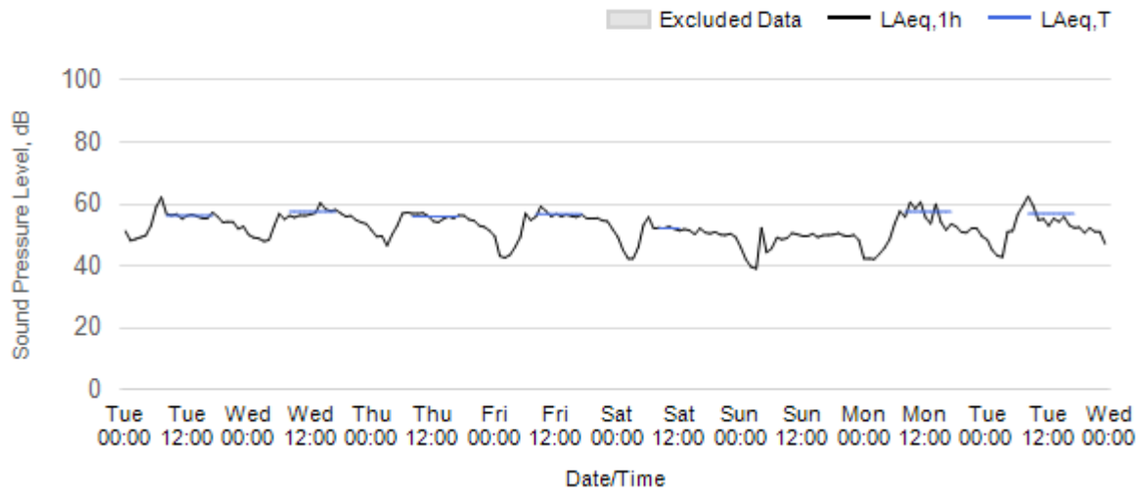

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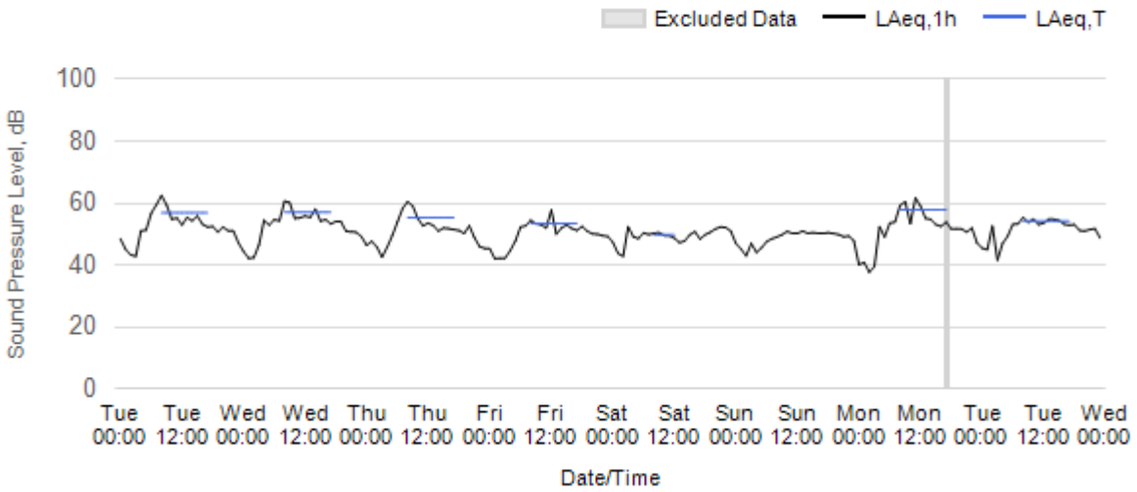

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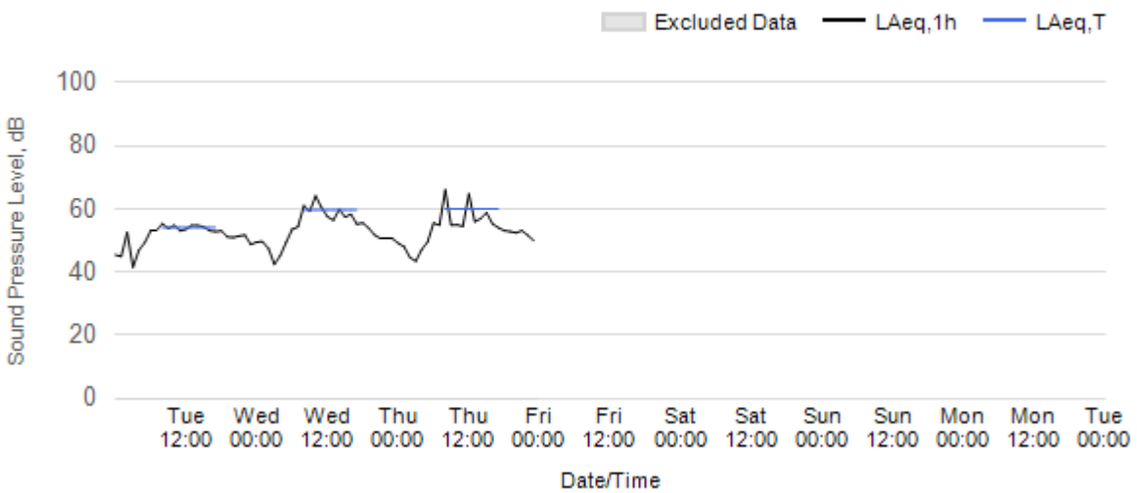
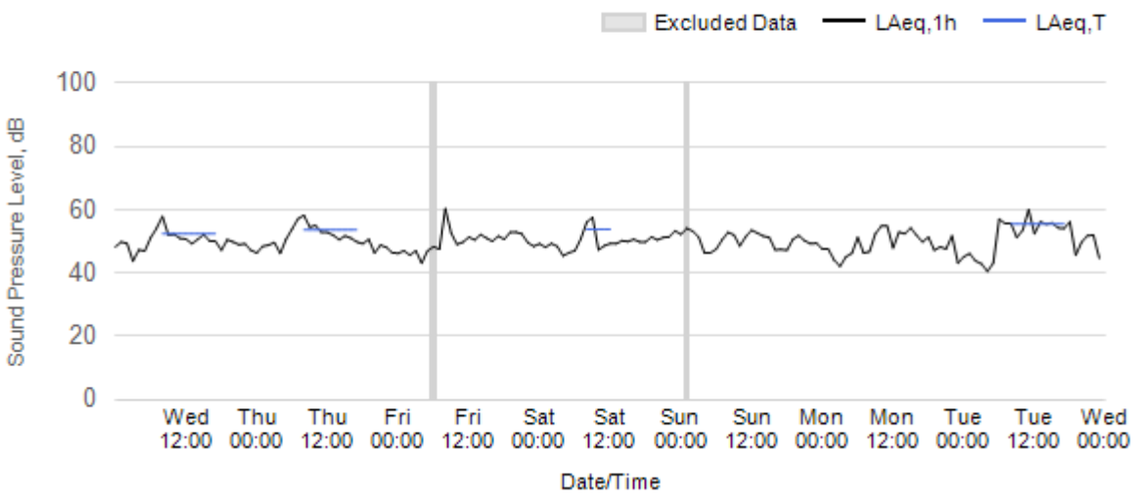
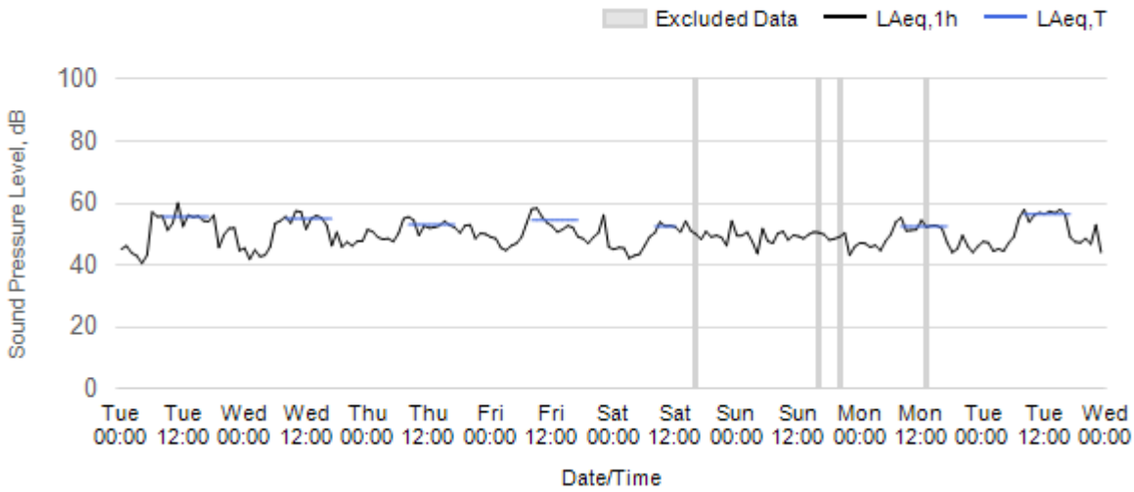


Worksite: WET - Monitoring Ref: N035

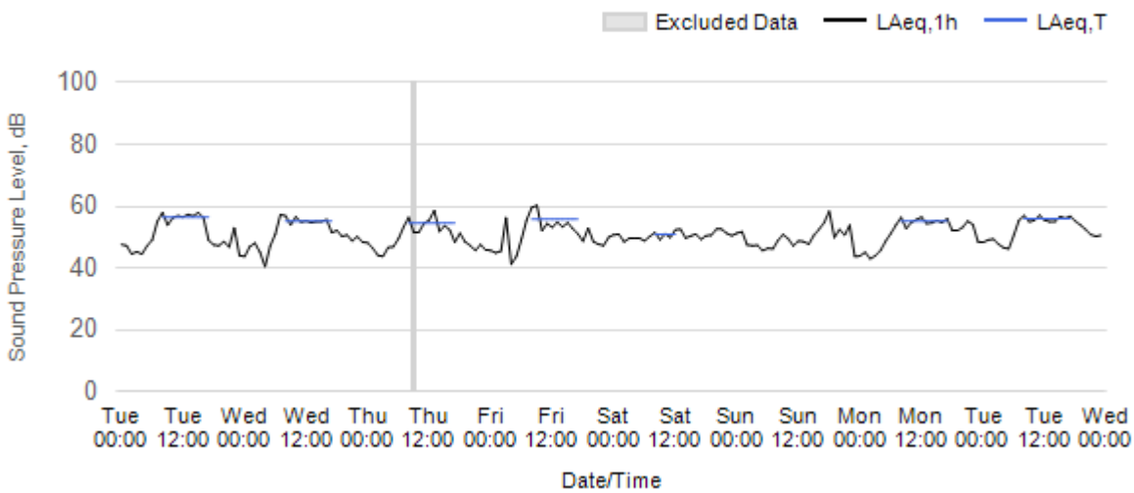
Worksite: WET Monitoring Ref: N035 01 April 2026 to 07 April 2026



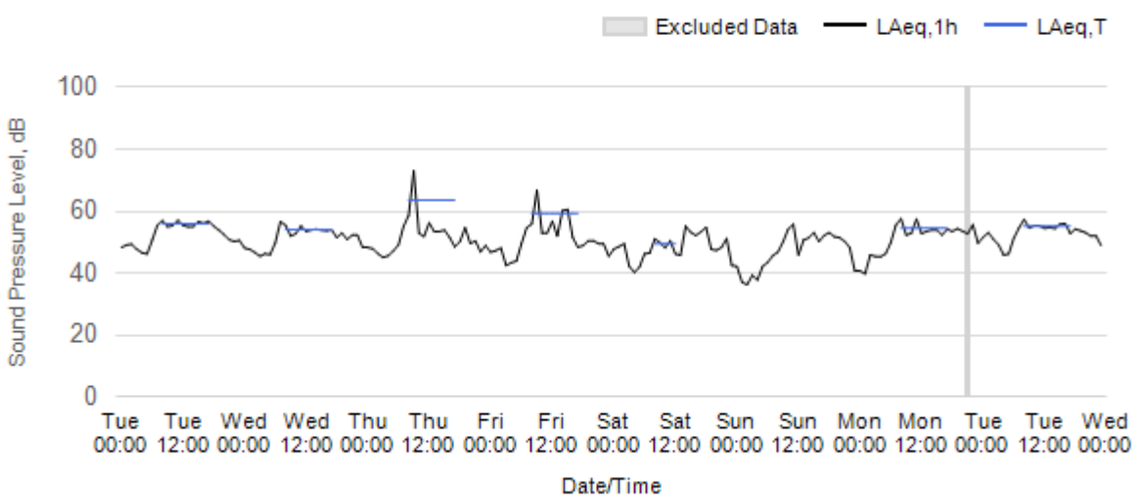
Worksite: WET Monitoring Ref: N035 08 April 2026 to 14 April 2026



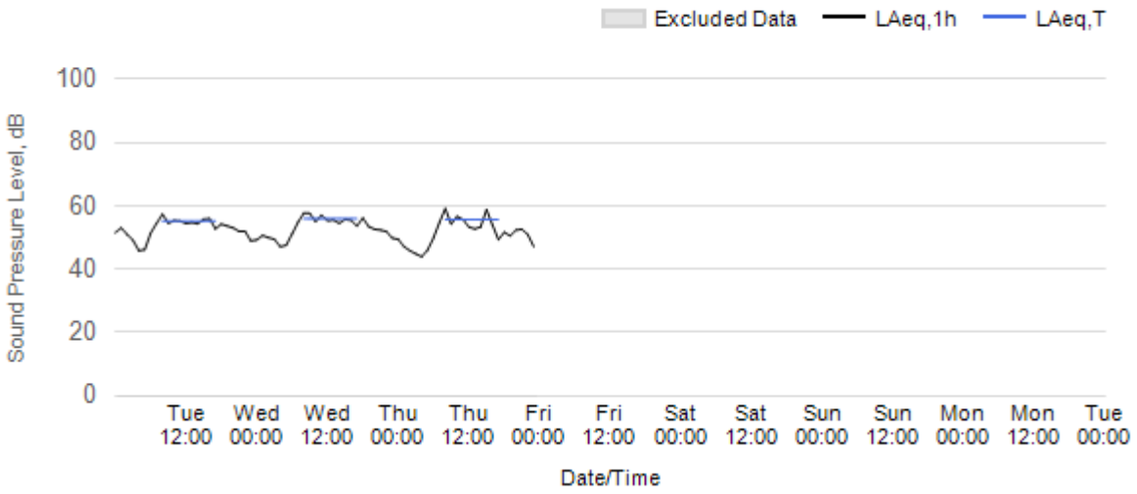
Worksite: WET Monitoring Ref: N035 15 April 2026 to 21 April 2026



Worksite: WET Monitoring Ref: N035 22 April 2026 to 28 April 2026

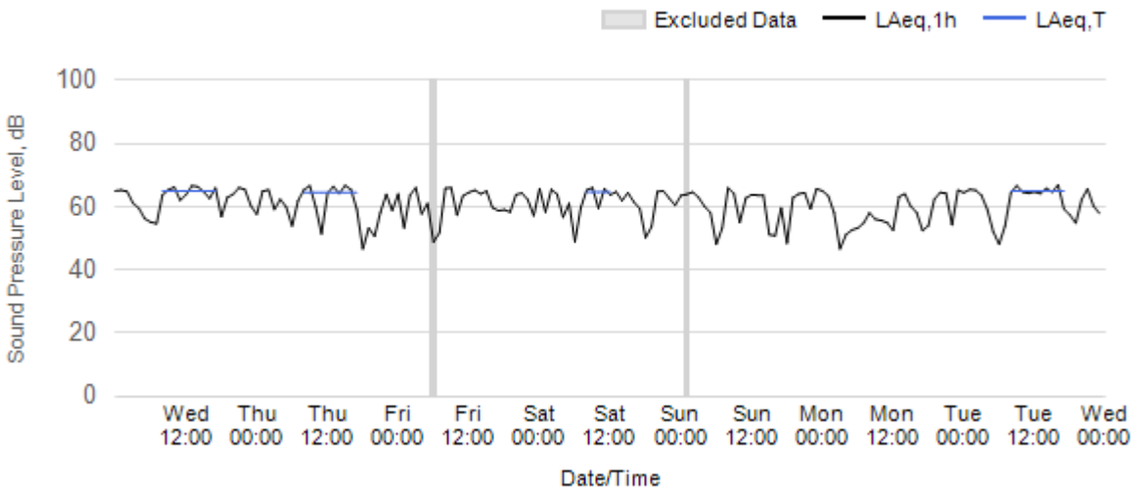


Worksite: WET Monitoring Ref: N035 29 April 2026 to 5 May 2026

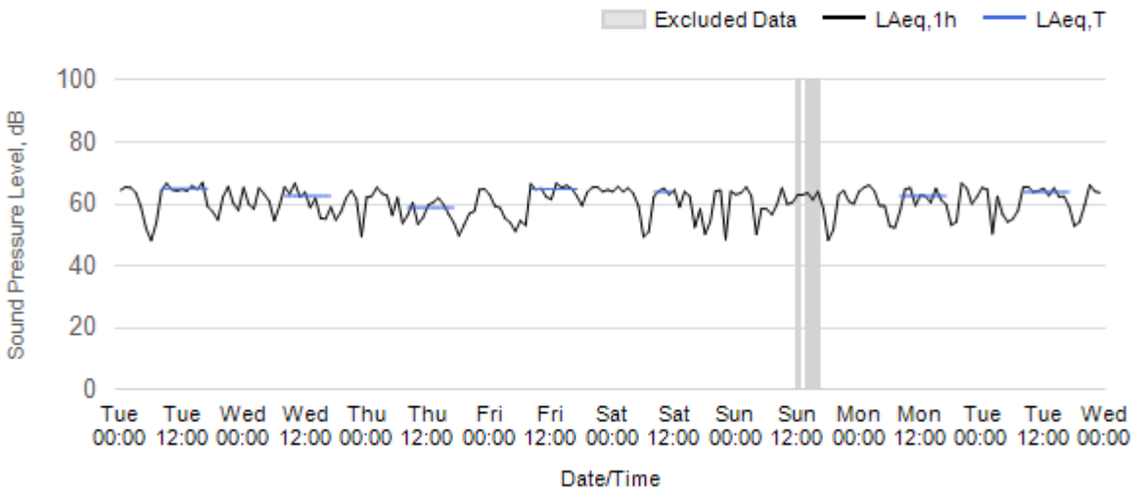


Worksite: AR - Monitoring Ref: N060

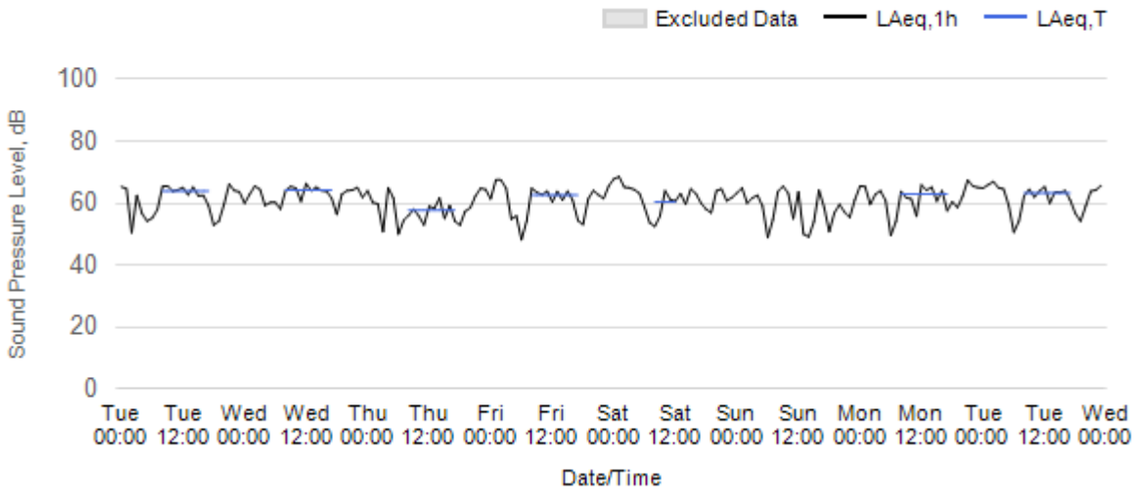
Worksite: AR Monitoring Ref: N060 01 April 2026 to 07 April 2026



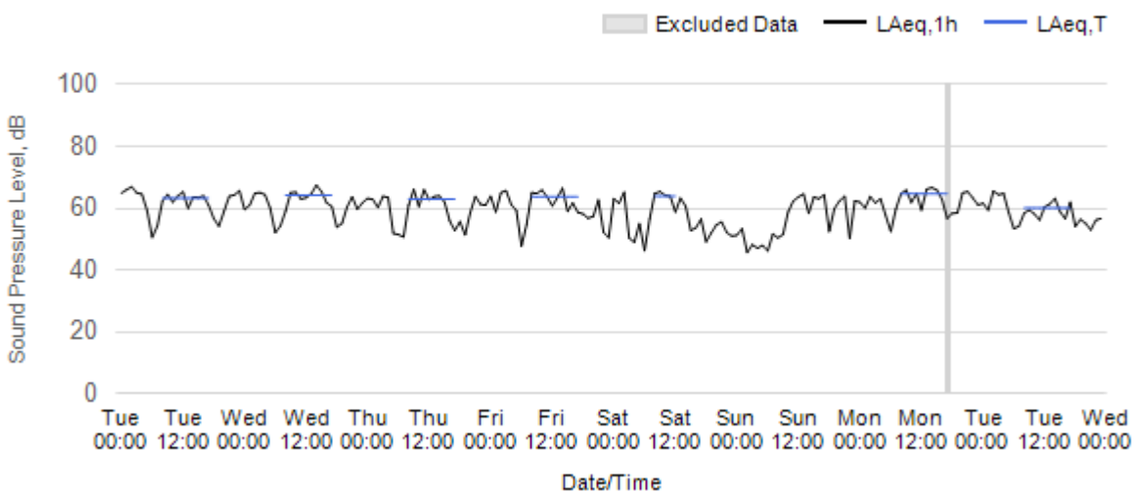
Worksite: AR Monitoring Ref: N060 08 April 2026 to 14 April 2026



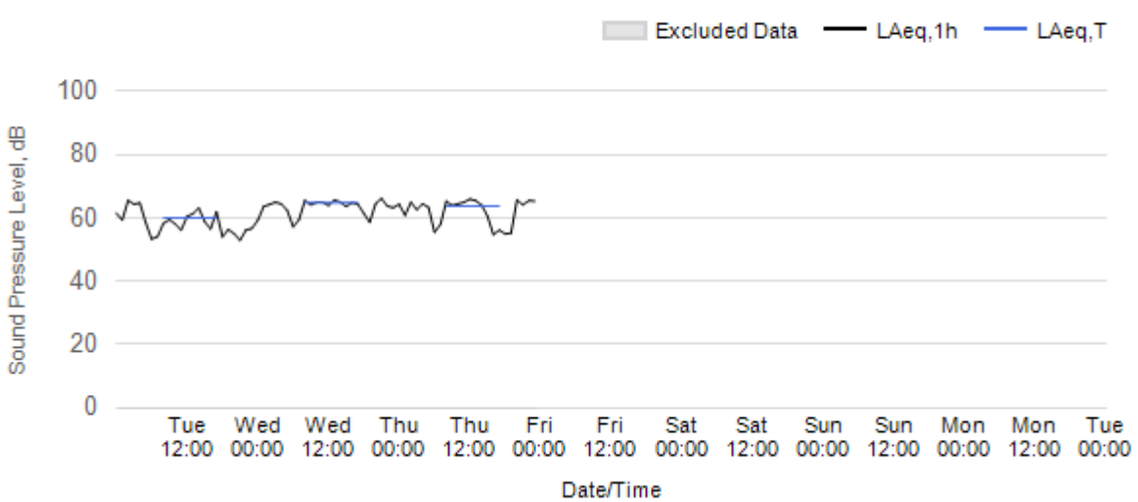
Worksite: AR Monitoring Ref: N060 15 April 2026 to 21 April 2026



Worksite: AR Monitoring Ref: N060 22 April 2026 to 28 April 2026

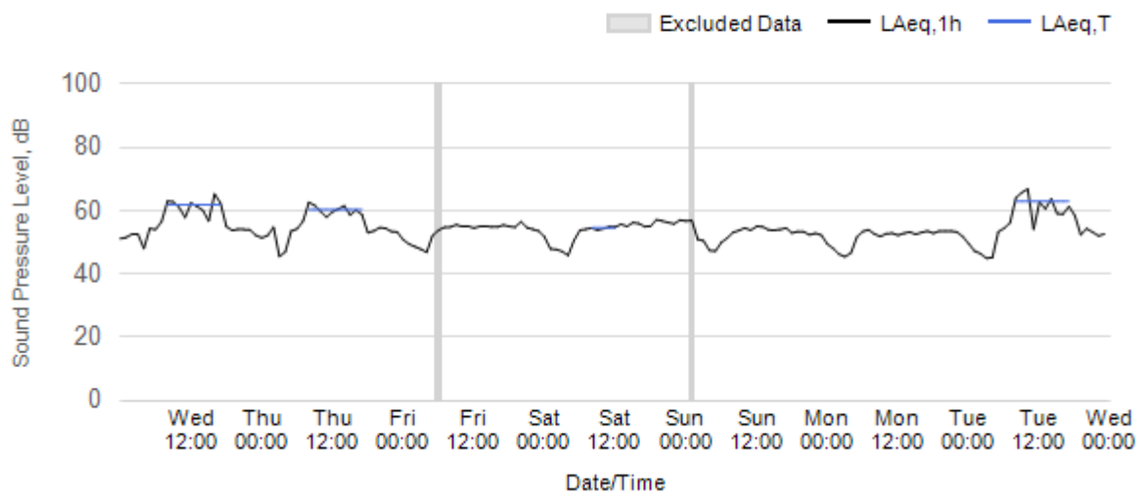


Worksite: AR Monitoring Ref: N060 29 April 2026 to 5 May 2026

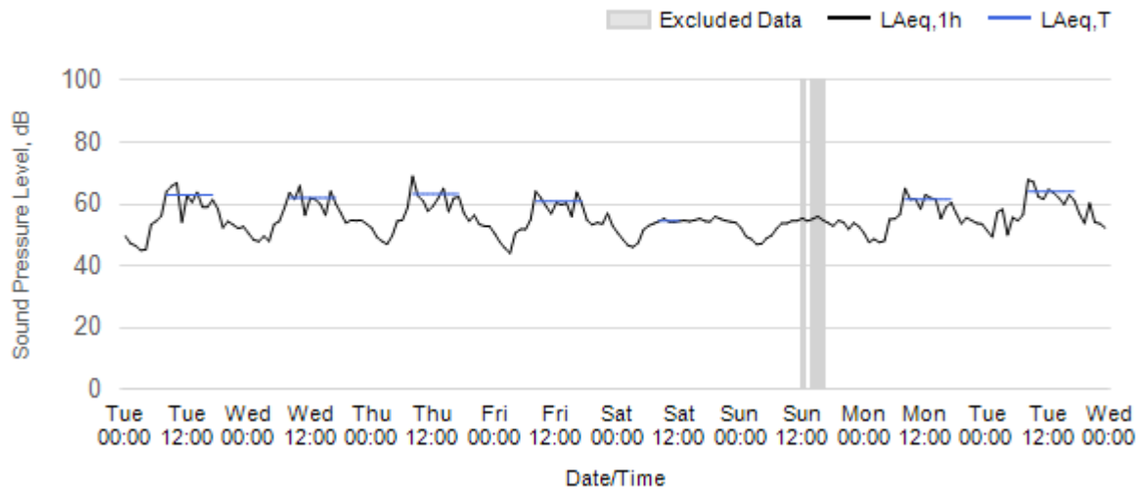


Worksite: MRVS - Monitoring Ref: N058

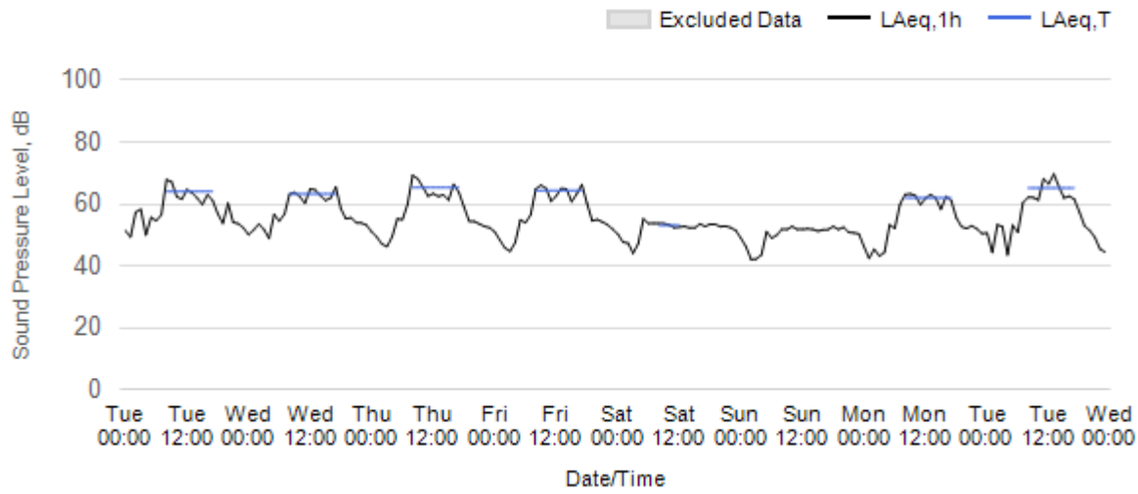
Worksite: MRVS Monitoring Ref: N058 01 April 2026 to 07 April 2026



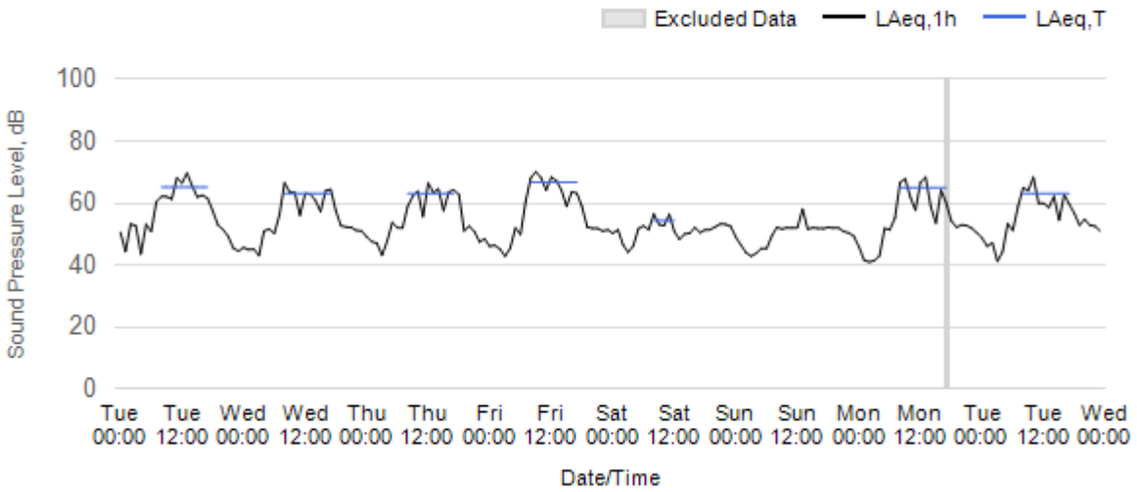
Worksite: MRVS Monitoring Ref: N058 08 April 2026 to 14 April 2026



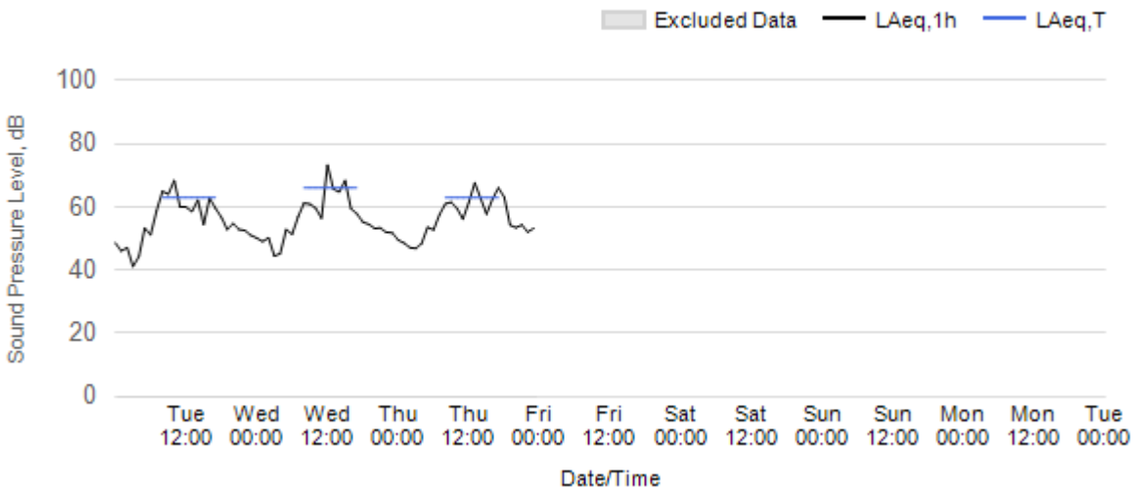
Worksite: MRVS Monitoring Ref: N058 15 April 2026 to 21 April 2026



Worksite: MRVS Monitoring Ref: N058 22 April 2026 to 28 April 2026

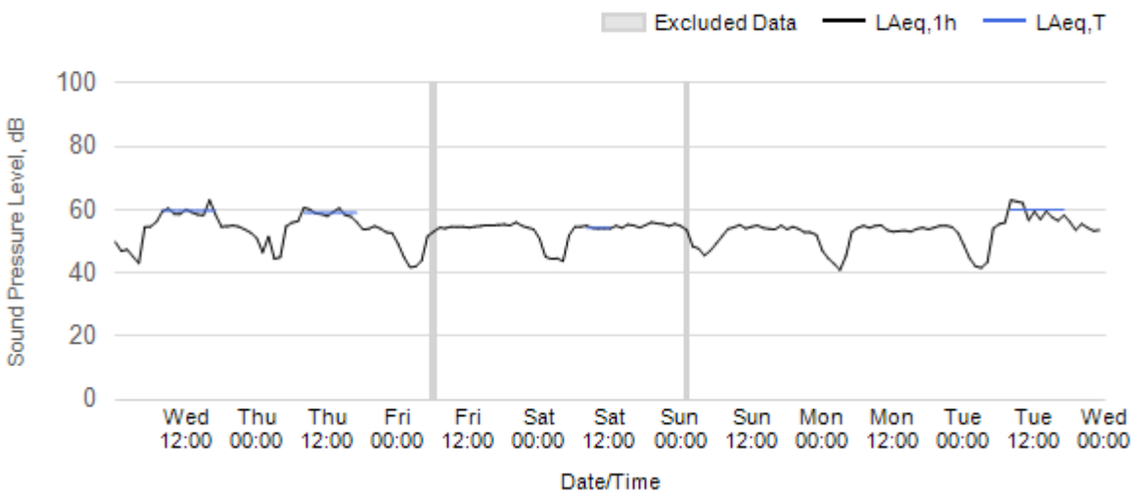


Worksite: MRVS Monitoring Ref: N058 29 April 2026 to 5 May 2026

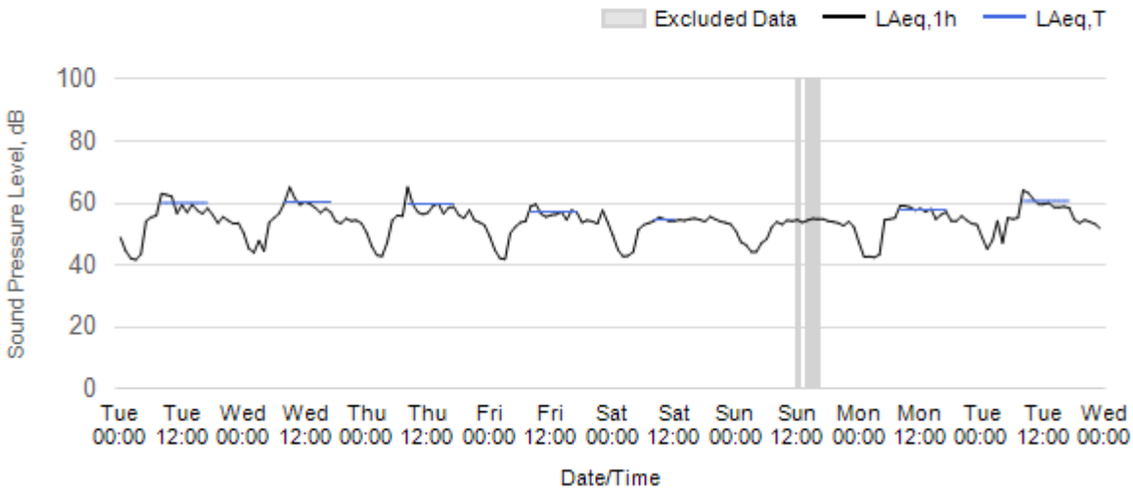


Worksite: MRVS - Monitoring Ref: BLV-N001

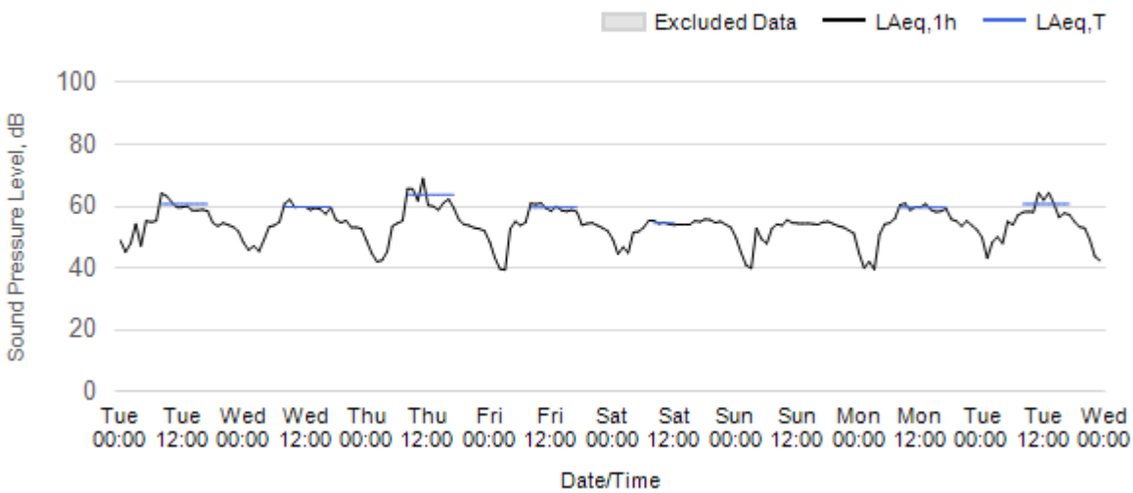
Worksite: MRVS Monitoring Ref: BLV-N001 01 April 2026 to 07 April 2026



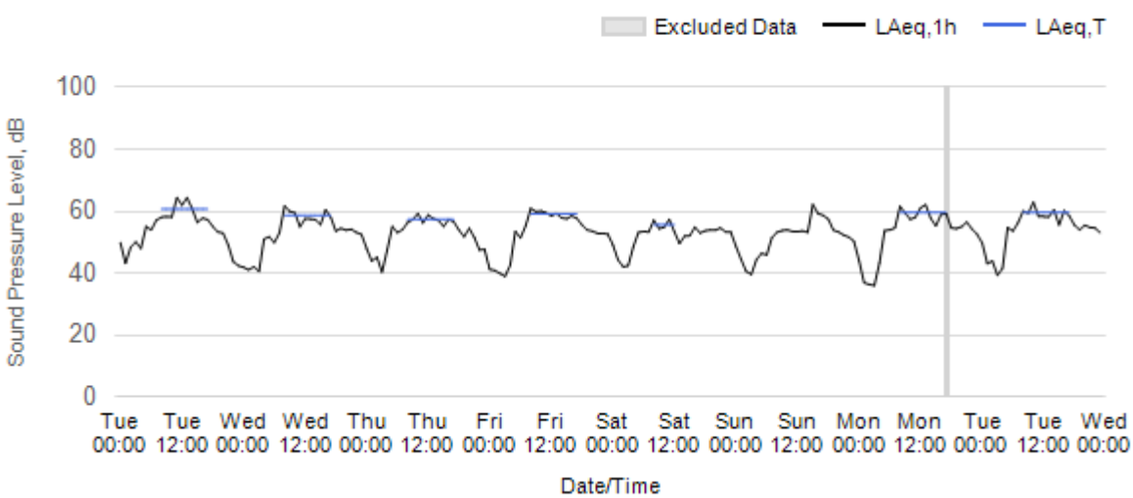
Worksite: MRVS Monitoring Ref: BLV-N001 08 April 2026 to 14 April 2026

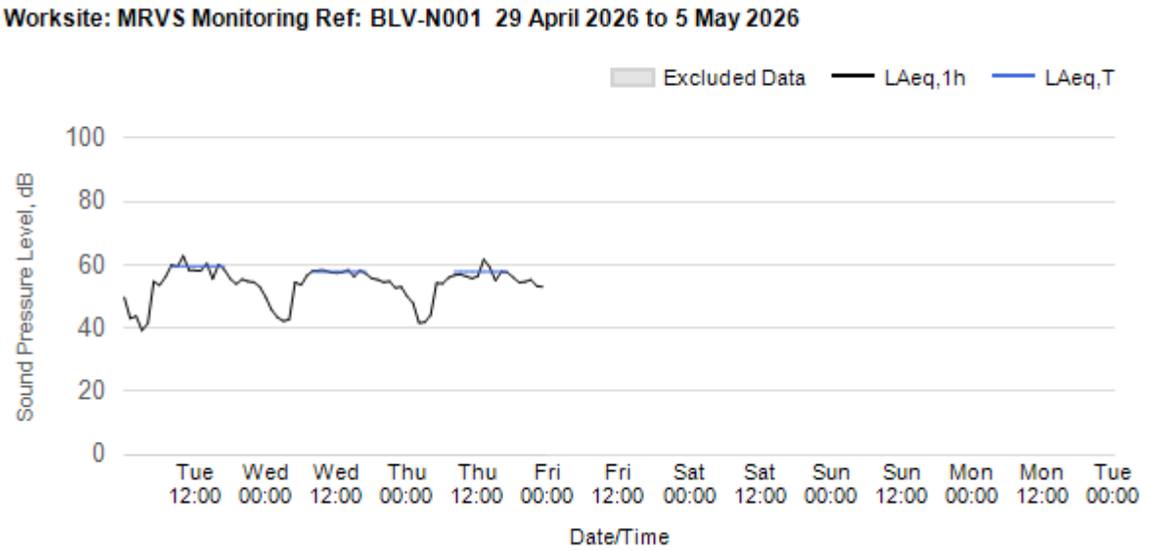


Worksite: MRVS Monitoring Ref: BLV-N001 15 April 2026 to 21 April 2026



Worksite: MRVS Monitoring Ref: BLV-N001 22 April 2026 to 28 April 2026

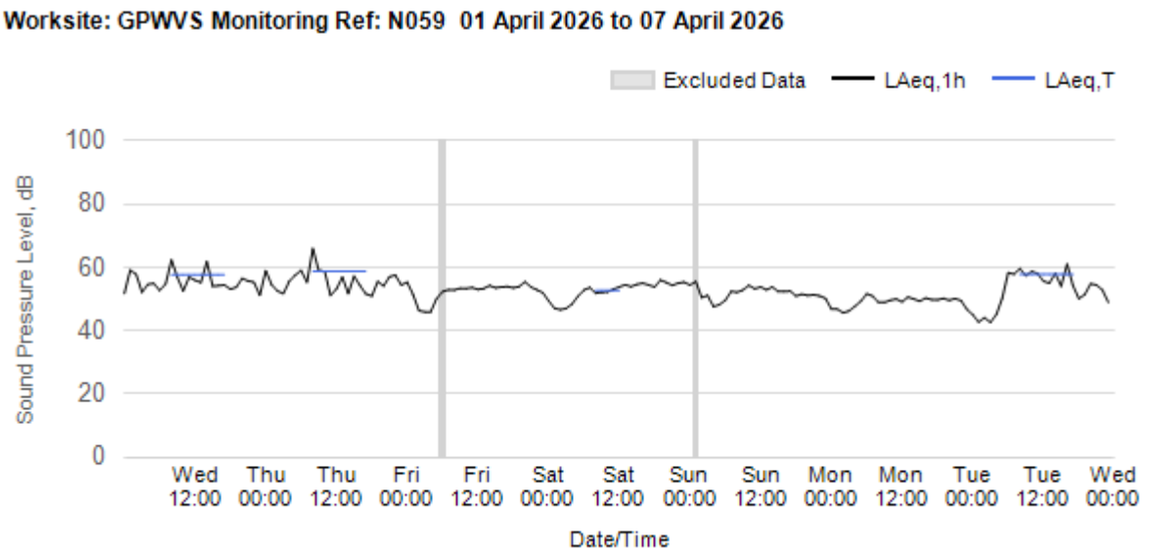




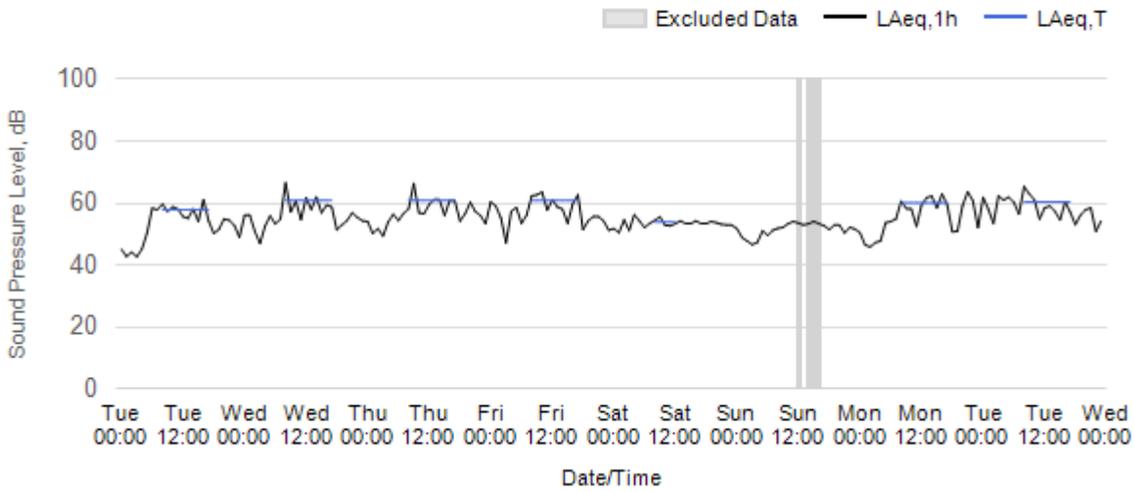
Worksite: AR - Monitoring Ref: N033

Note: No data measured throughout the month due to loss of power to the lighting column which supplies power to the monitoring station.

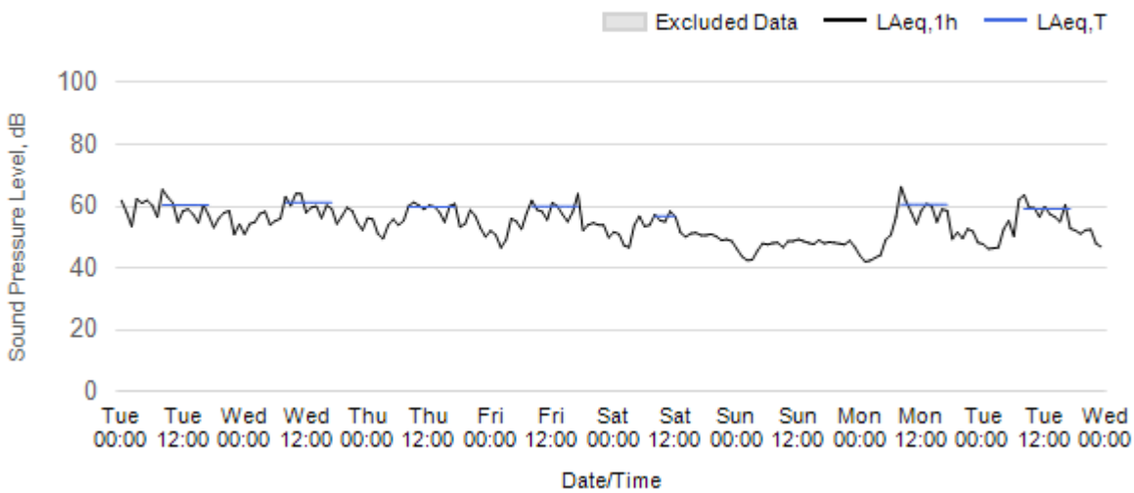
Worksite: GPWVS - Monitoring Ref: N059



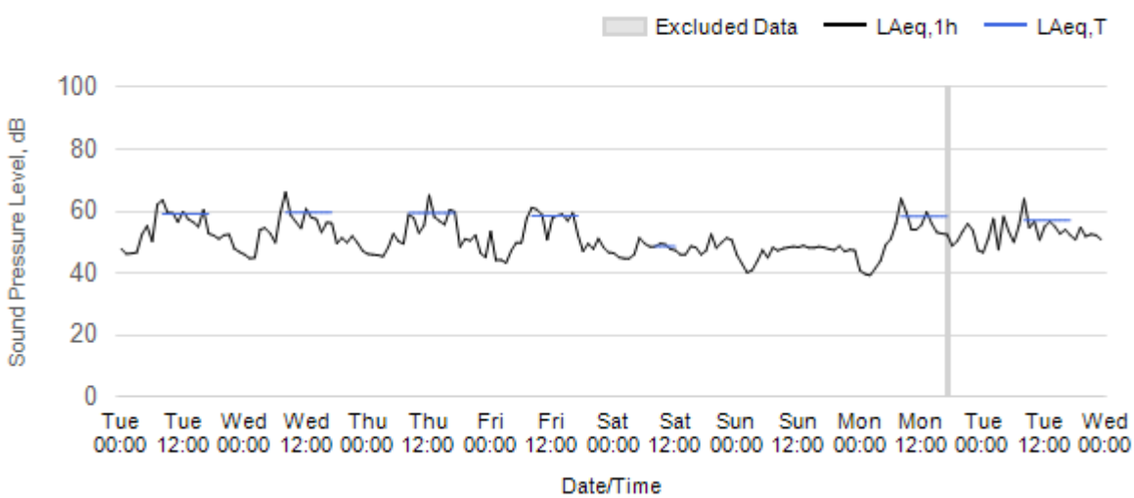
Worksite: GPWVS Monitoring Ref: N059 08 April 2026 to 14 April 2026



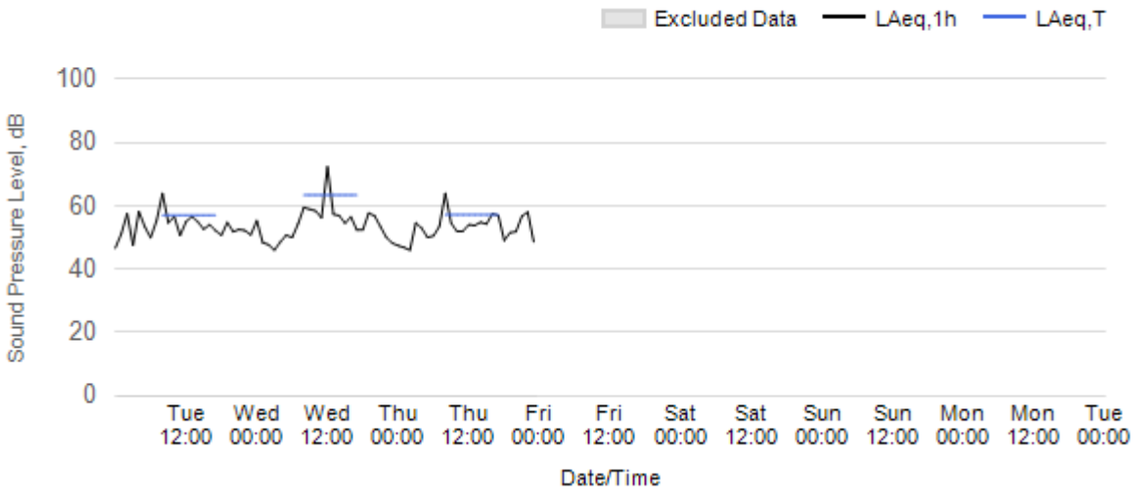
Worksite: GPWVS Monitoring Ref: N059 15 April 2026 to 21 April 2026



Worksite: GPWVS Monitoring Ref: N059 22 April 2026 to 28 April 2026

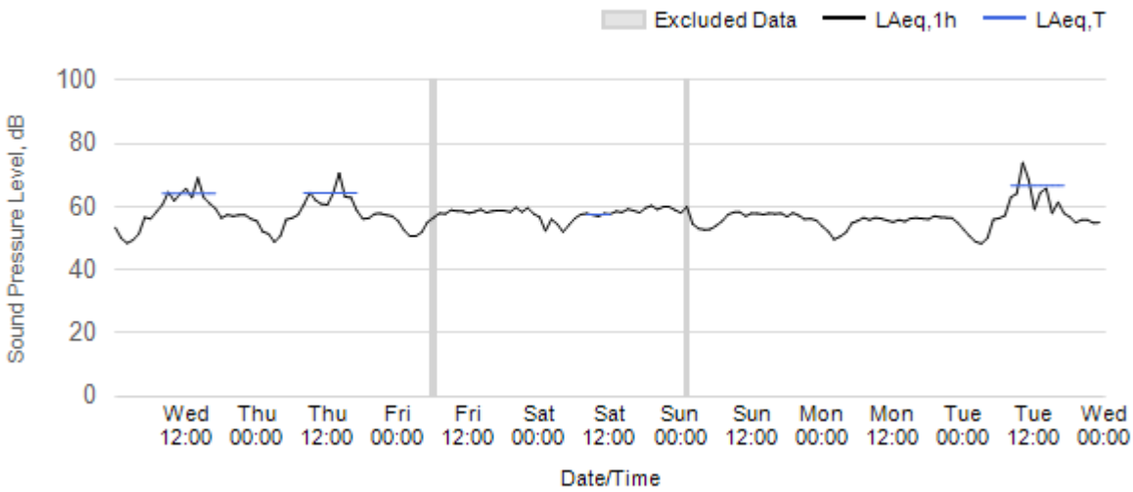


Worksite: GPWVS Monitoring Ref: N059 29 April 2026 to 5 May 2026

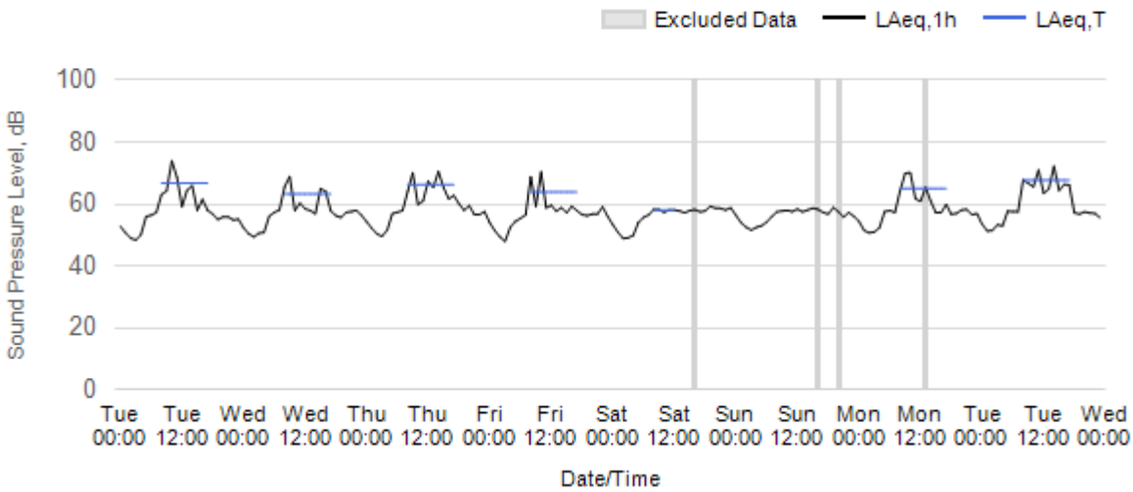


Worksite: MRVS - Monitoring Ref: N063

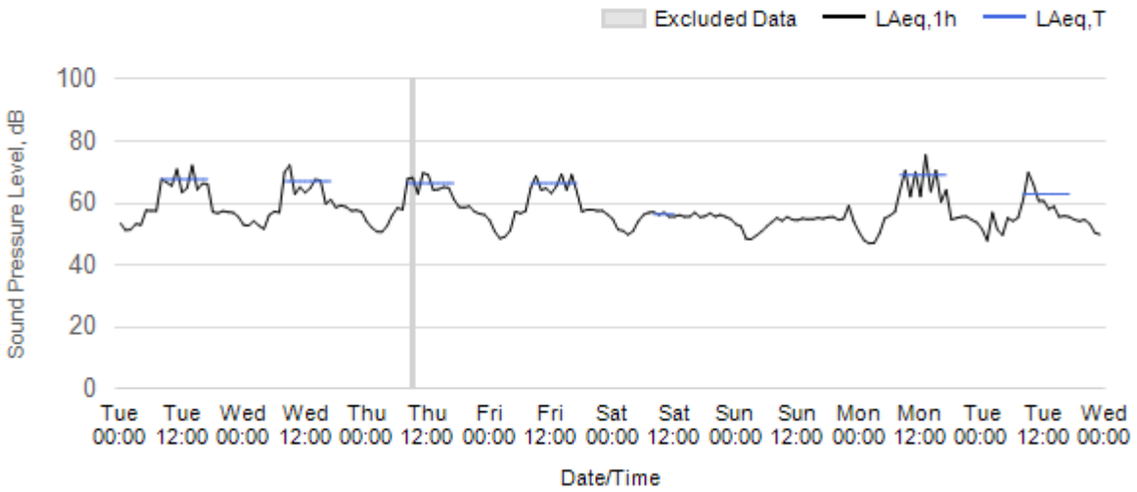
Worksite: MRVS Monitoring Ref: N063 01 April 2026 to 07 April 2026



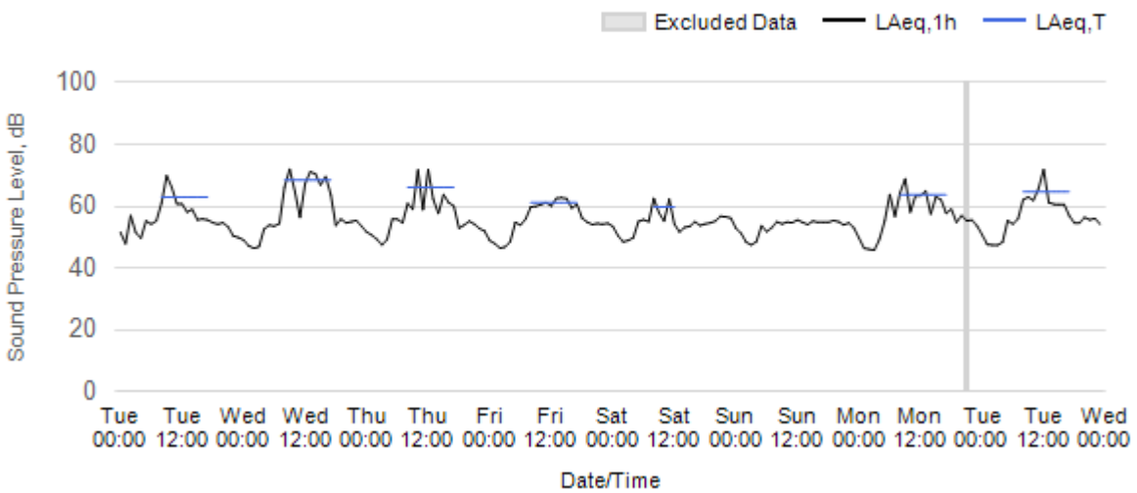
Worksite: MRVS Monitoring Ref: N063 08 April 2026 to 14 April 2026



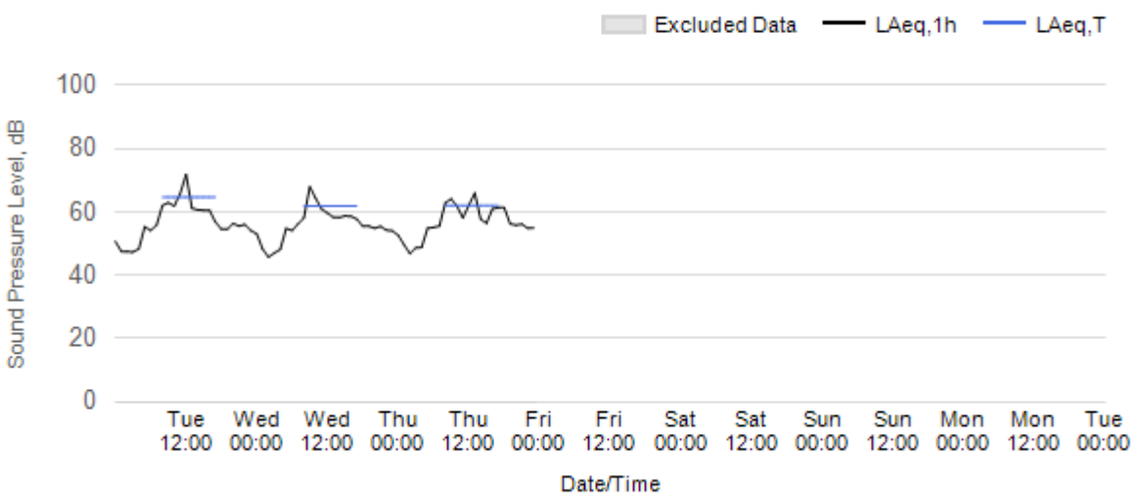
Worksite: MRVS Monitoring Ref: N063 15 April 2026 to 21 April 2026



Worksite: MRVS Monitoring Ref: N063 22 April 2026 to 28 April 2026

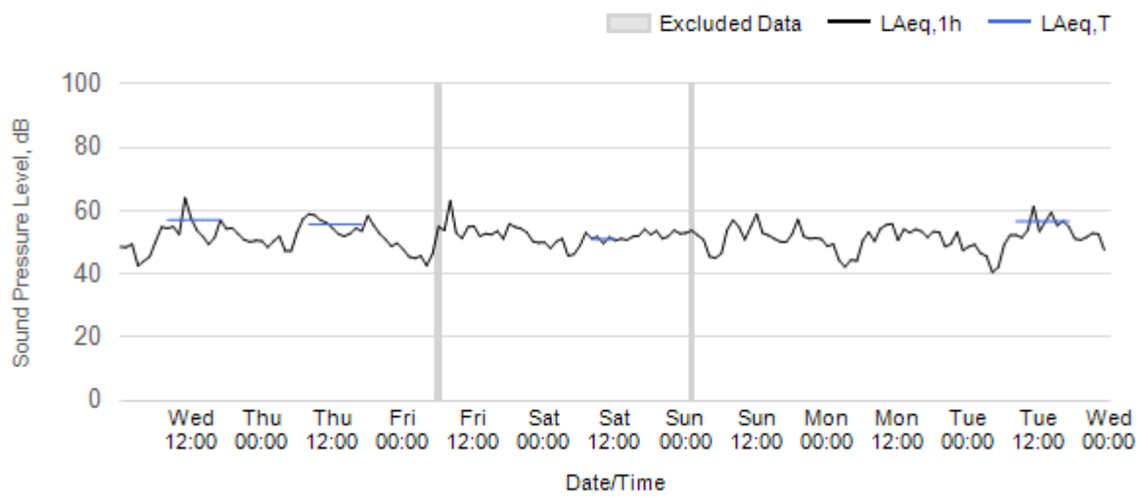


Worksite: MRVS Monitoring Ref: N063 29 April 2026 to 5 May 2026

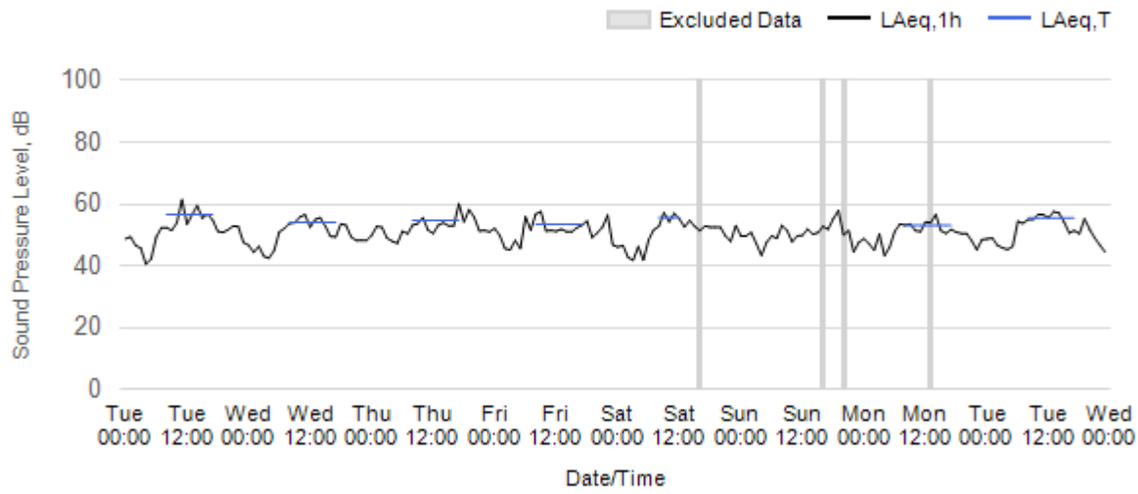


Worksite: WET - Monitoring Ref: N034

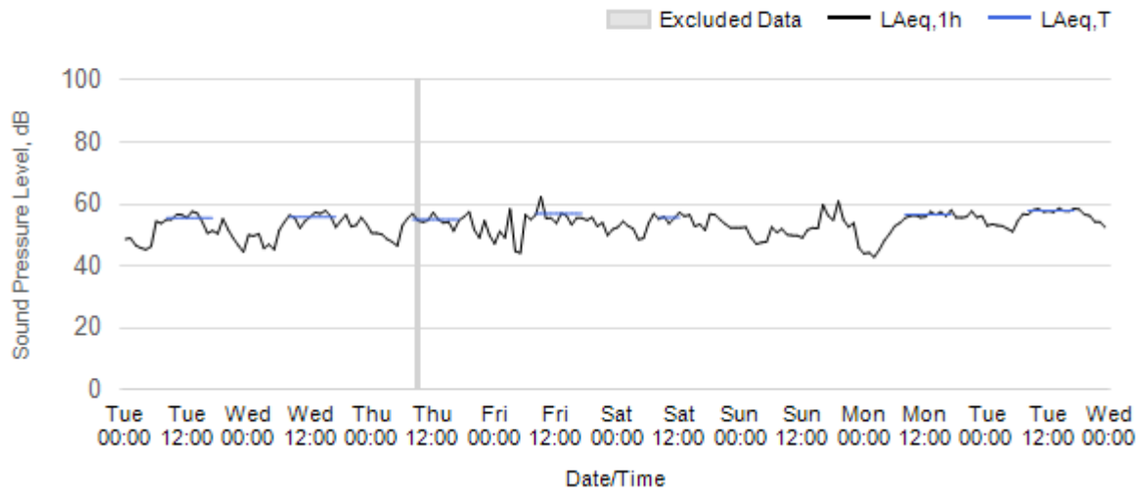
Worksite: WET Monitoring Ref: N034 01 April 2026 to 07 April 2026



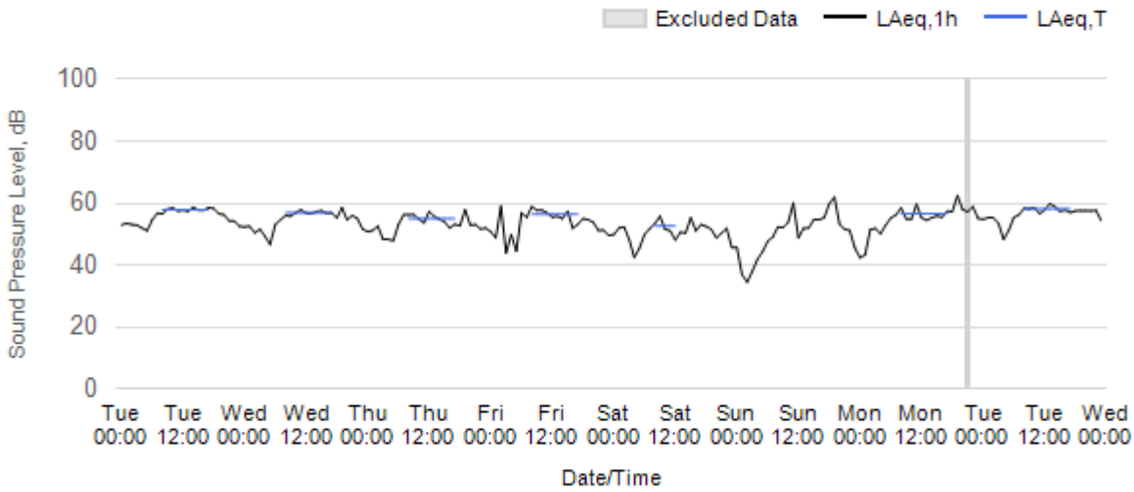
Worksite: WET Monitoring Ref: N034 08 April 2026 to 14 April 2026



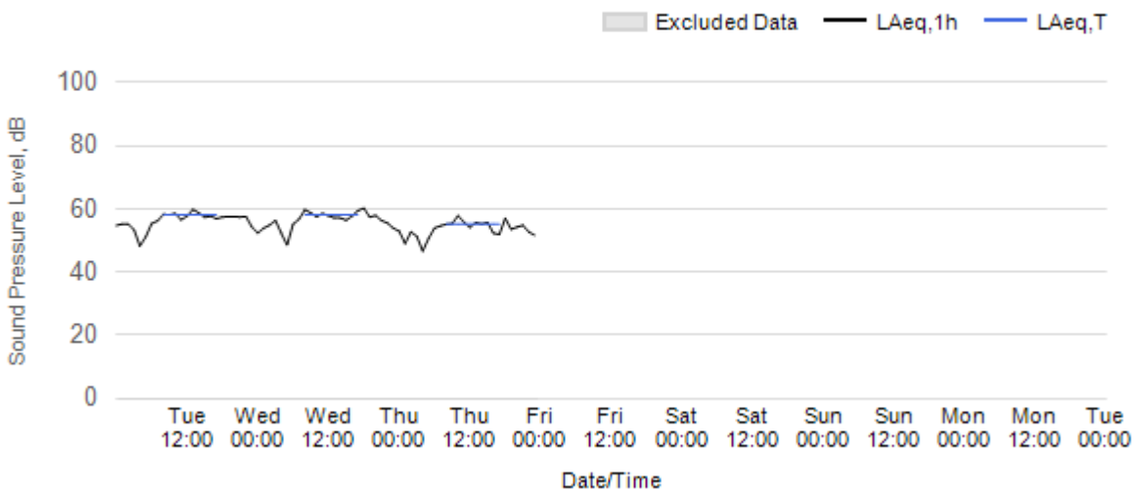
Worksite: WET Monitoring Ref: N034 15 April 2026 to 21 April 2026



Worksite: WET Monitoring Ref: N034 22 April 2026 to 28 April 2026

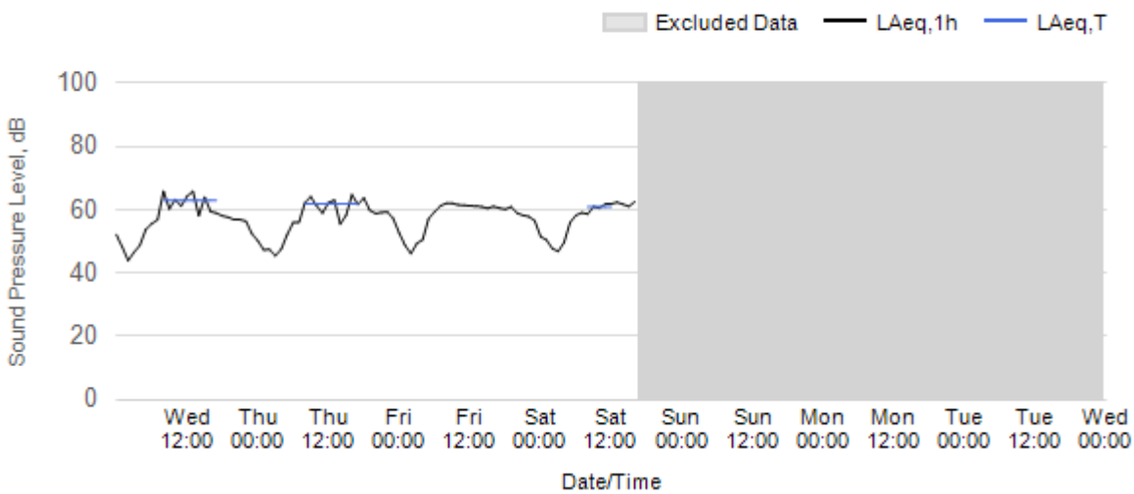


Worksite: WET Monitoring Ref: N034 29 April 2026 to 5 May 2026



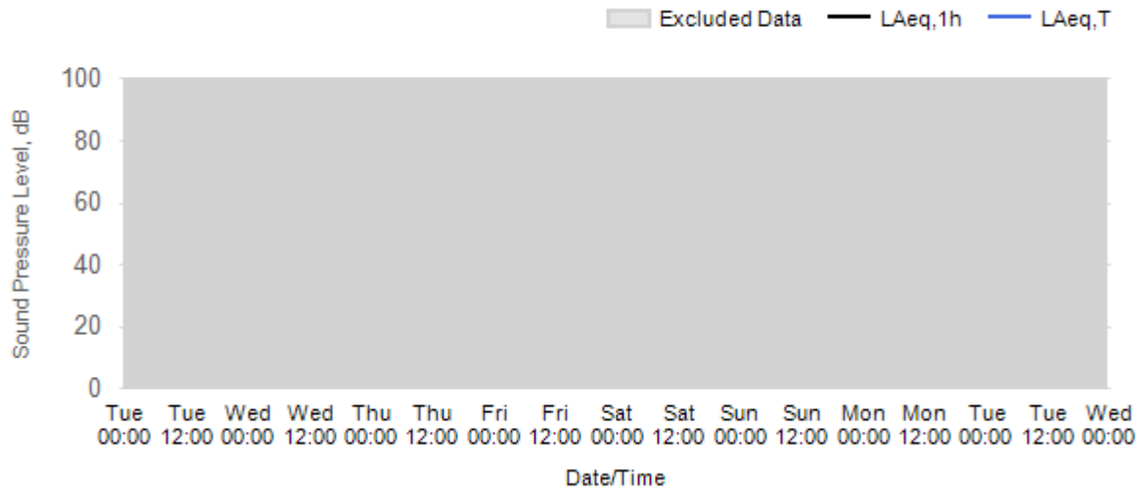
Worksite: OOC - Monitoring Ref: OOC-N03

Worksite: OOC Monitoring Ref: OOC-N03 01 April 2026 to 07 April 2026



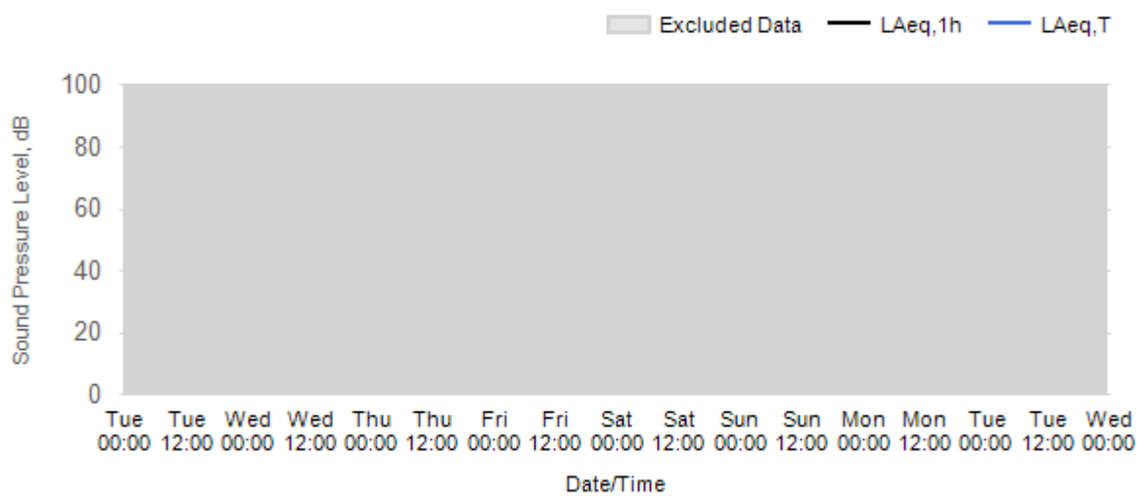
Note: no valid data recorded at the monitoring location due to a fault with the device

Worksite: OOC Monitoring Ref: OOC-N03 08 April 2026 to 14 April 2026



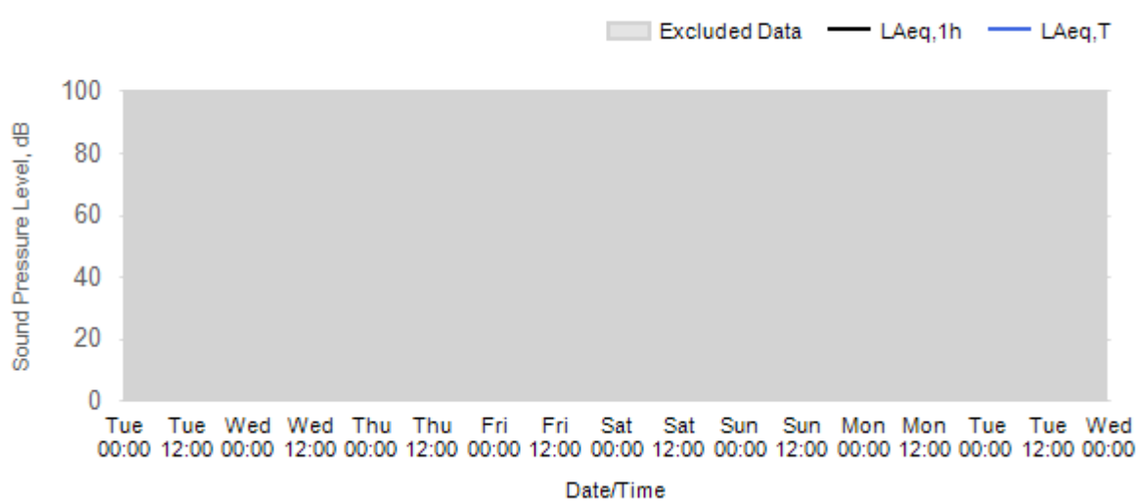
Note: no valid data recorded at the monitoring location due to a fault with the device

Worksite: OOC Monitoring Ref: OOC-N03 15 April 2026 to 21 April 2026



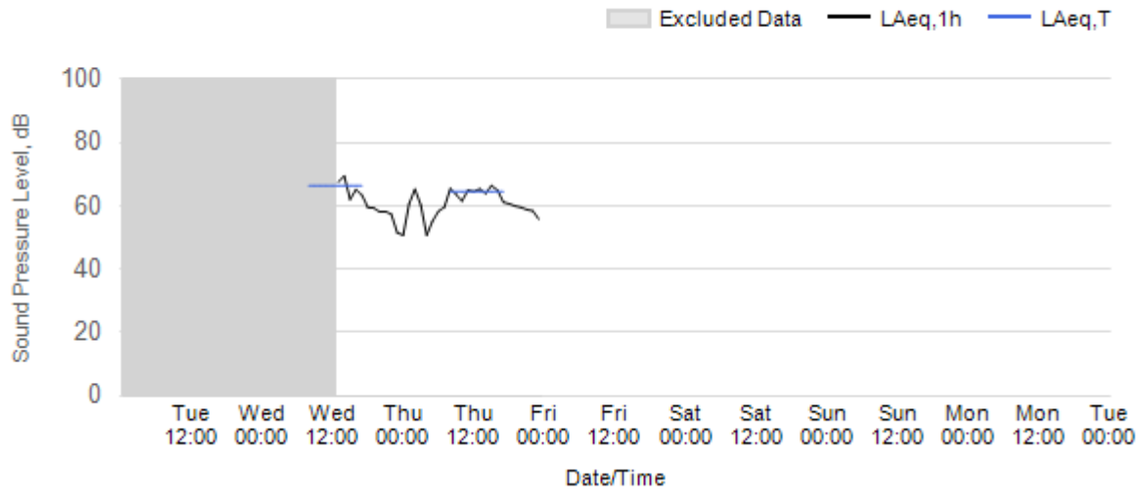
Note: no valid data recorded at the monitoring location due to a fault with the device

Worksite: OOC Monitoring Ref: OOC-N03 22 April 2026 to 28 April 2026



Note: no valid data recorded at the monitoring location due to a fault with the device

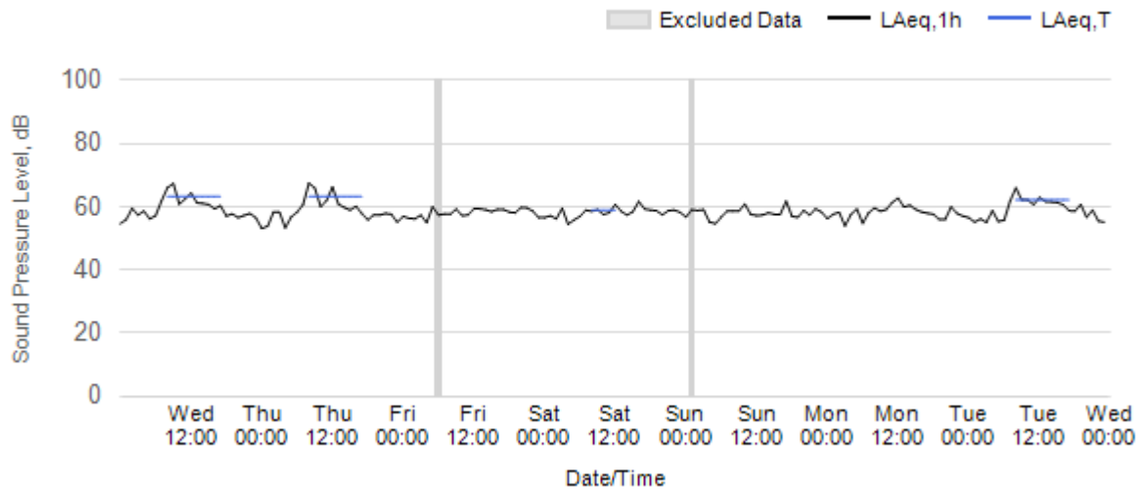
Worksite: OOC Monitoring Ref: OOC-N03 29 April 2026 to 5 May 2026



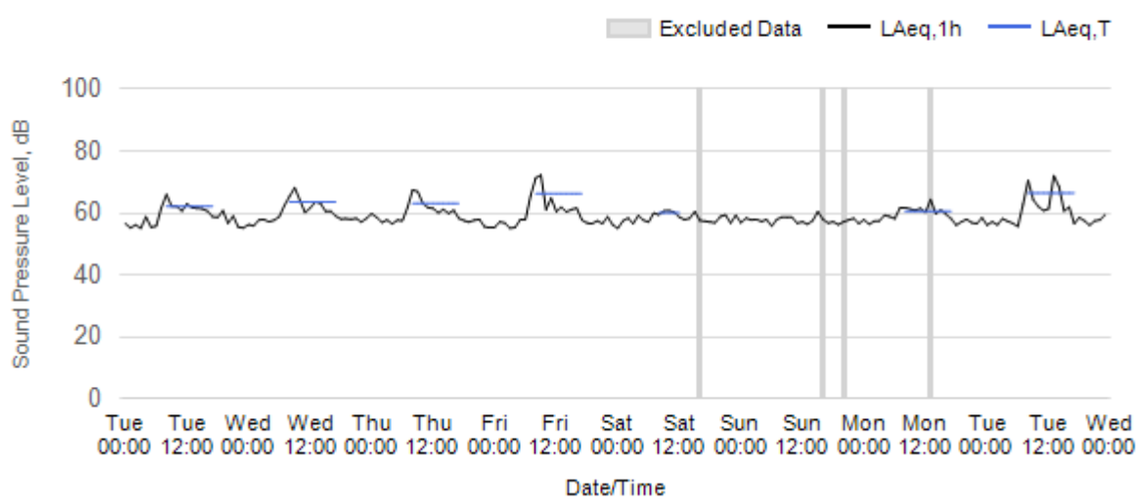
Note: no valid data recorded at the monitoring location due to a fault with the device

Worksite: AR - Monitoring Ref: N033b

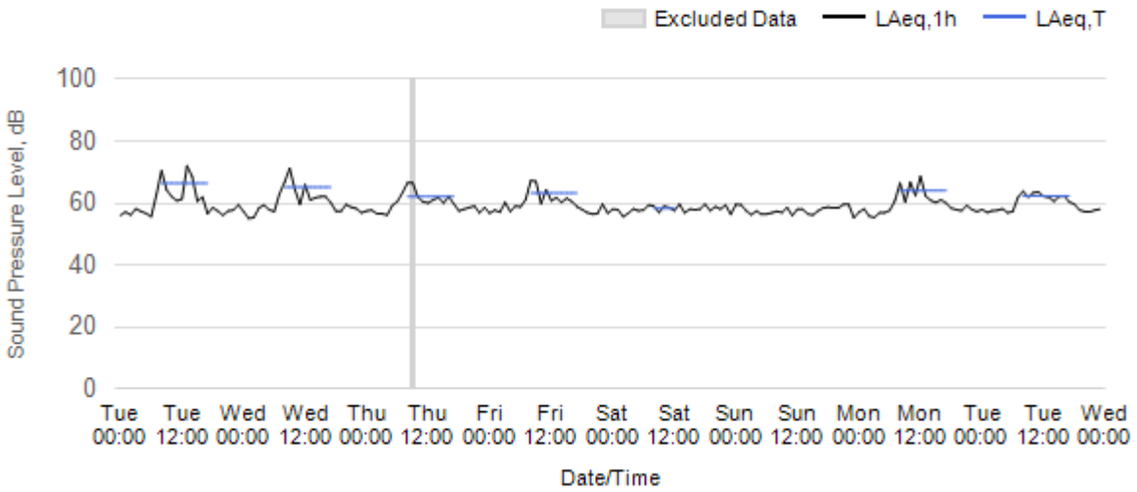
Worksite: AR Monitoring Ref: N033b 01 April 2026 to 07 April 2026



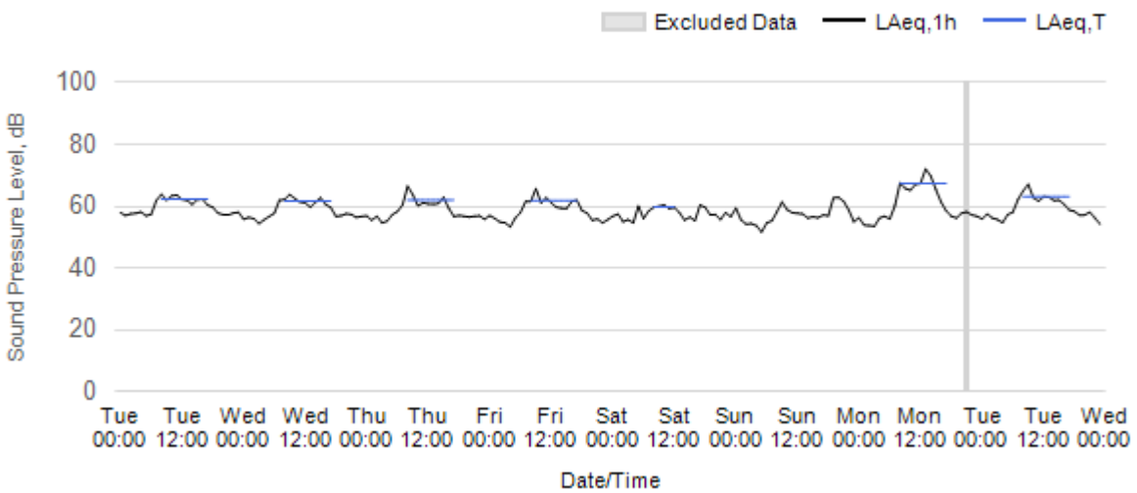
Worksite: AR Monitoring Ref: N033b 08 April 2026 to 14 April 2026



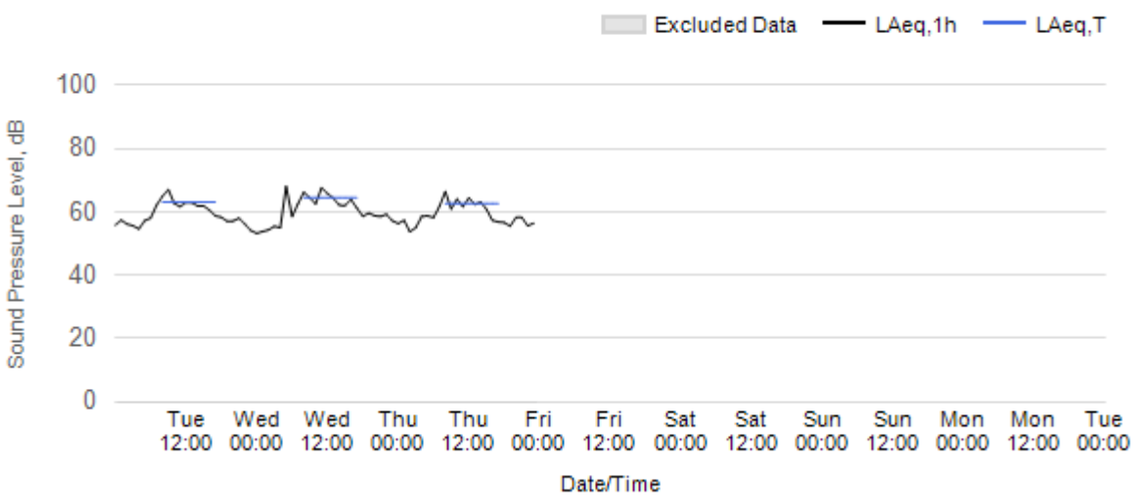
Worksite: AR Monitoring Ref: N033b 15 April 2026 to 21 April 2026



Worksite: AR Monitoring Ref: N033b 22 April 2026 to 28 April 2026



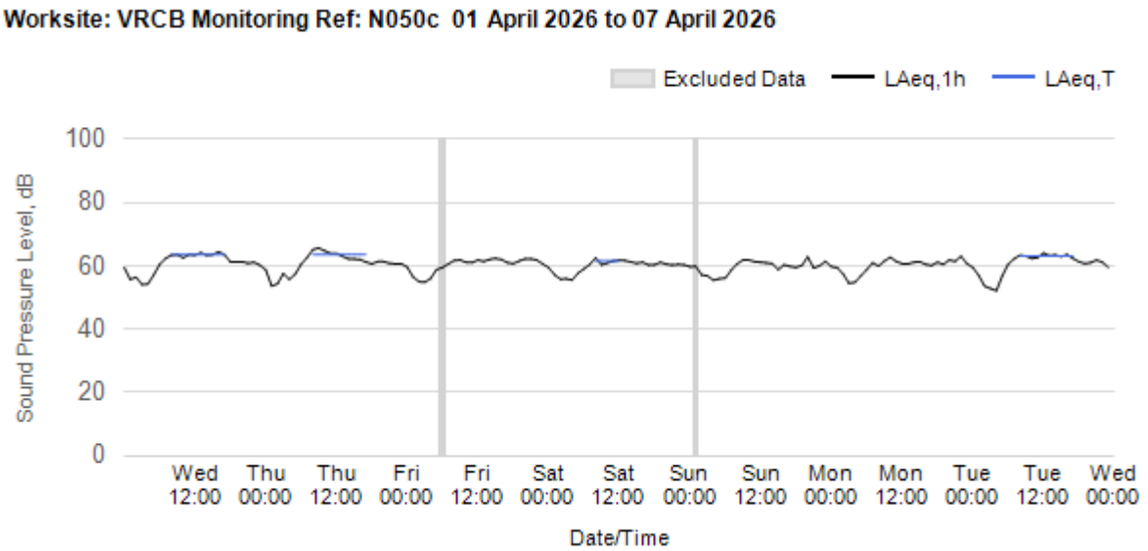
Worksite: AR Monitoring Ref: N033b 29 April 2026 to 5 May 2026

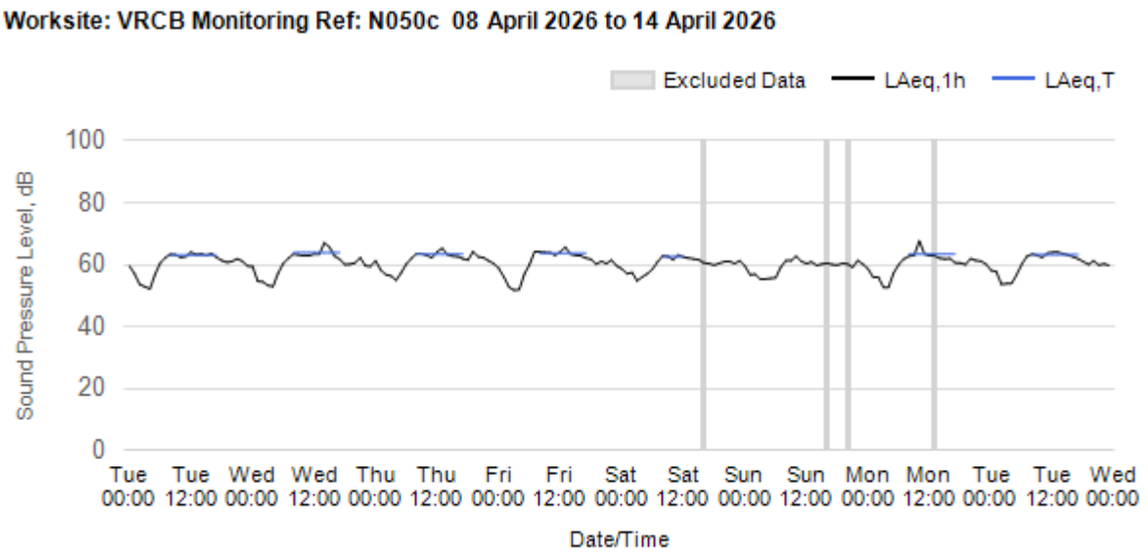


Worksite: AR - Monitoring Ref: N032

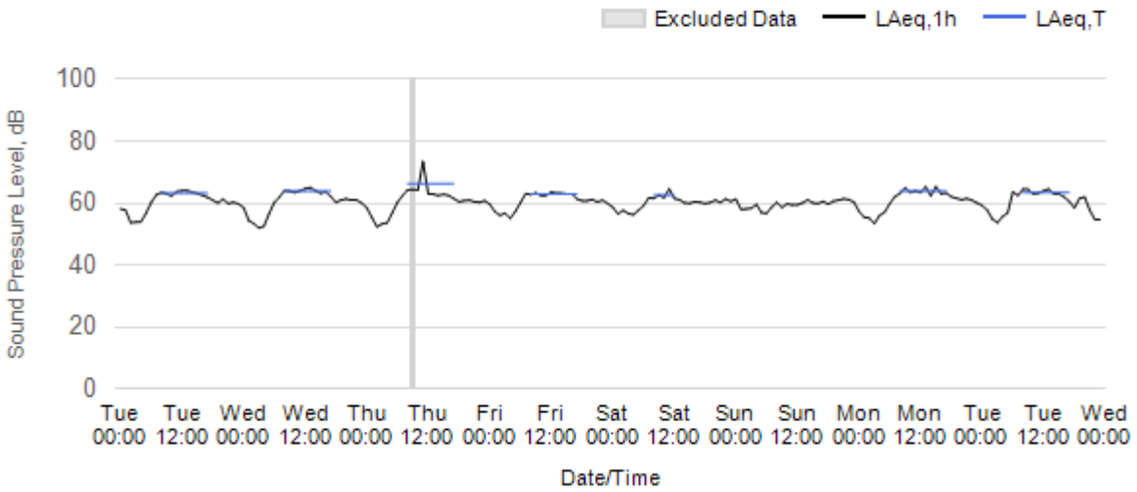
Note: No data measured throughout the month due to loss of power to the lighting column which supplies power to the monitoring station.

Worksite: VRCB - Monitoring Ref: N050c

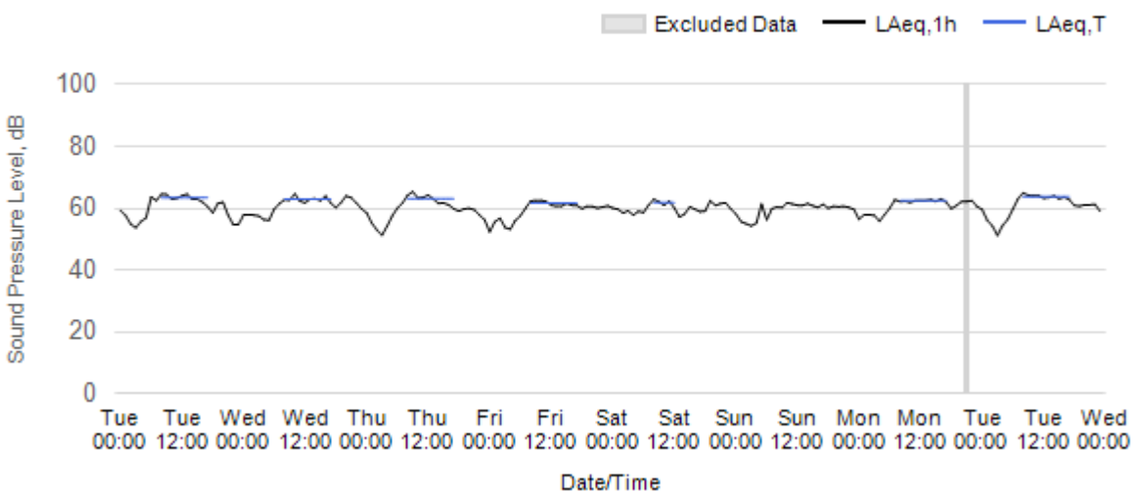




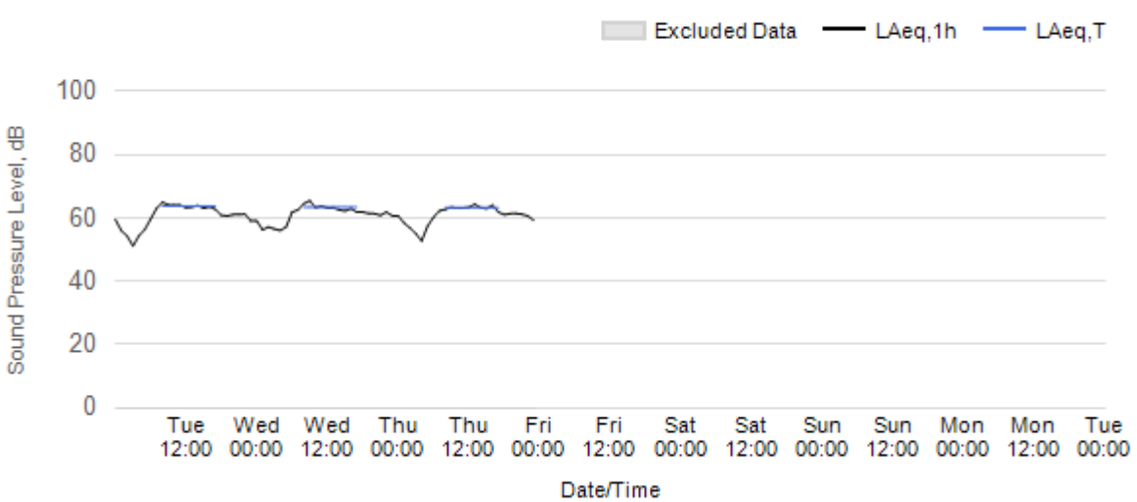
Worksite: VRCB Monitoring Ref: N050c 15 April 2026 to 21 April 2026



Worksite: VRCB Monitoring Ref: N050c 22 April 2026 to 28 April 2026

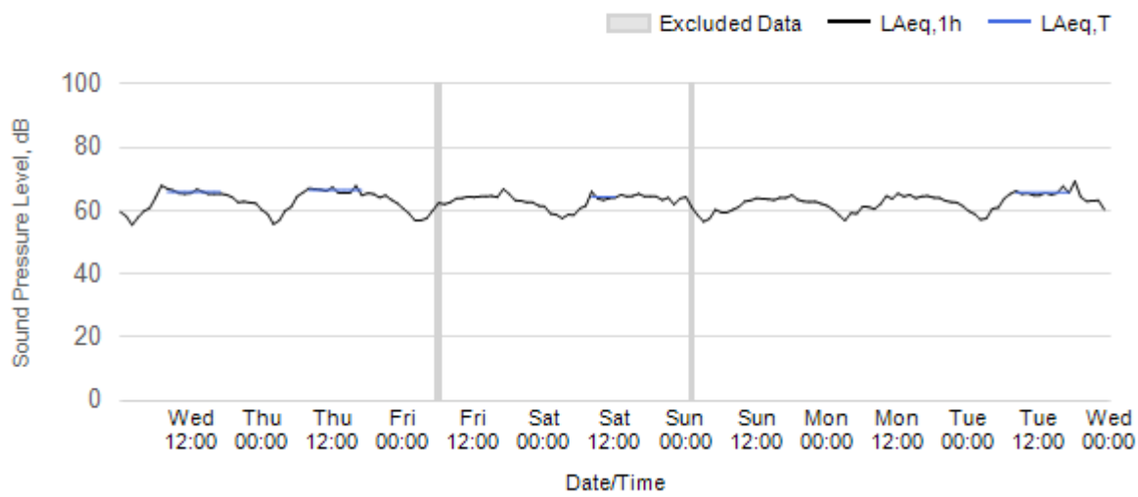


Worksite: VRCB Monitoring Ref: N050c 29 April 2026 to 5 May 2026

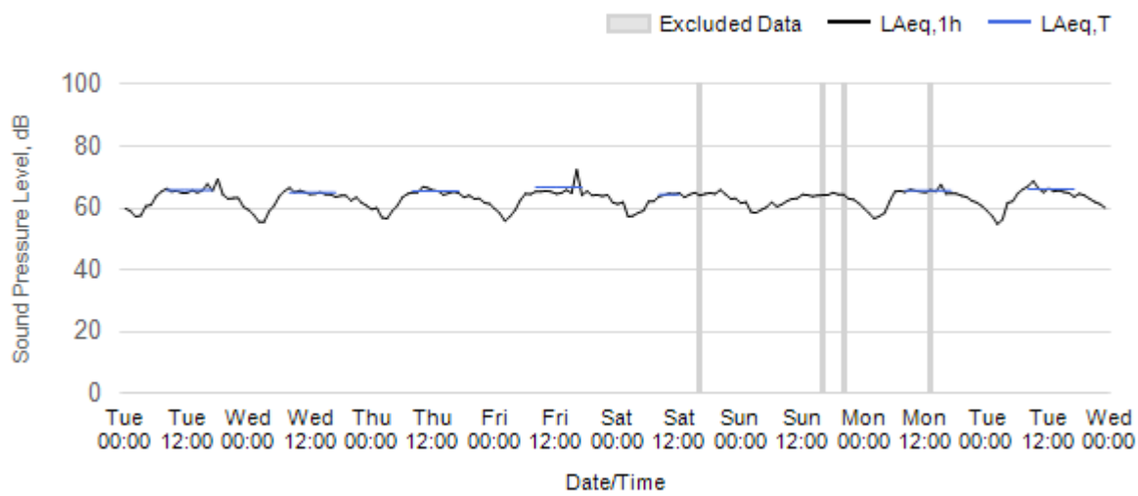


Worksite: AR - Monitoring Ref: N032b

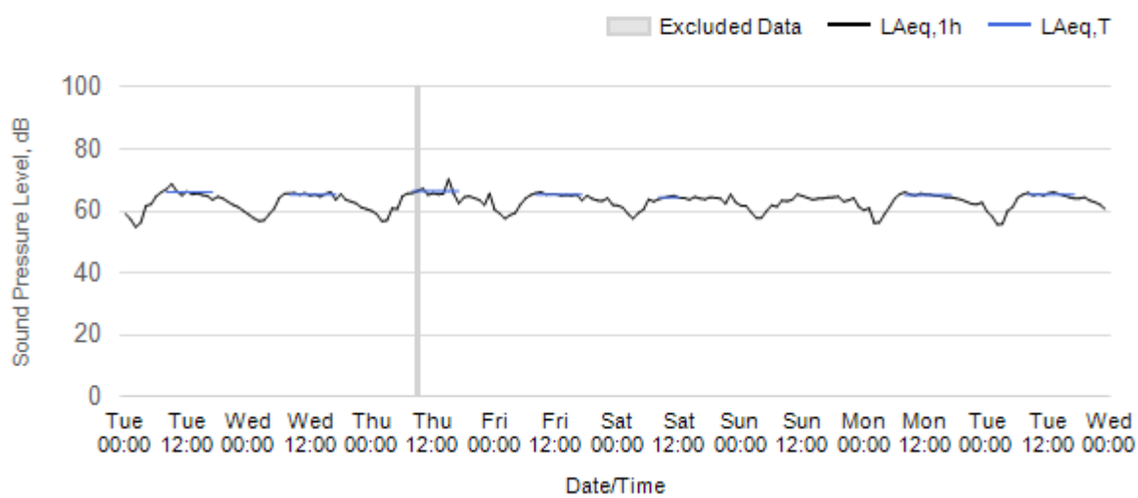
Worksite: AR Monitoring Ref: N032b 01 April 2026 to 07 April 2026



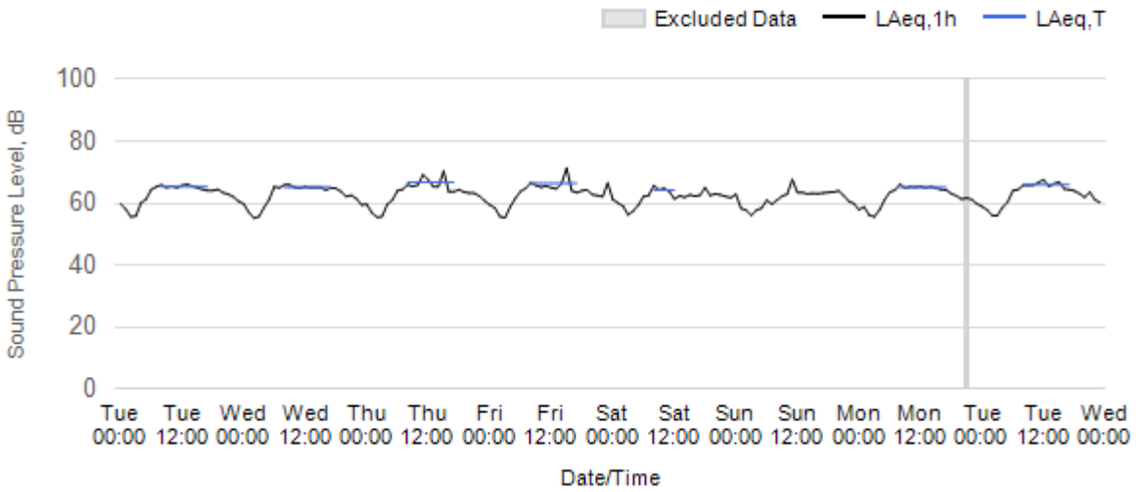
Worksite: AR Monitoring Ref: N032b 08 April 2026 to 14 April 2026



Worksite: AR Monitoring Ref: N032b 15 April 2026 to 21 April 2026



Worksite: AR Monitoring Ref: N032b 22 April 2026 to 28 April 2026



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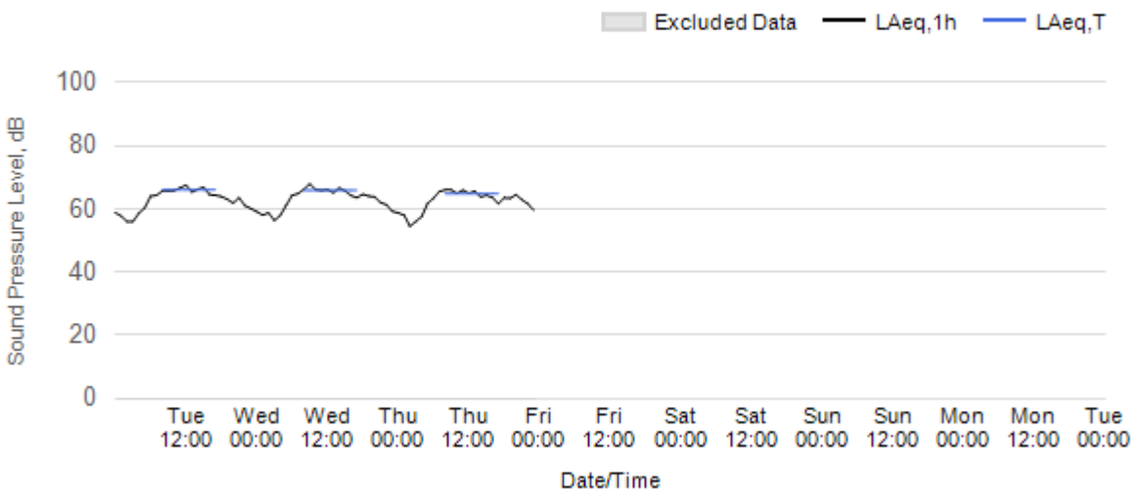
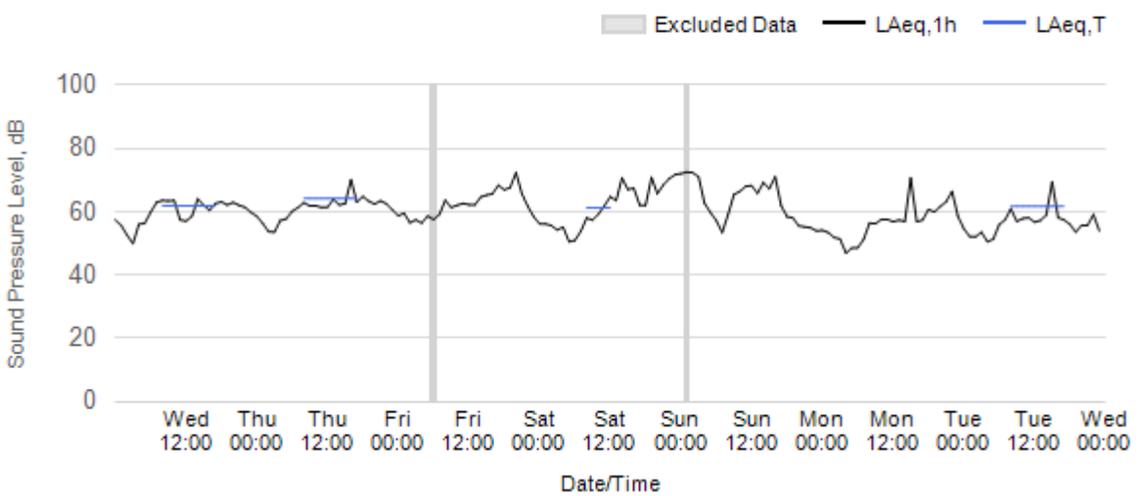


Worksite: WET - Monitoring Ref: N041a

Worksite: WET Monitoring Ref: N041a 01 April 2026 to 07 April 2026



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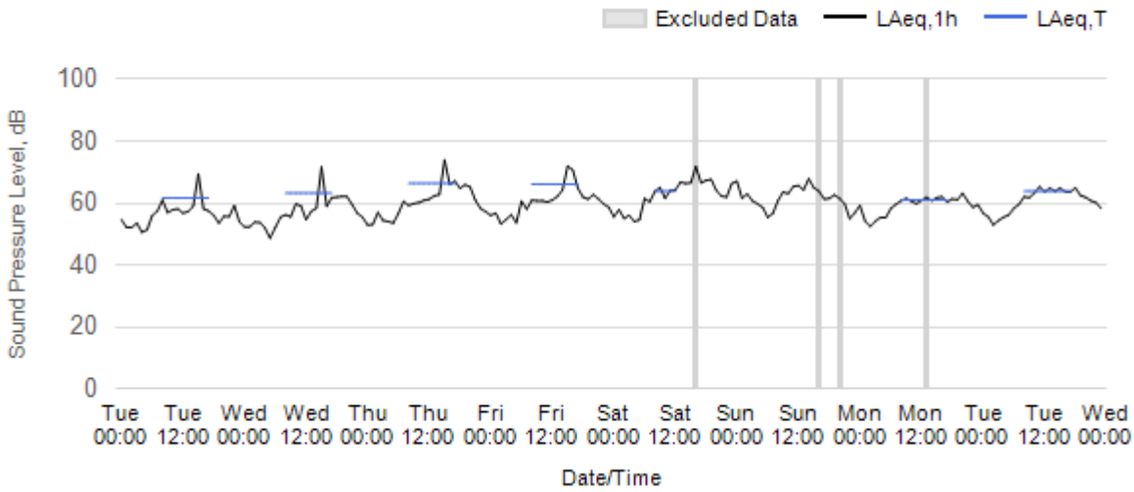

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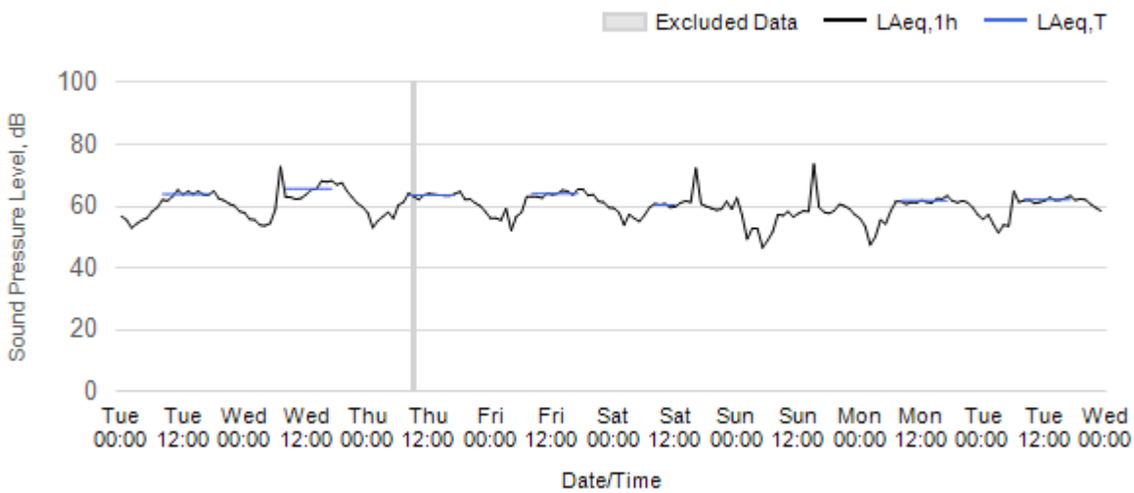

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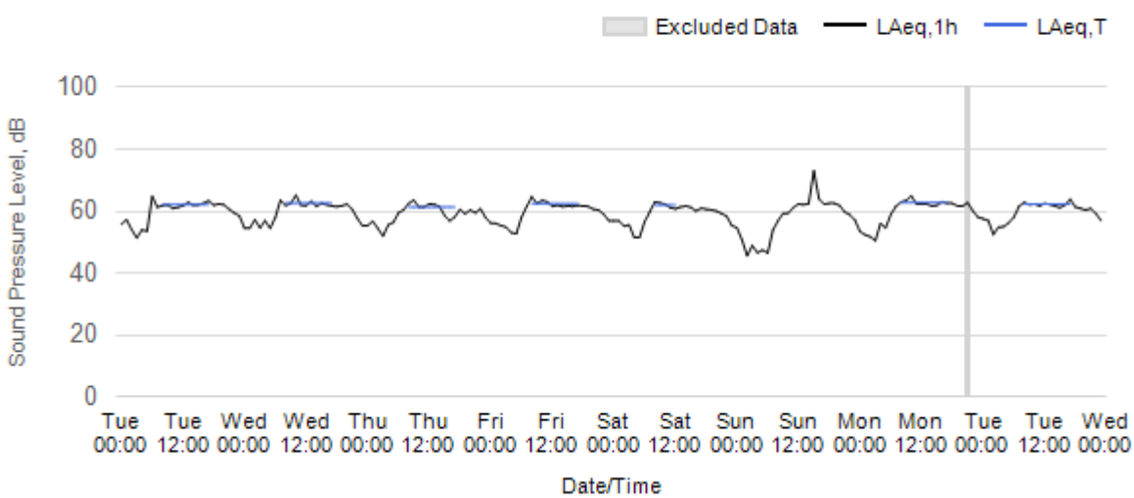

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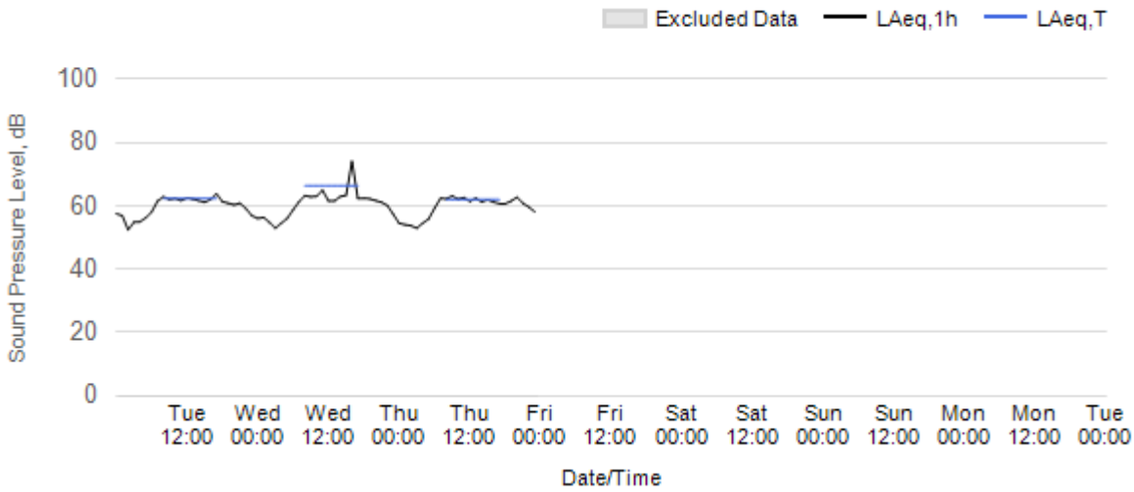

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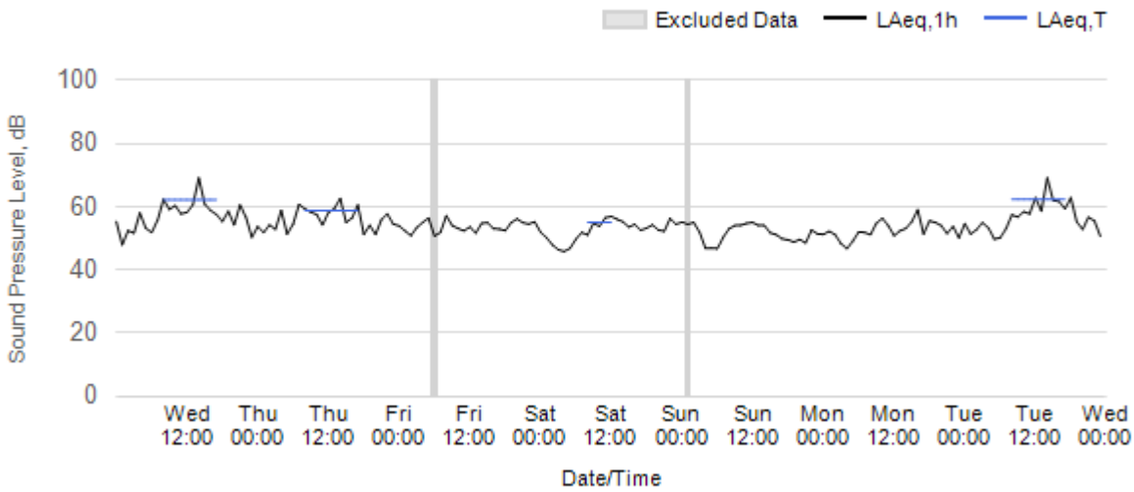

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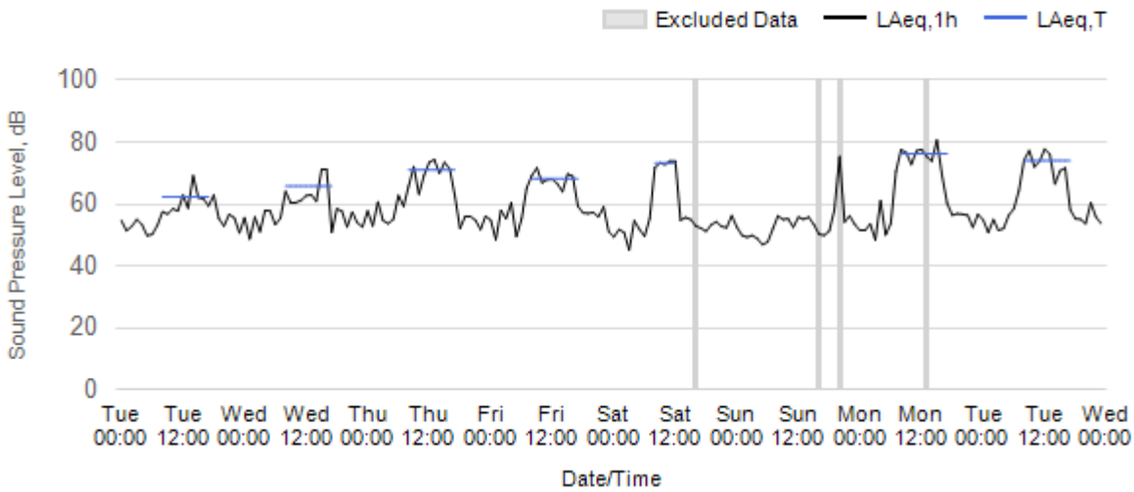

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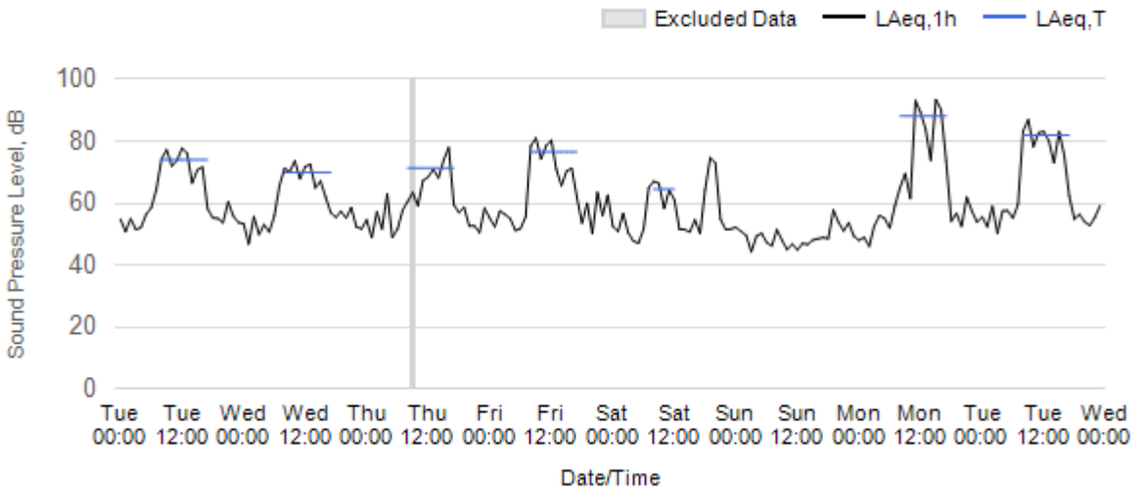

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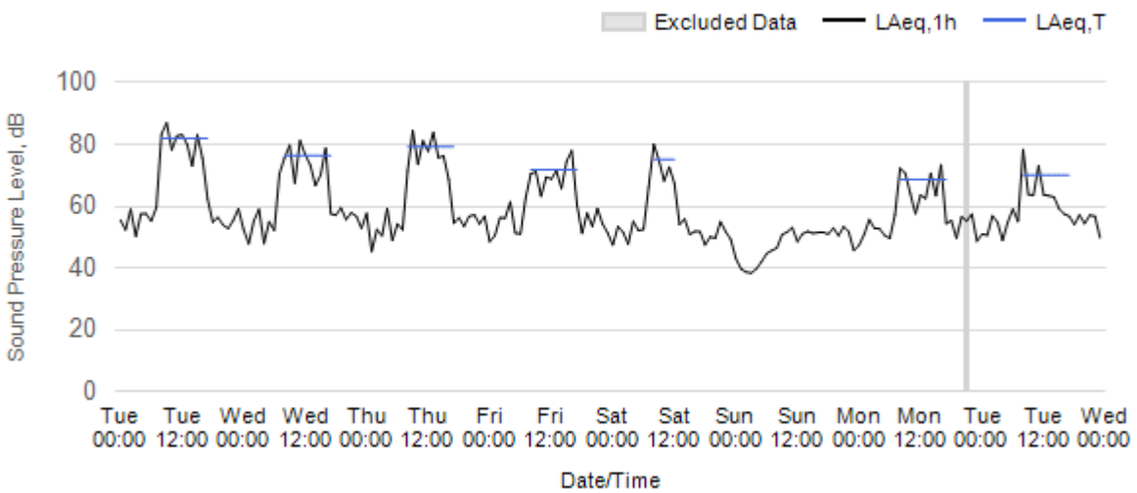

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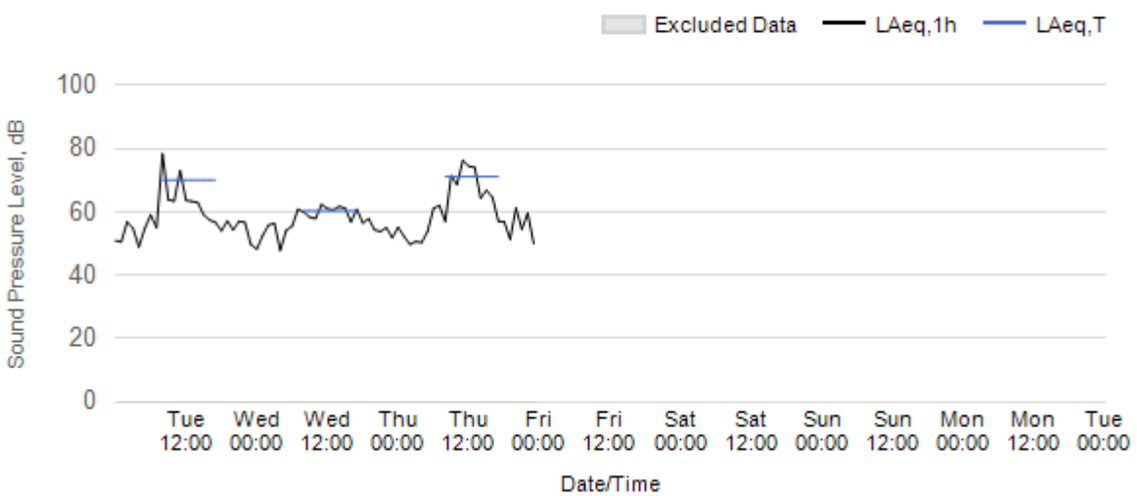

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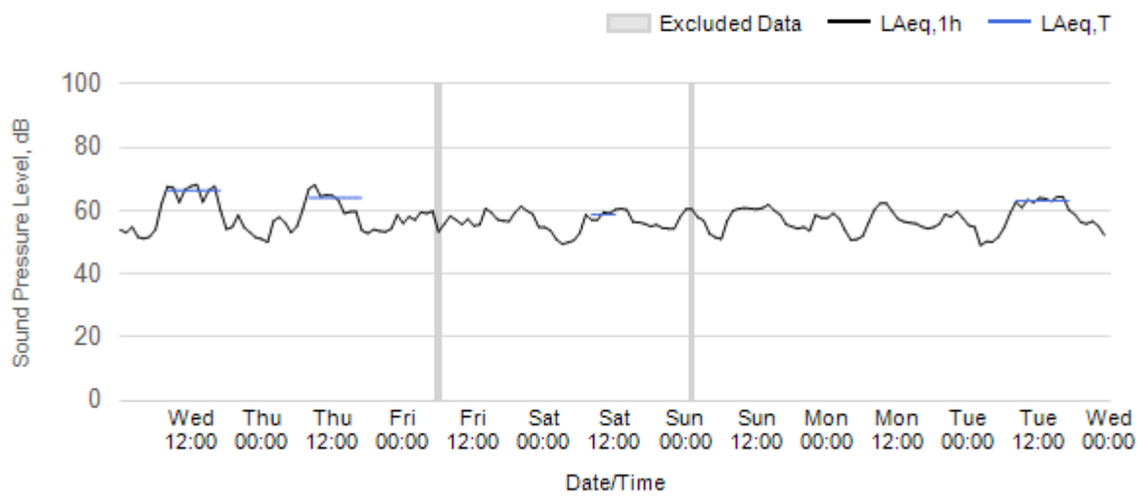
Worksite: FIC Monitoring Ref: N042 01 April 2026 to 07 April 2026



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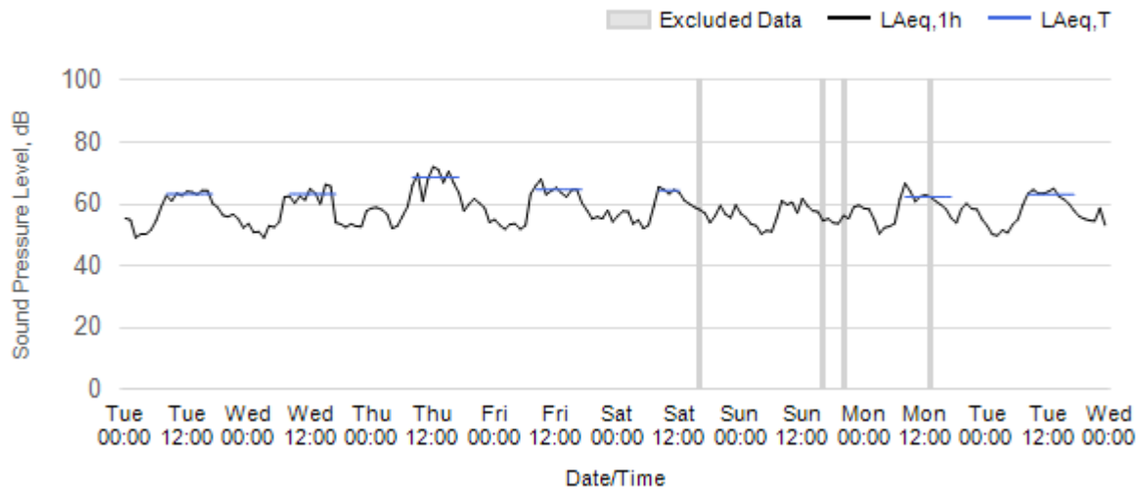

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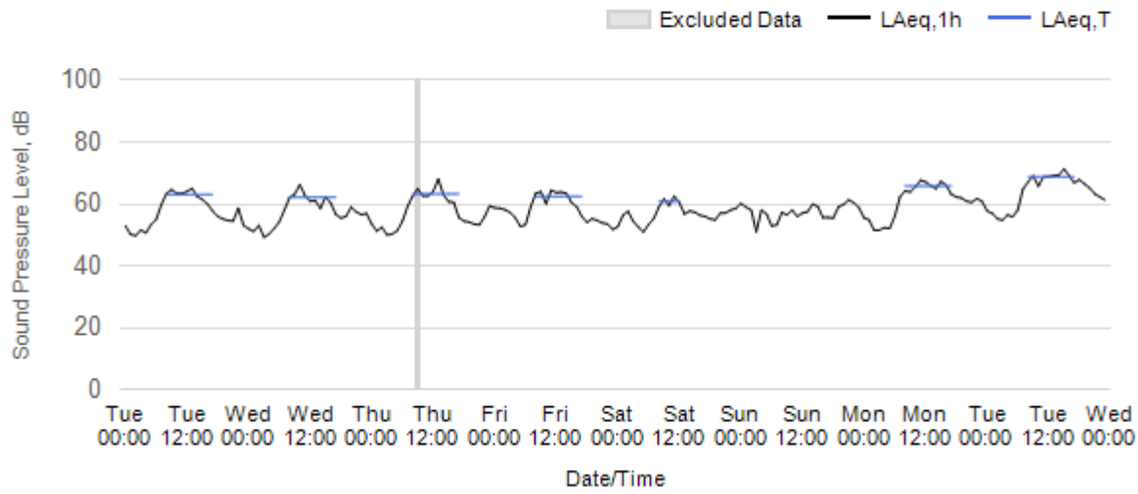

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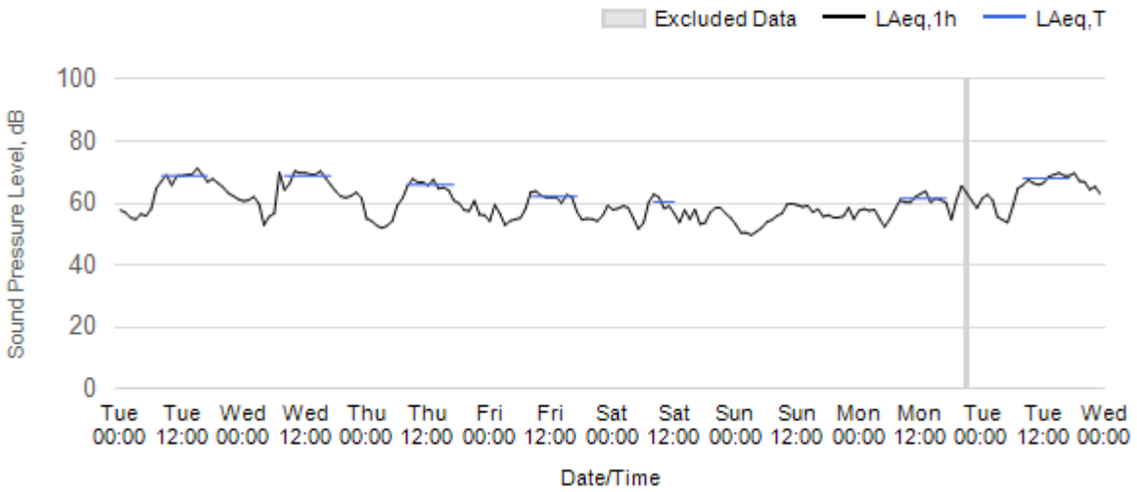

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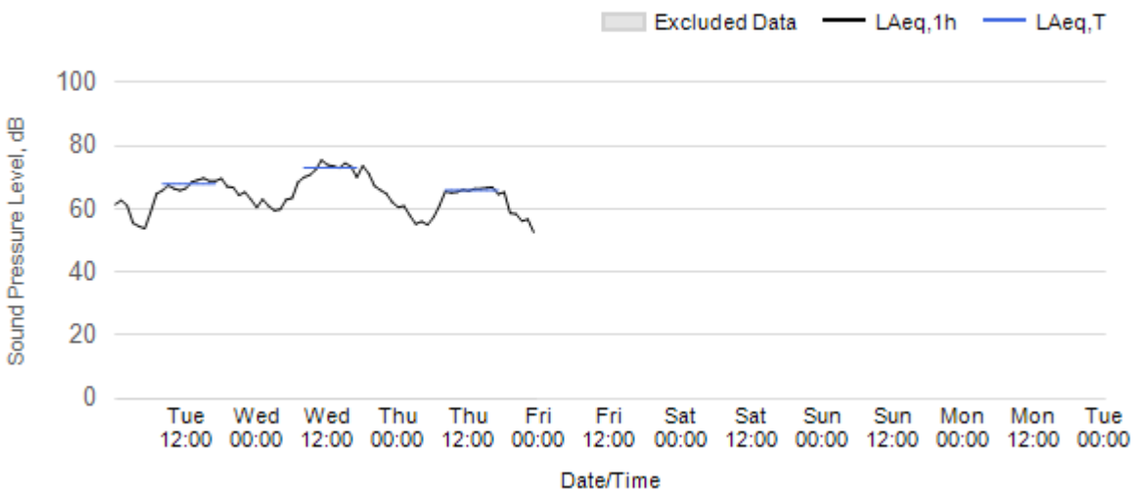

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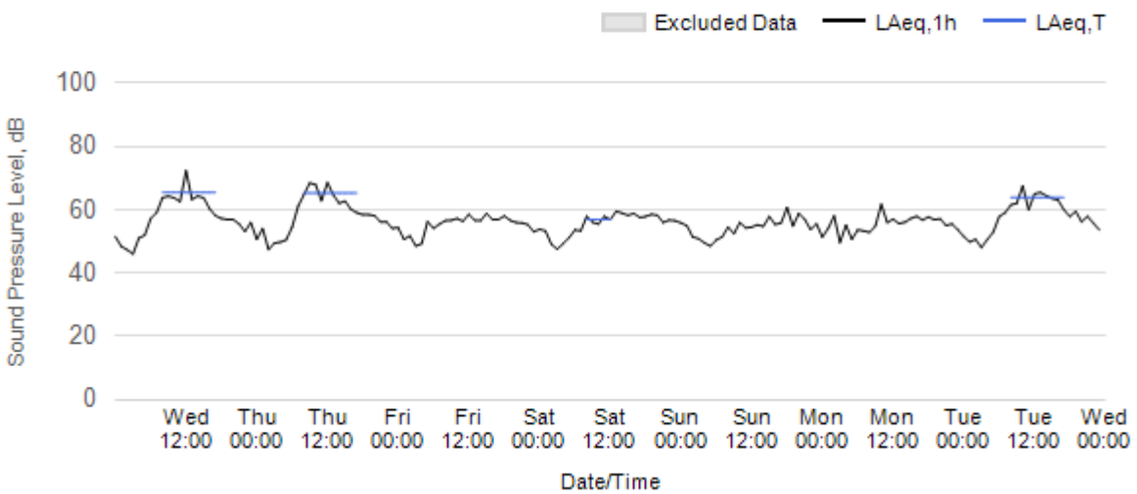
Worksite: OOC Monitoring Ref: OOC-N02 01 April 2026 to 07 April 2026



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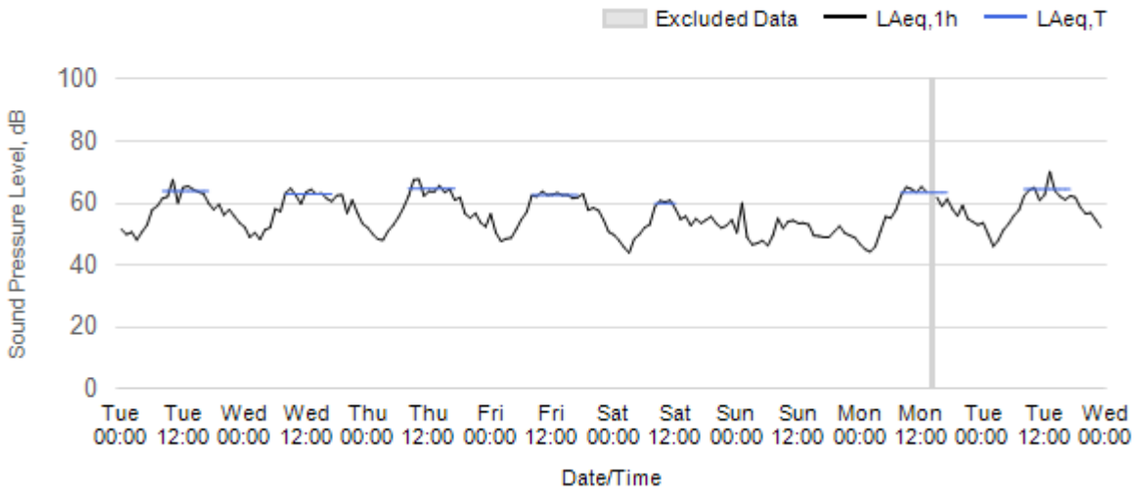

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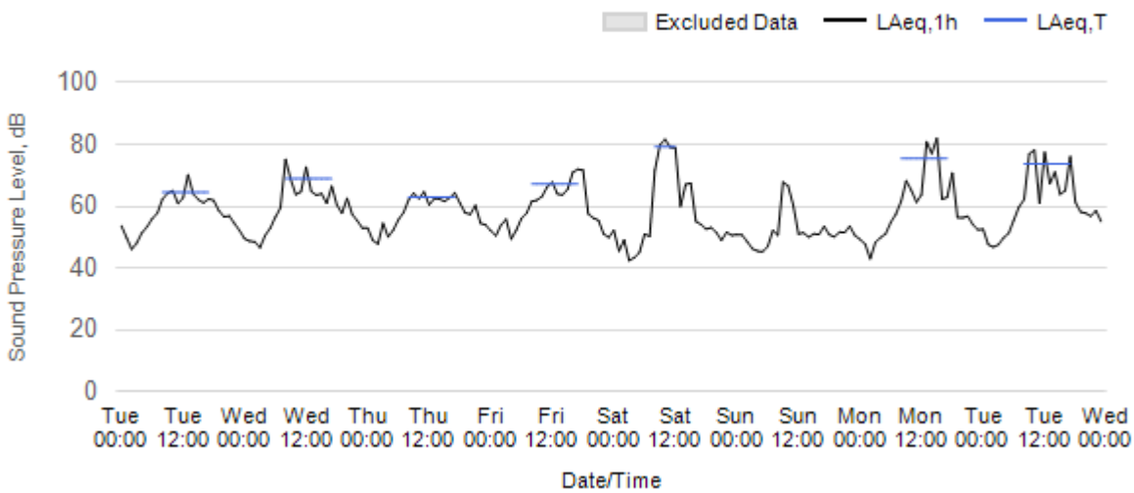

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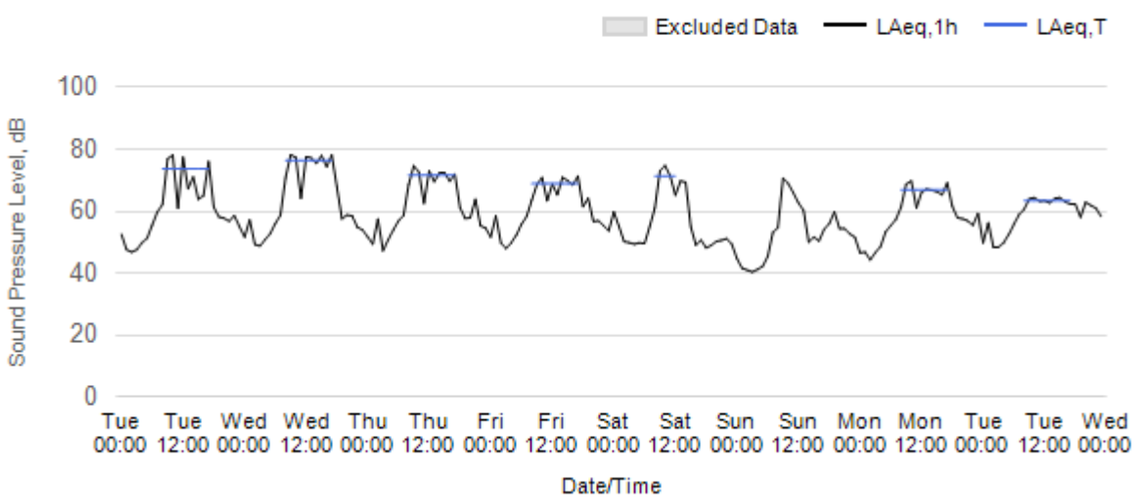

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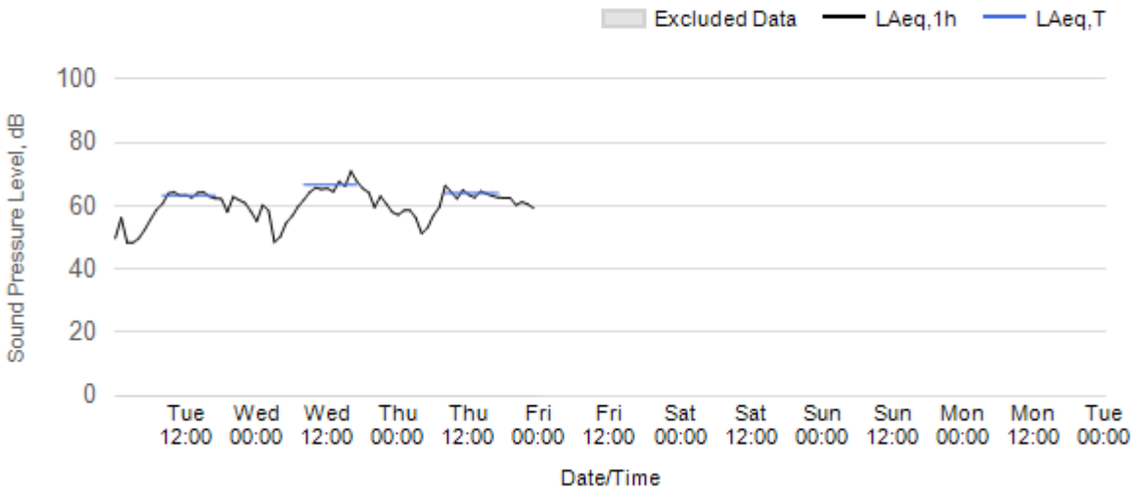
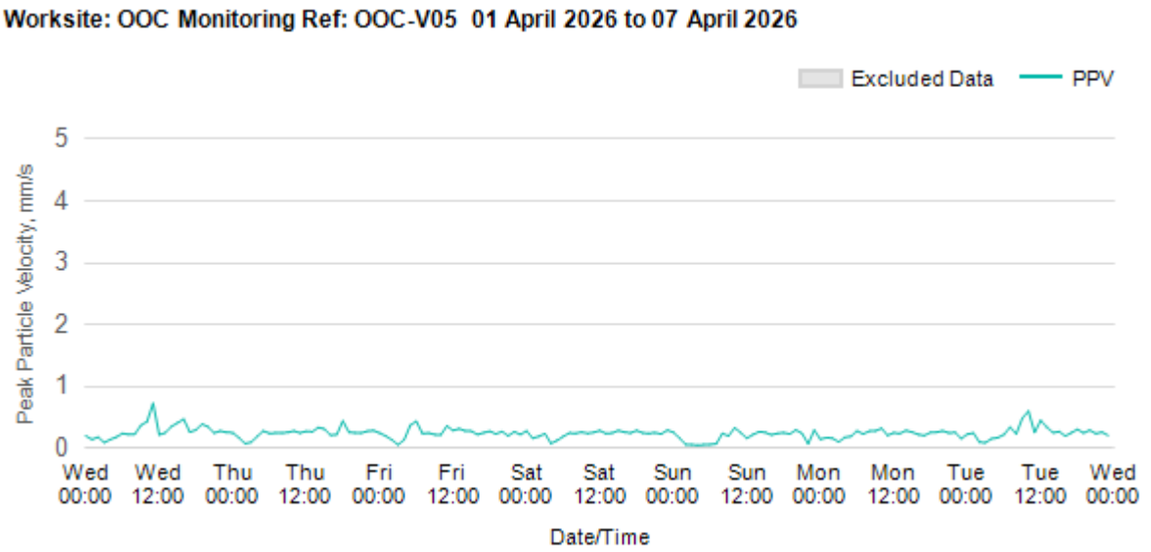
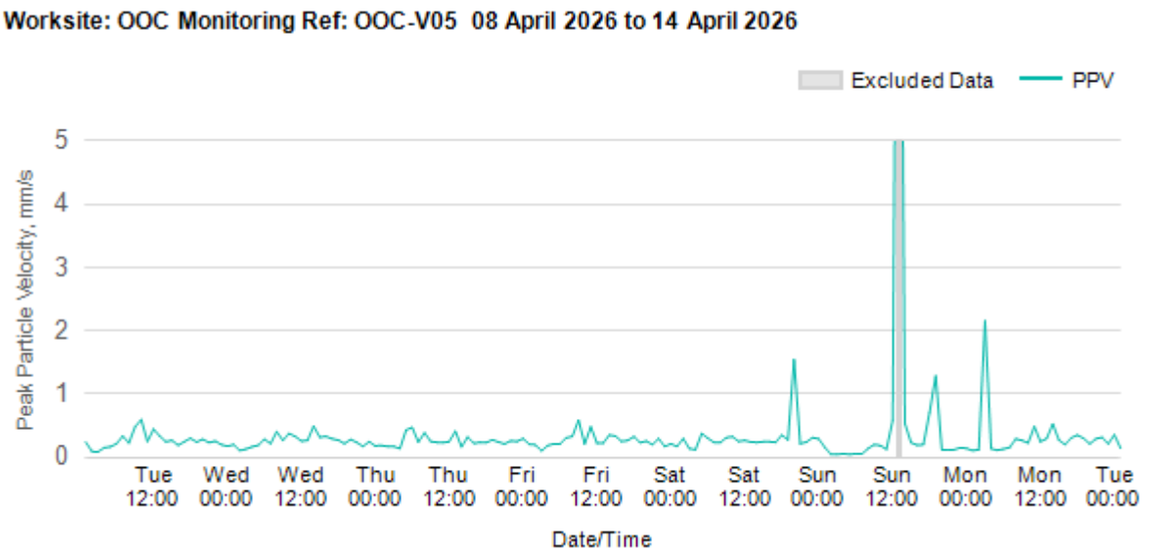


Vibration

The following graphs show the hourly measured peak particle velocity PPV recorded during the monitoring period. The graphs show the resultant PPV due to vibration components on three orthogonal axis x, y and z. Where high values of PPV were caused by local interference with the vibration monitor, which are not representative of HS2 construction works, these values have been greyed out in the following charts and have been excluded to calculate values in Table 4 of the main report.

Worksite: OOC - Monitoring Ref: OOC-V05





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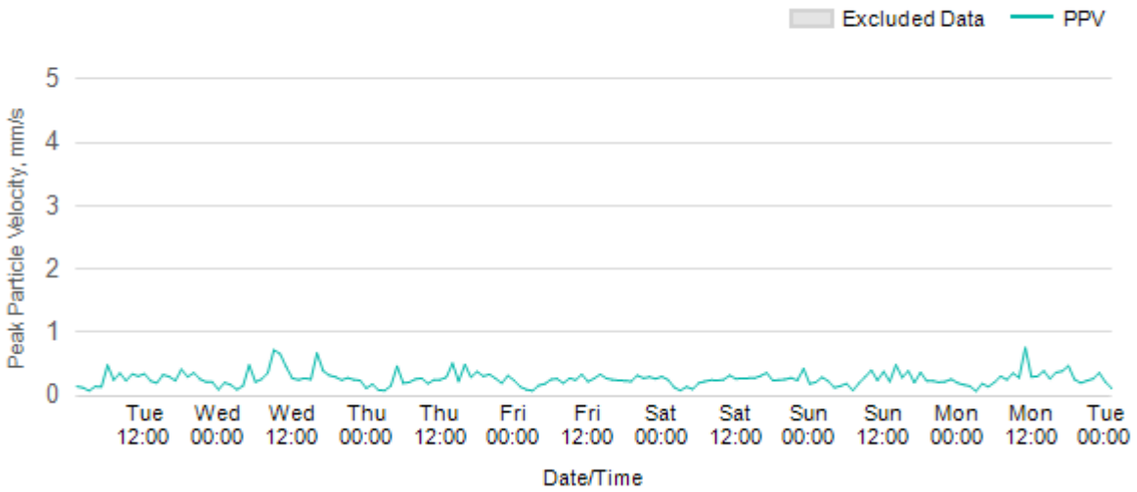

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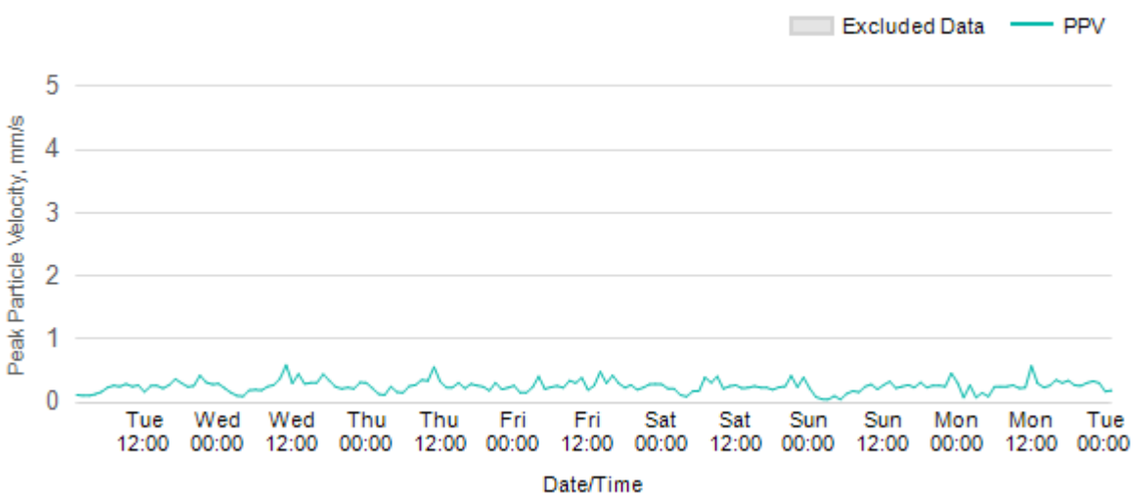

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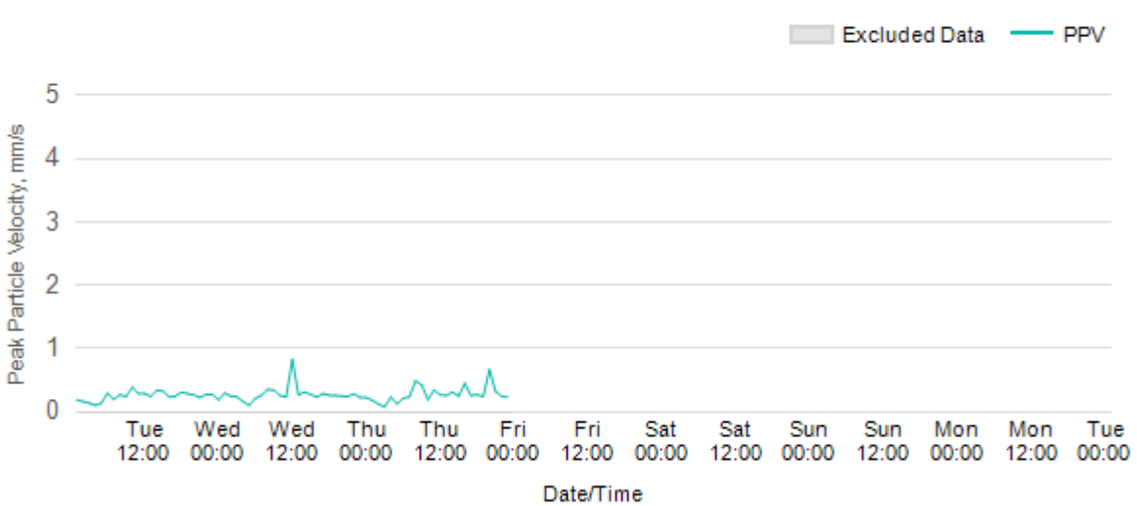

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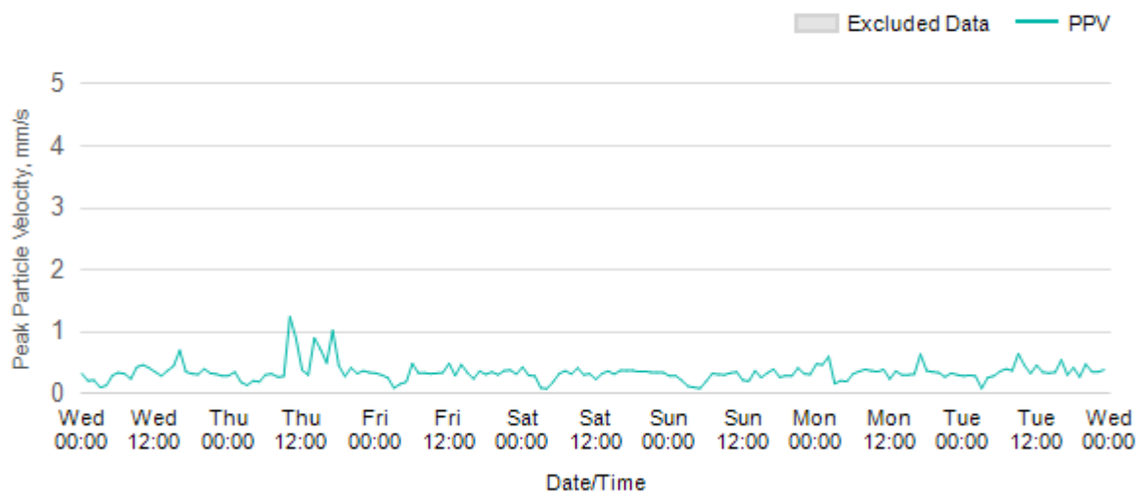
Worksite: OOC Monitoring Ref: OOC-V03 01 April 2026 to 07 April 2026



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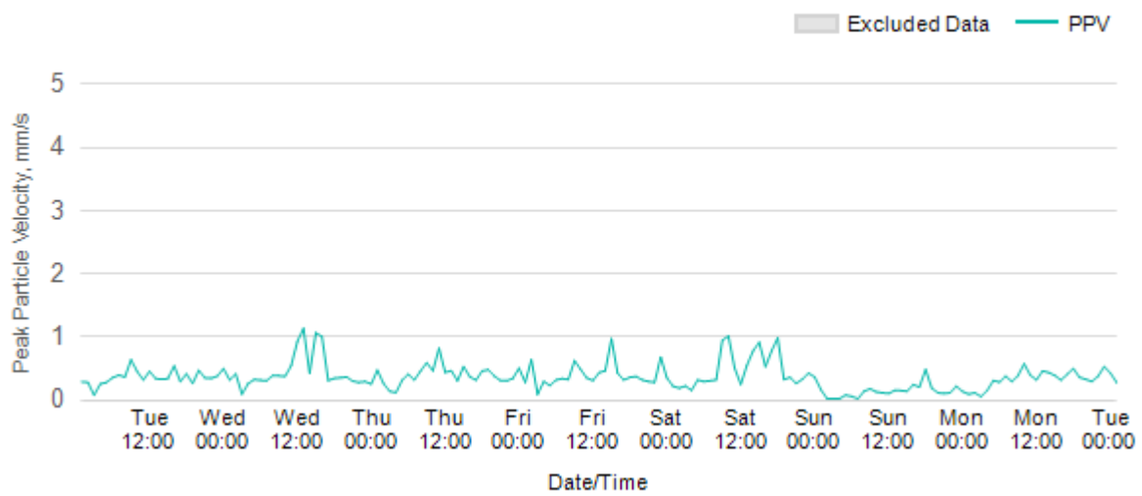

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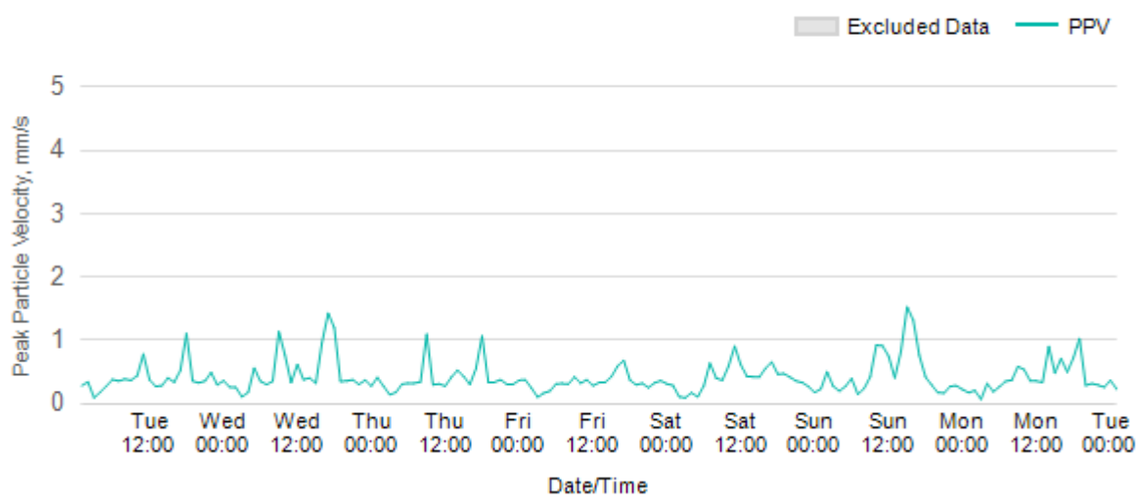

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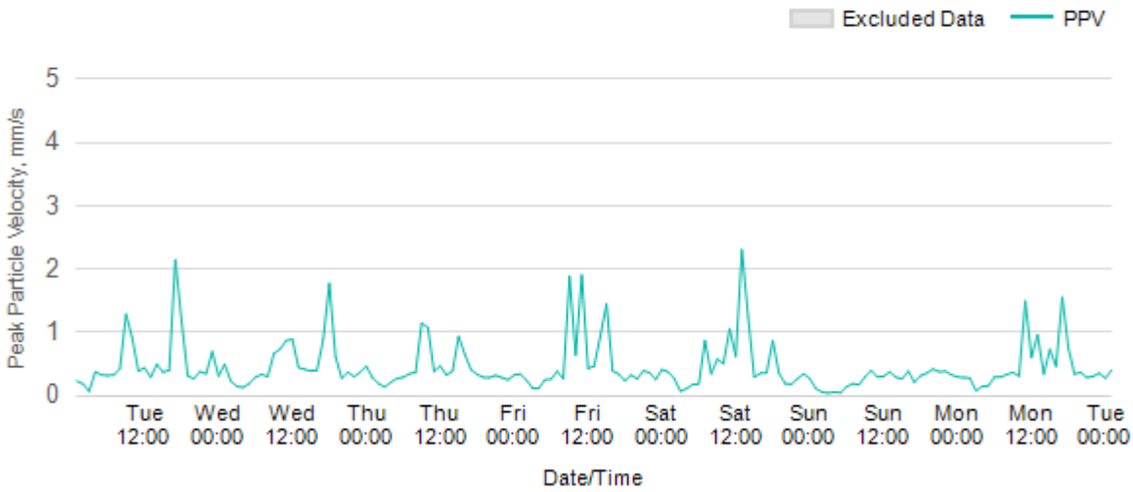

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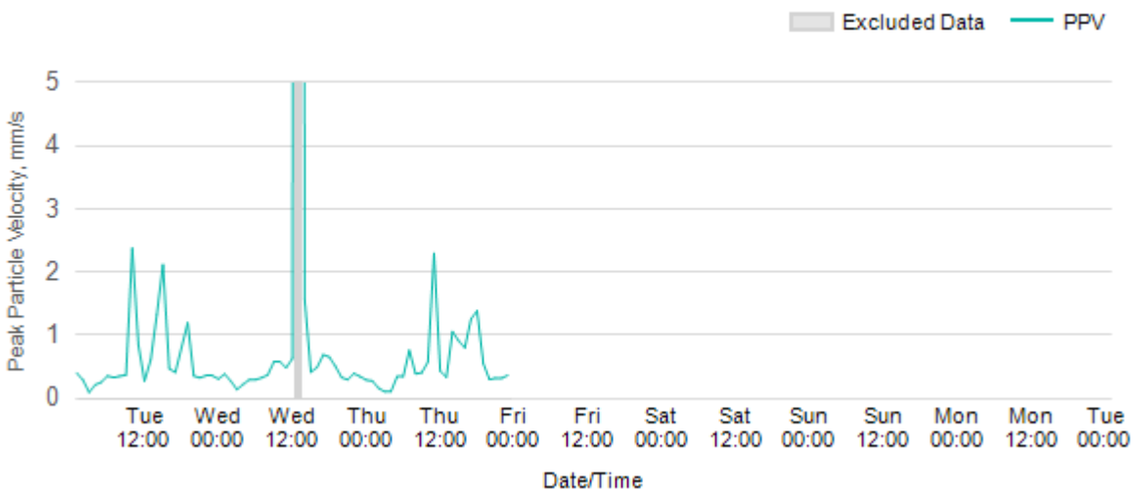
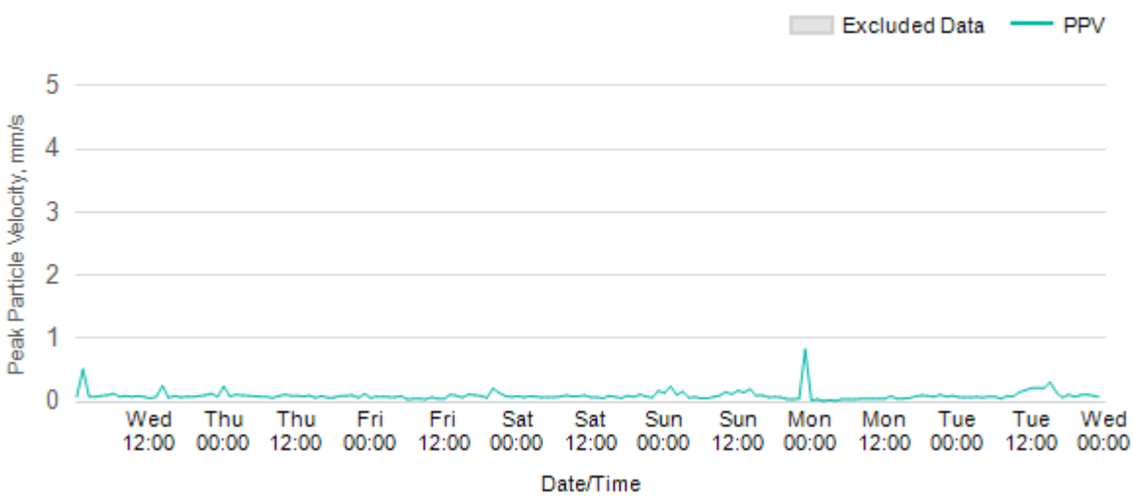


Worksite: GPWVS - Monitoring Ref: V053

Worksite: GPWVS Monitoring Ref: V053 01 April 2026 to 07 April 2026



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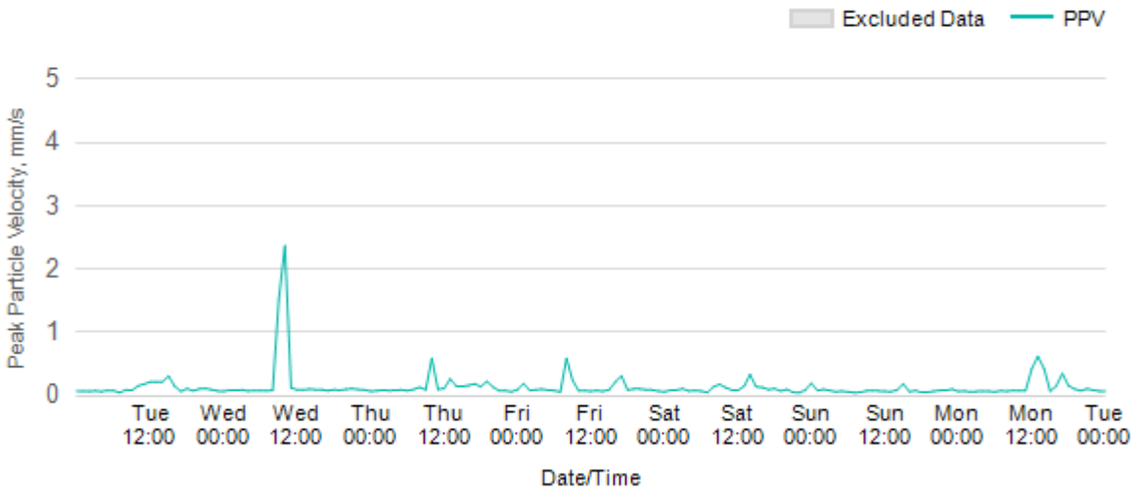

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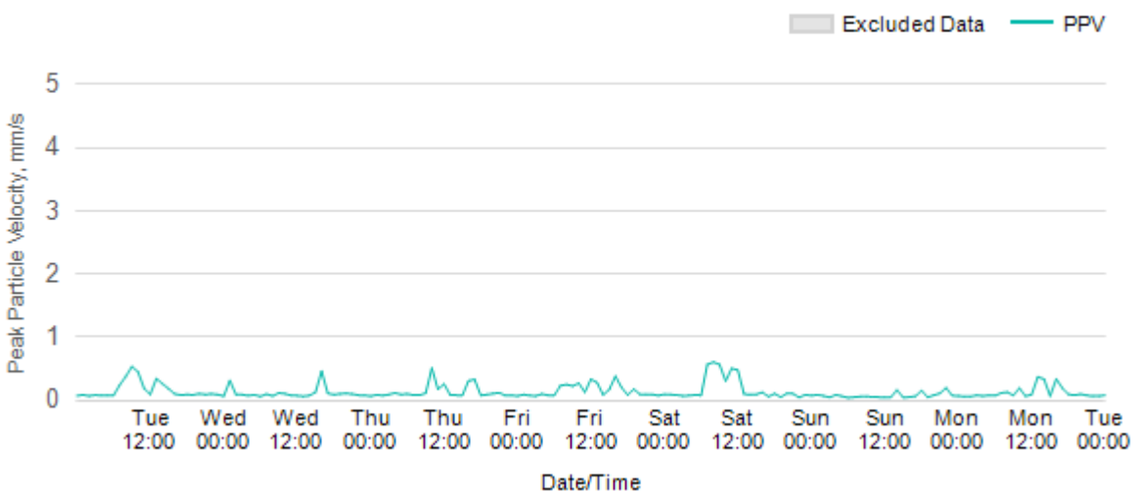

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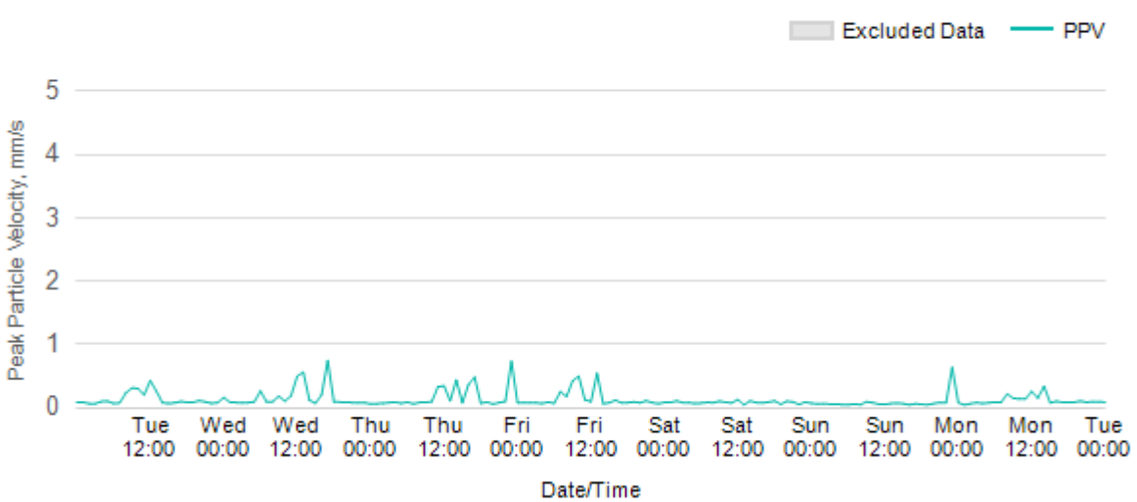

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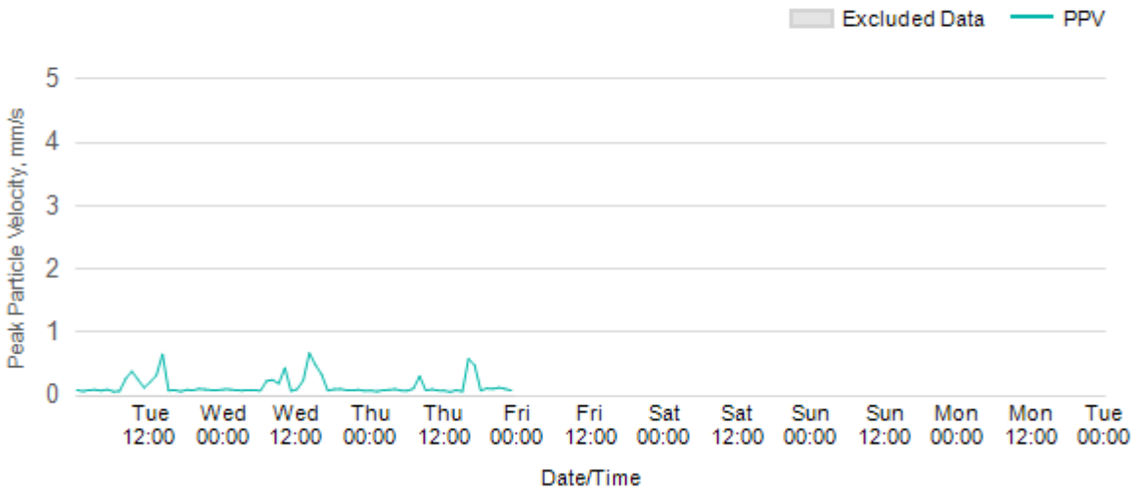

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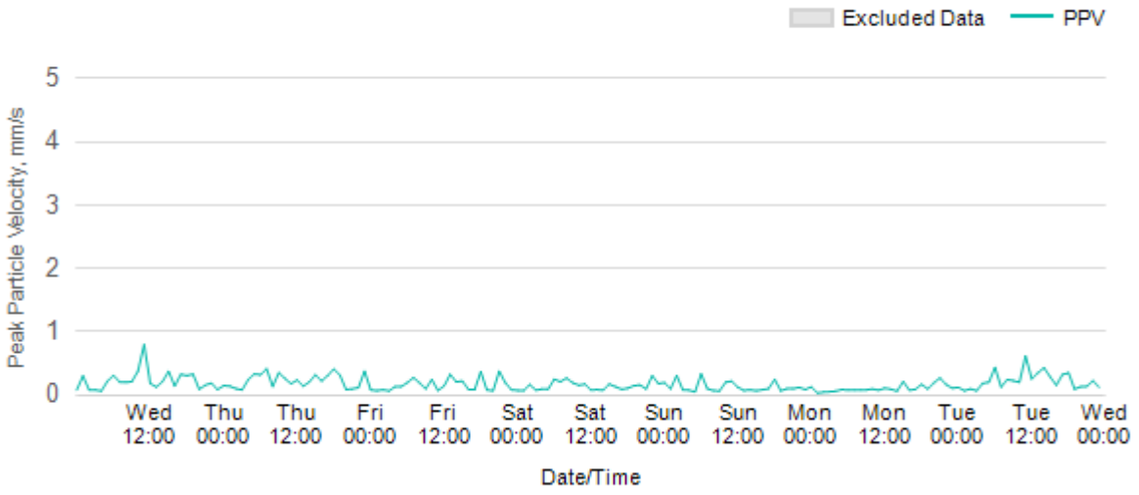

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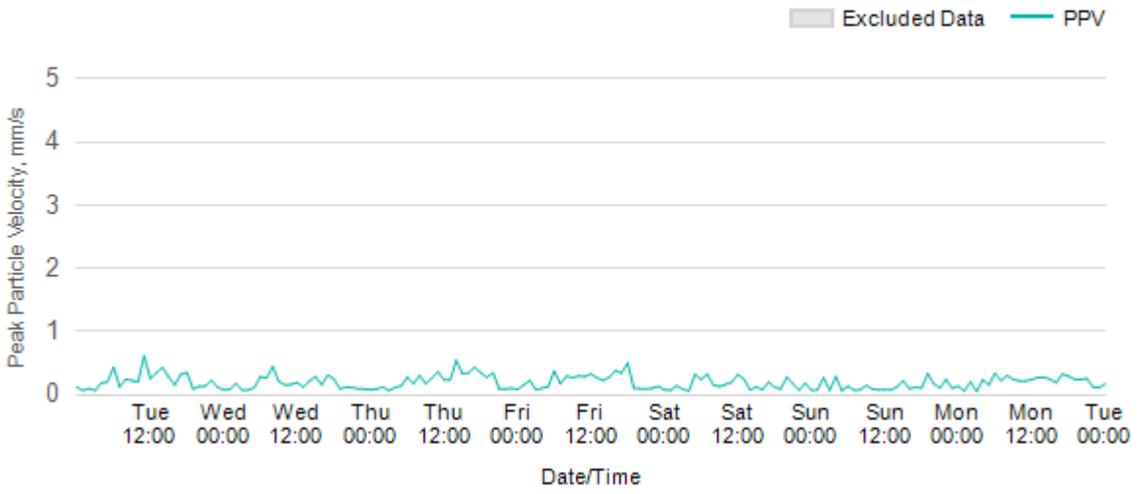

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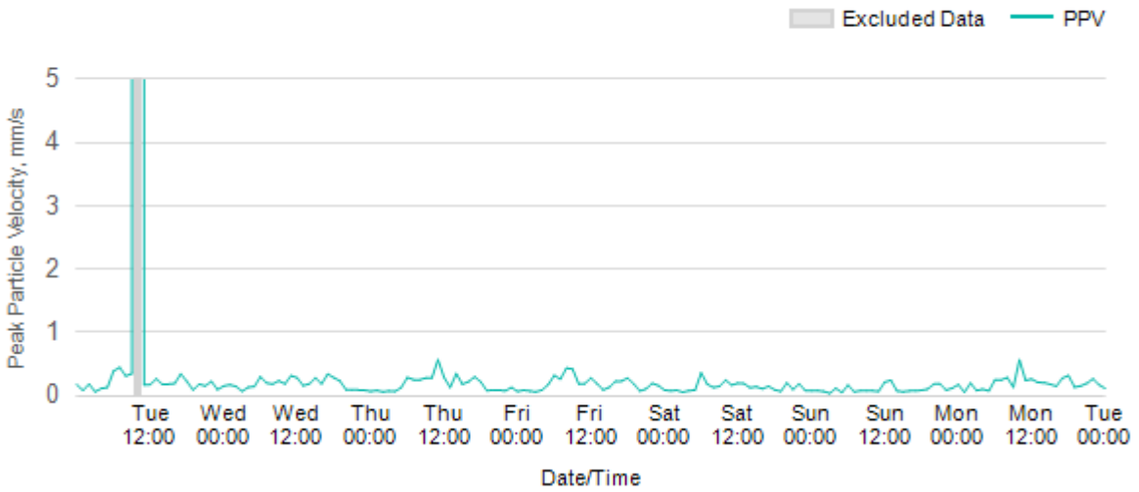

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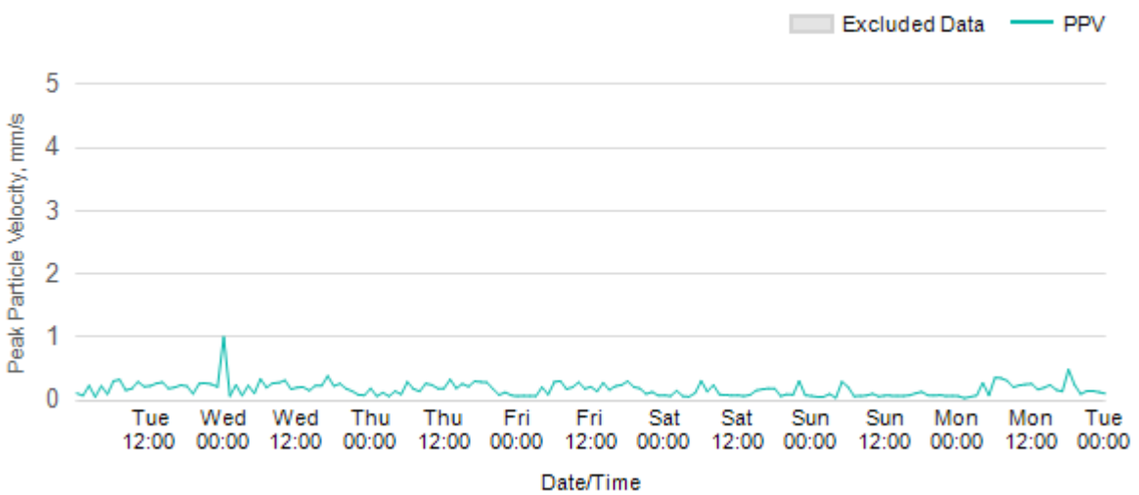

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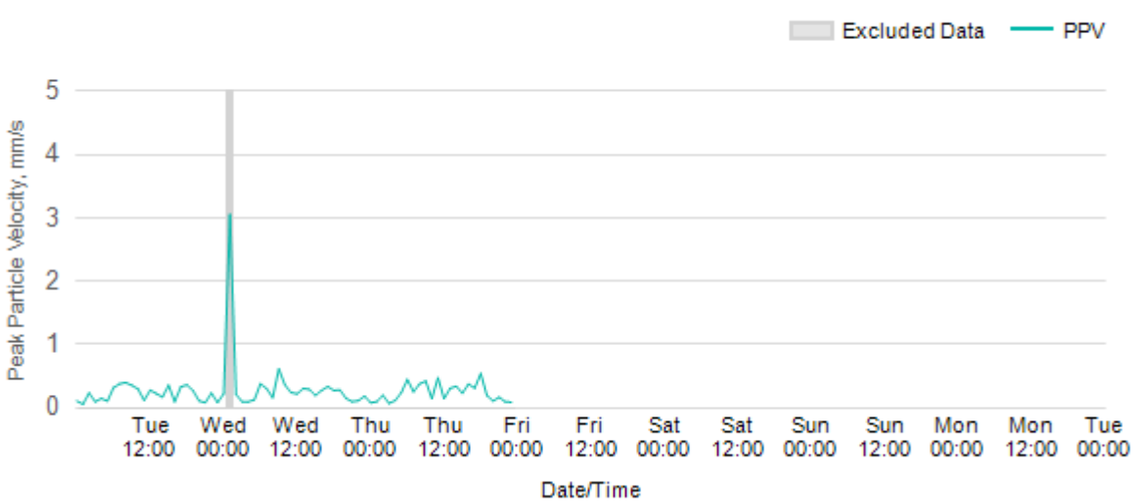

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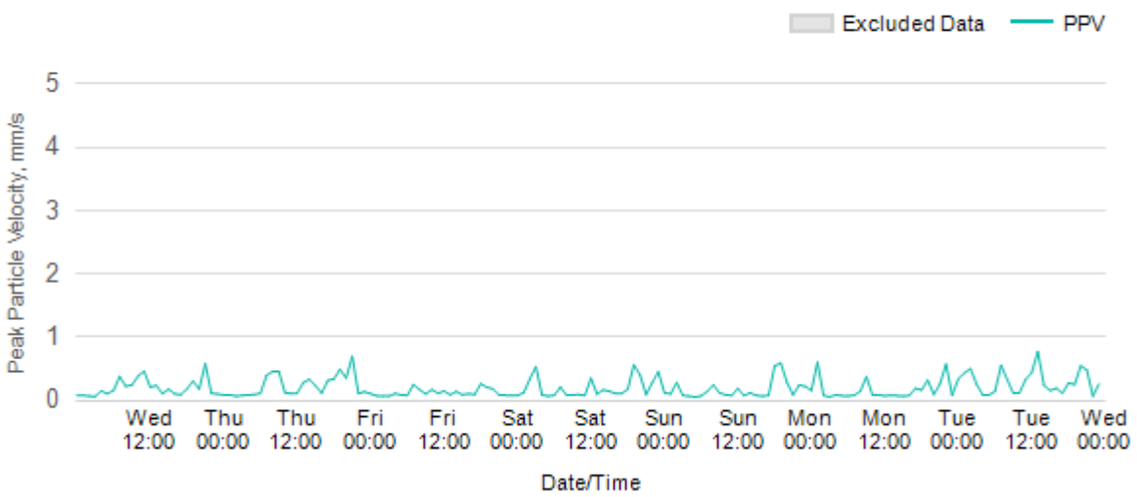

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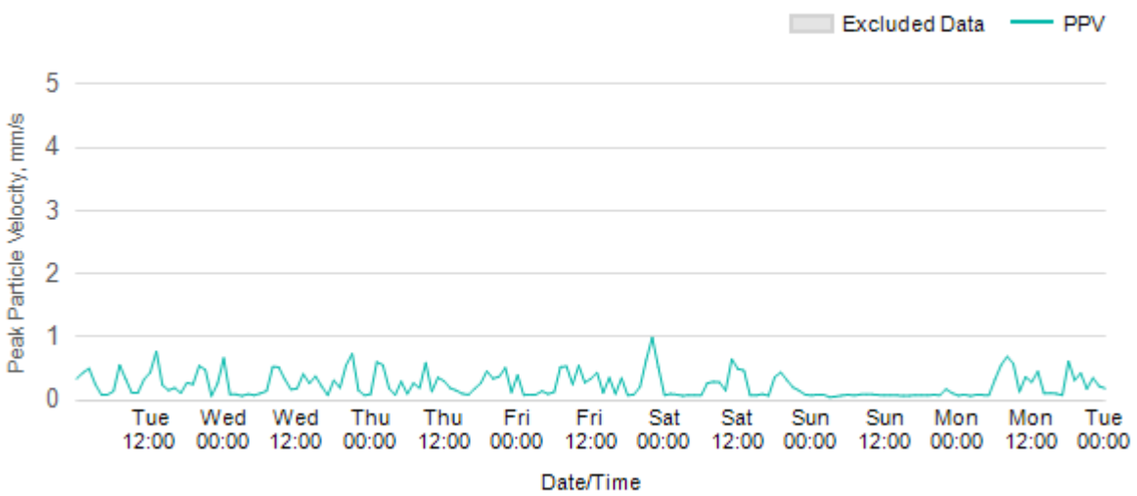

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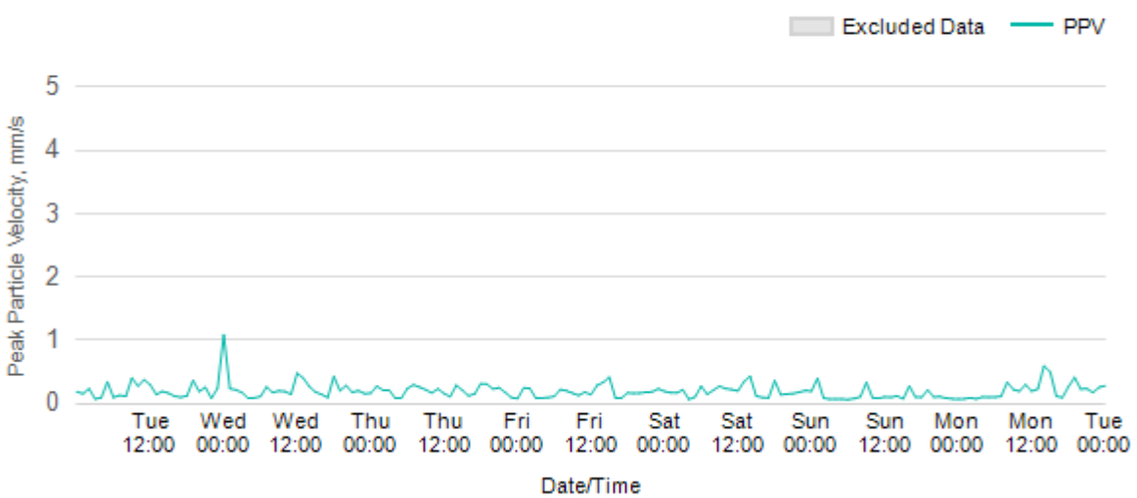

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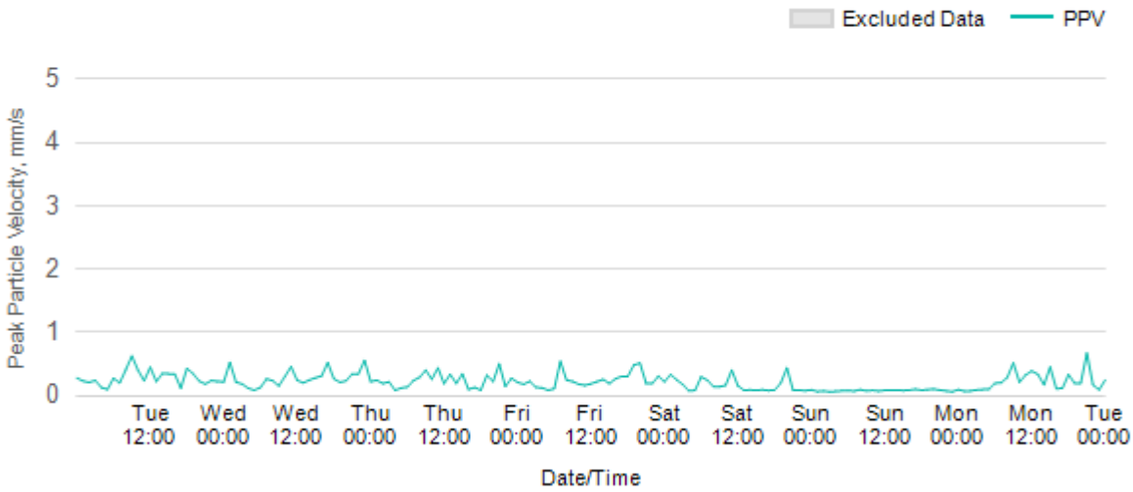

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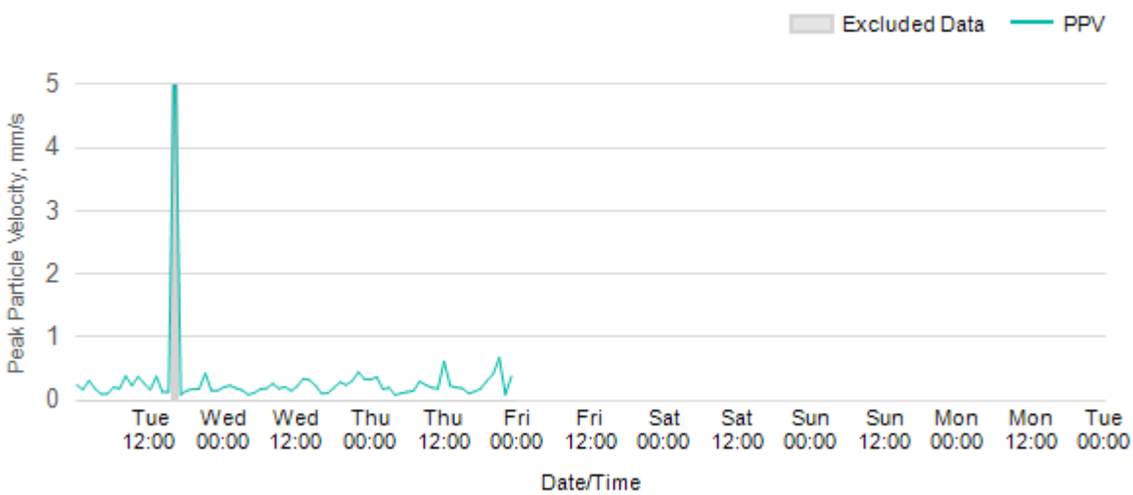

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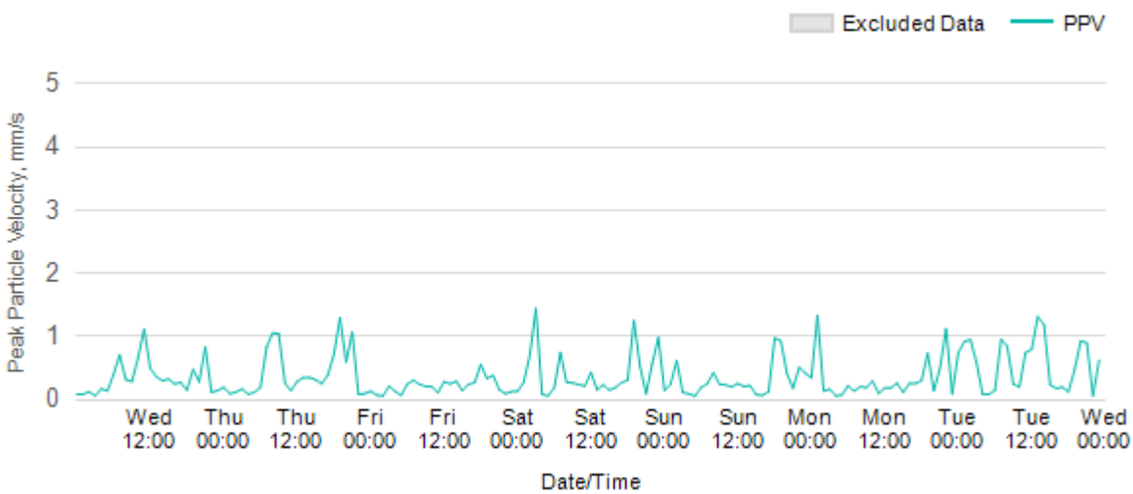
Worksite: WET Monitoring Ref: V052b 01 April 2026 to 07 April 2026



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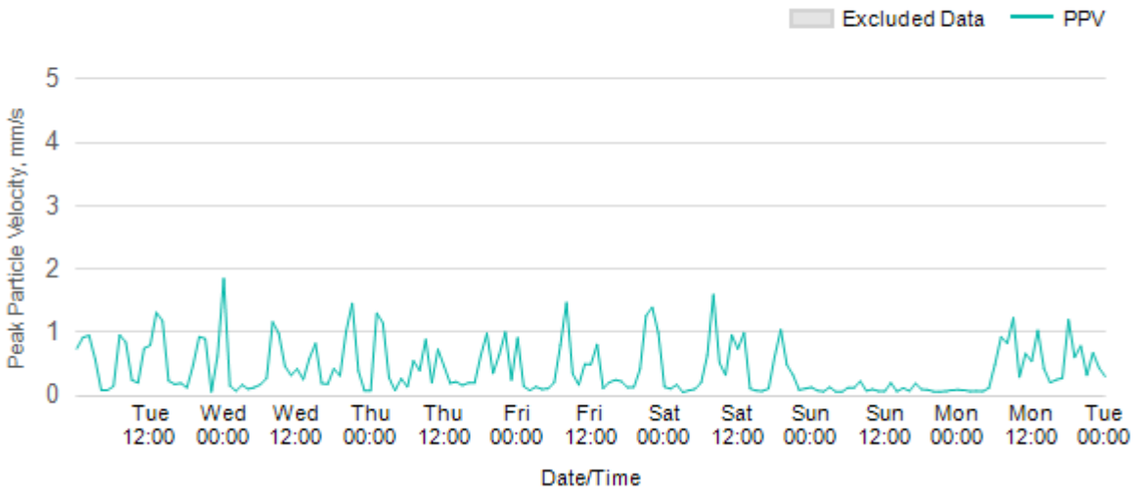

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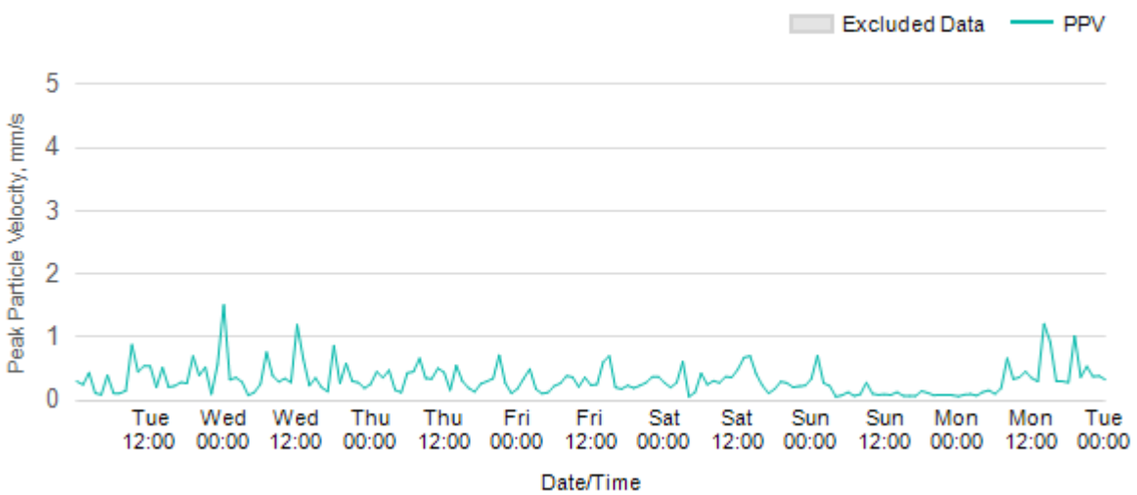

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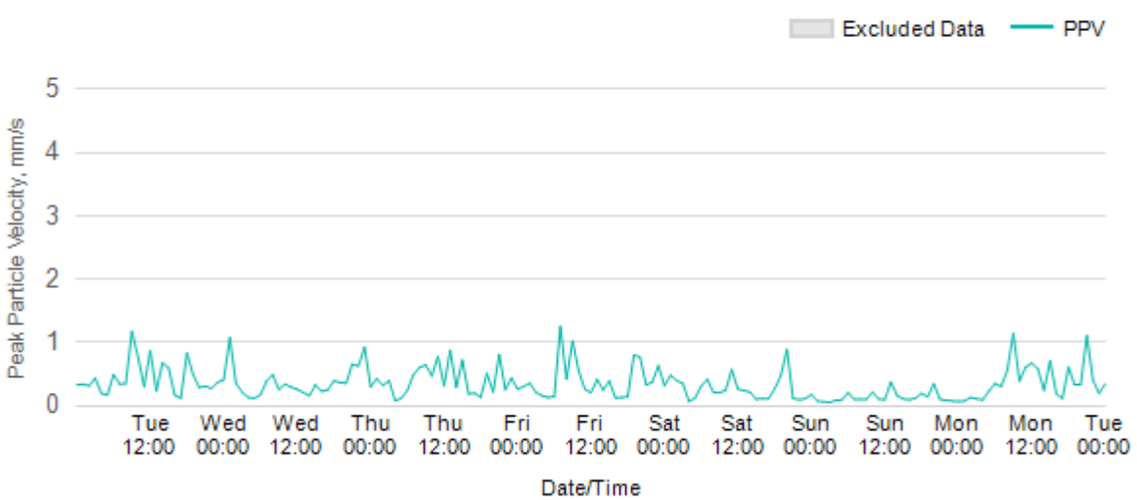

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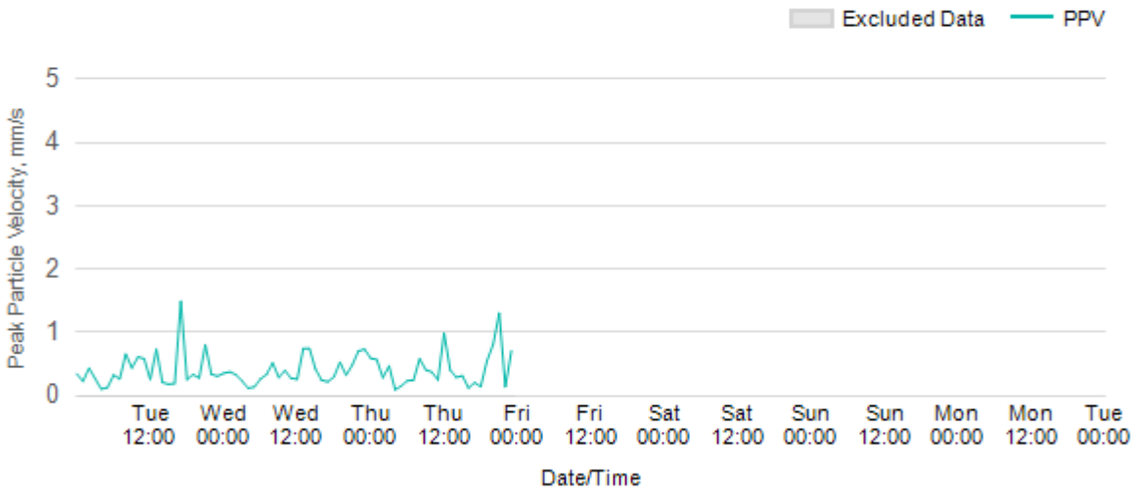
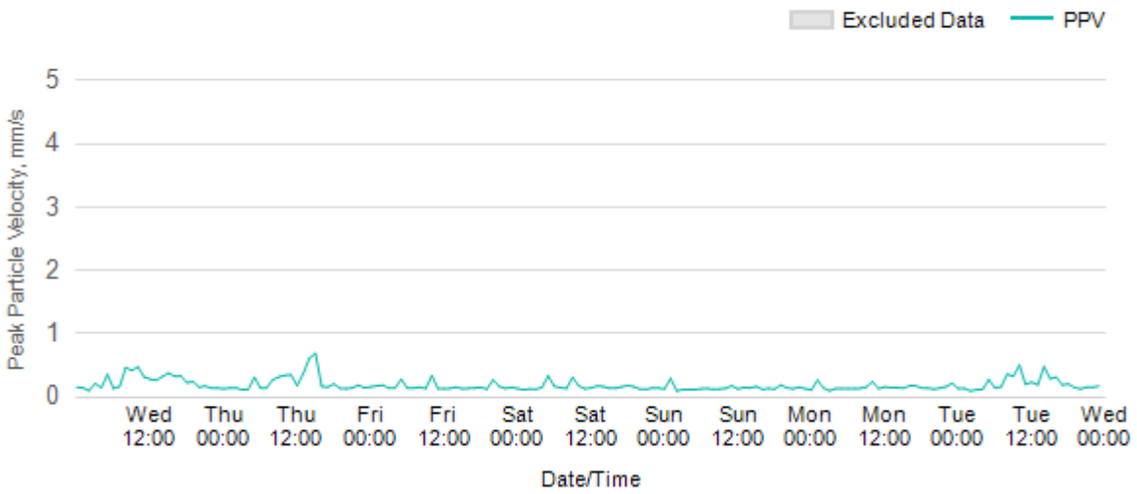
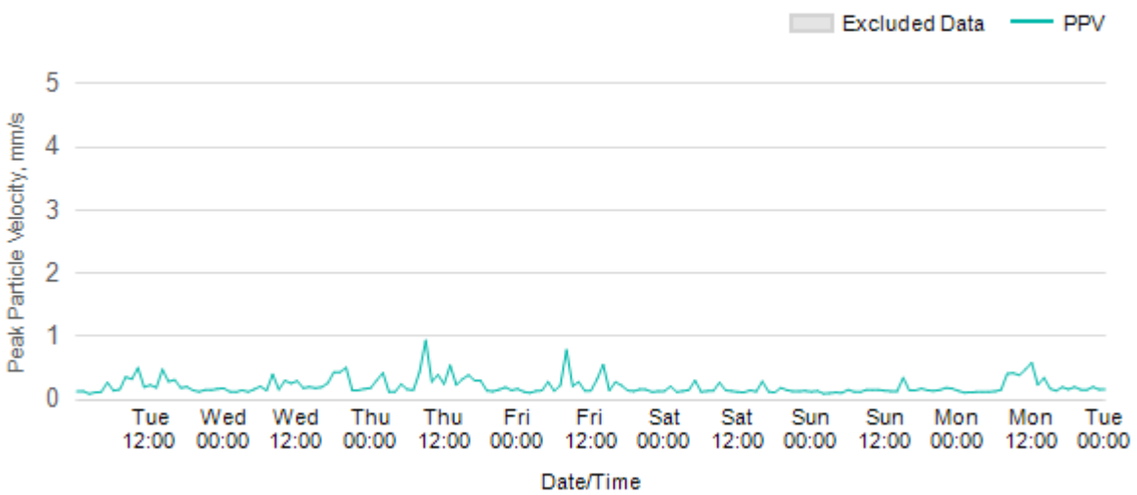


Worksite: MRVS - Monitoring Ref: V056a

Worksite: MRVS Monitoring Ref: V056a 01 April 2026 to 07 April 2026



Worksite: MRVS Monitoring Ref: V056a 08 April 2026 to 14 April 2026



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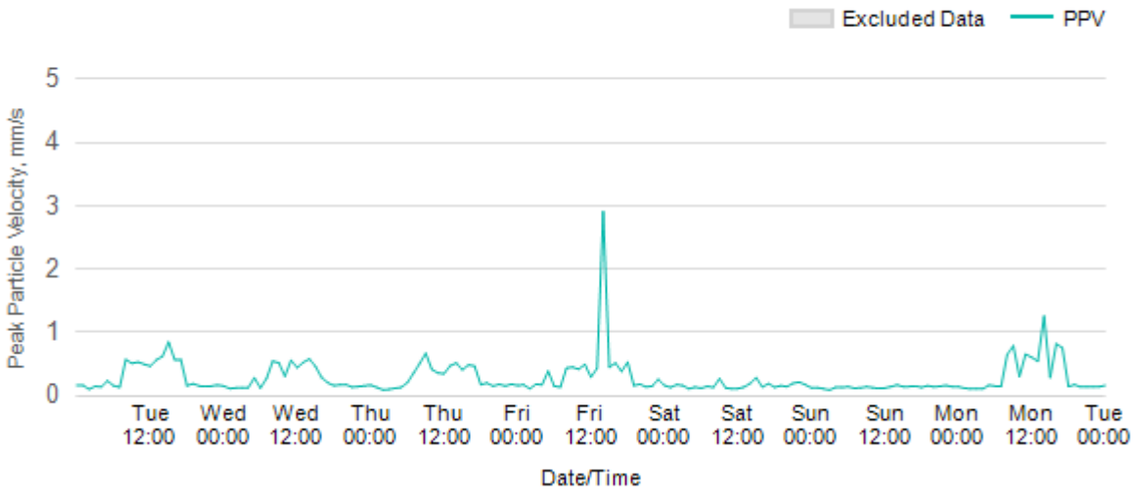
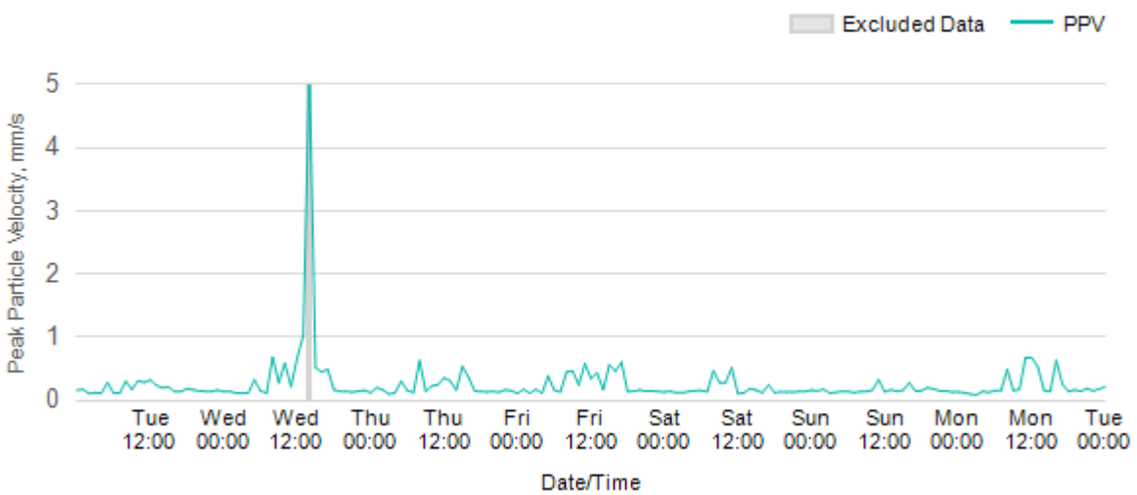


Worksite: MRVS Monitoring Ref: V056a 22 April 2026 to 28 April 2026



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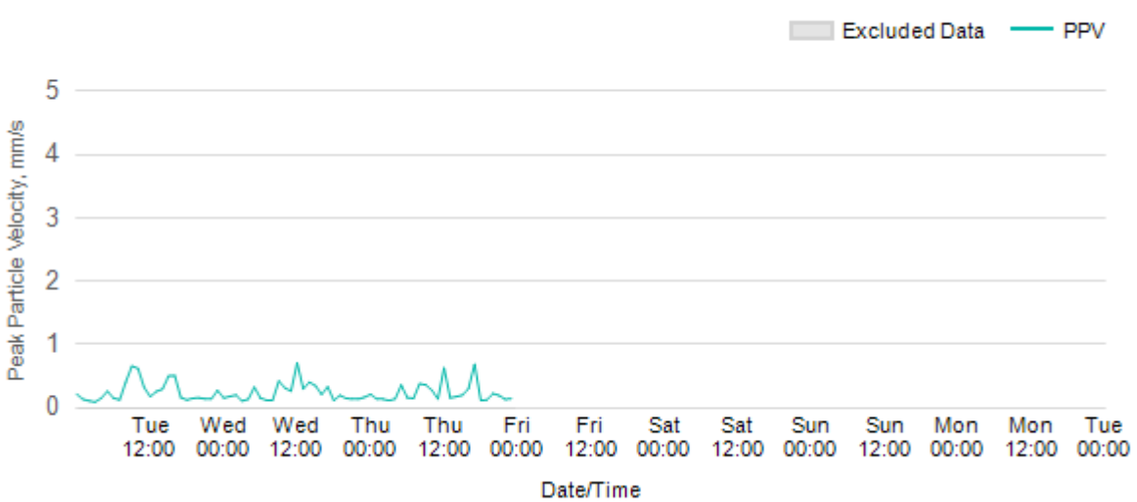
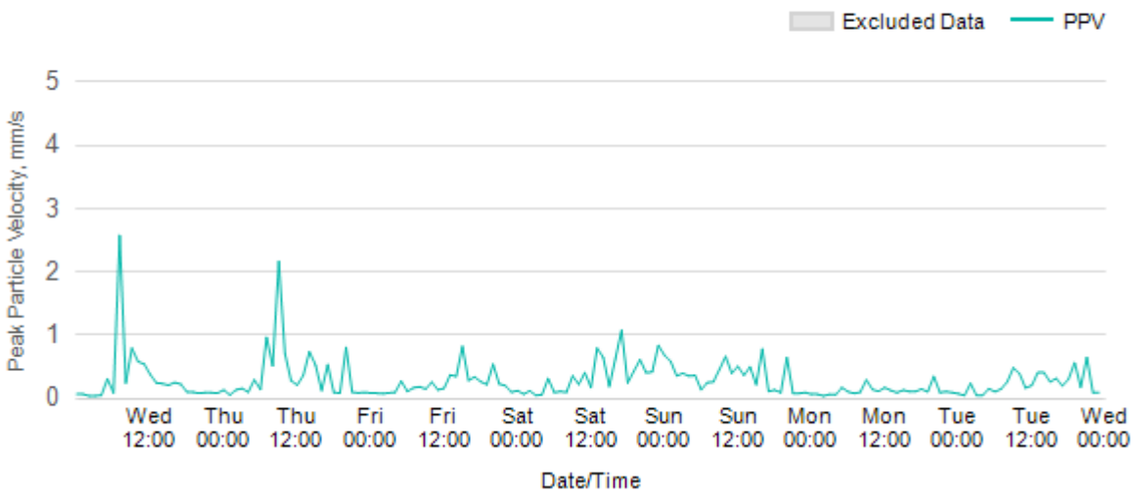


Worksite: MRVS - Monitoring Ref: V055b

Worksite: MRVS Monitoring Ref: V055b 01 April 2026 to 07 April 2026



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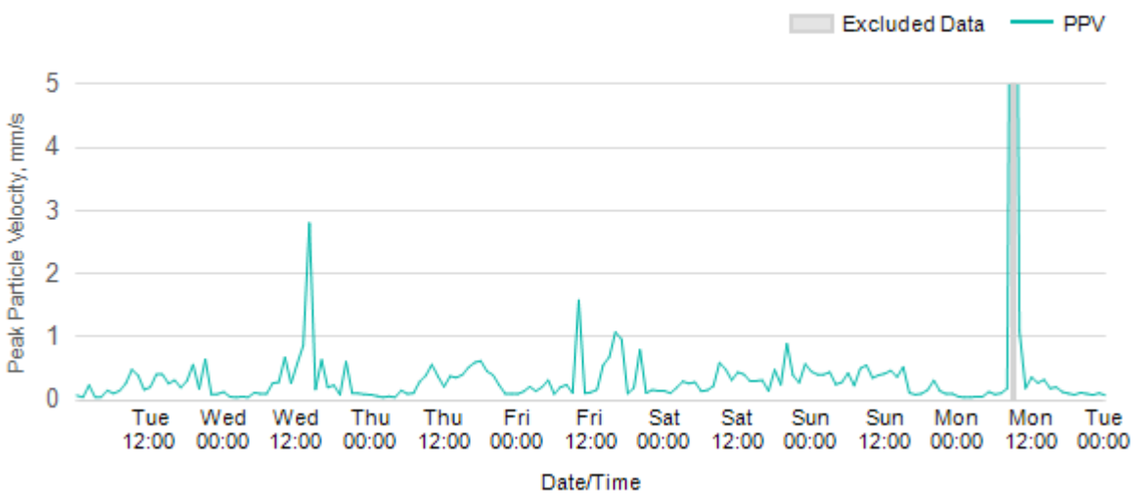

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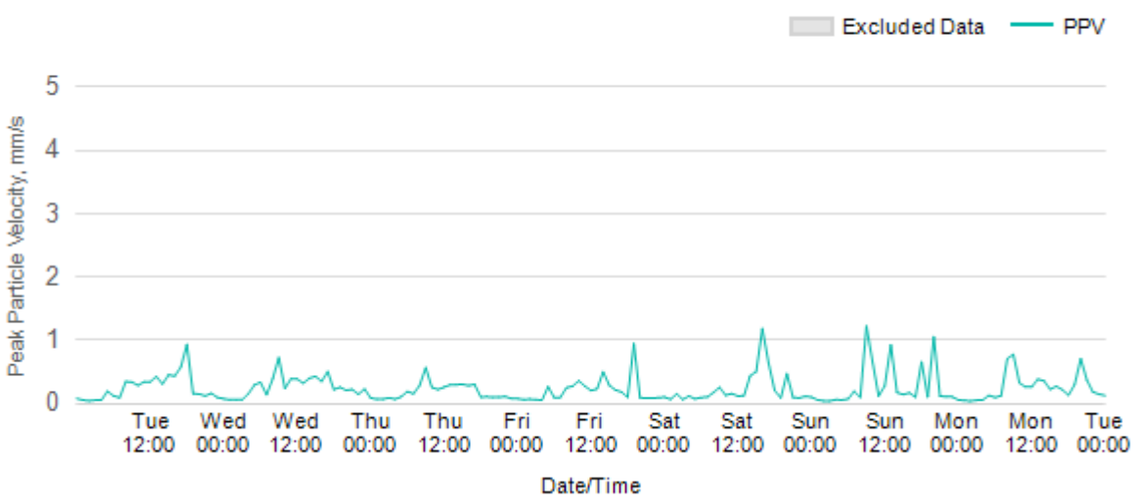

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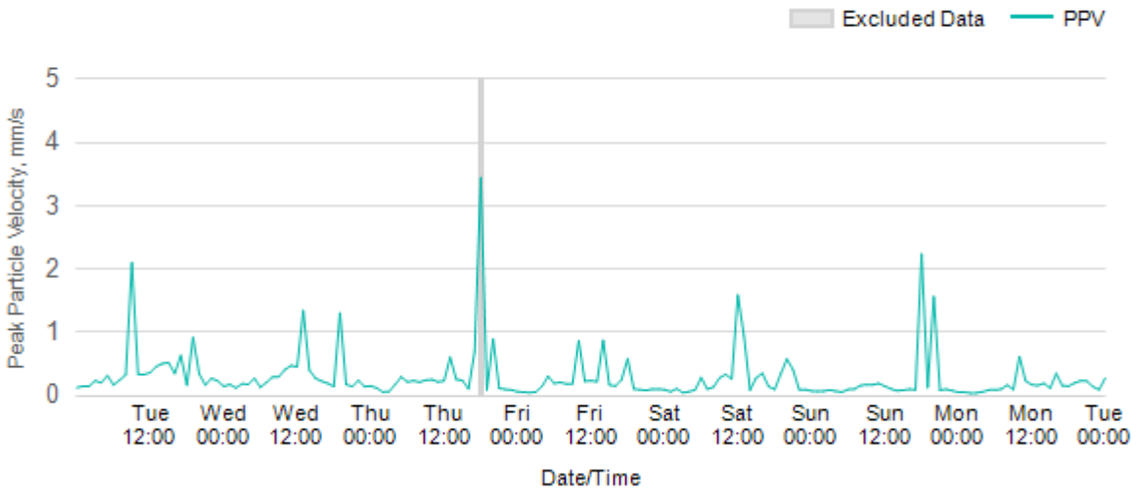

Worksite: MRVS Monitoring Ref: V055b 29 April 2026 to 5 May 2026