

Construction noise and vibration Monthly Report – May 2026

Buckinghamshire Council

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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 Buckinghamshire Council during the month of May 2026.

Within this period monitoring was undertaken at the following worksites:

- Noise and vibration were undertaken in the vicinity of West Street Overbridge worksite, (ref.: WSO) where structure works were underway.
- Noise and vibration were undertaken in the vicinity of Aylesbury Golf Course worksite (ref.: GC) where landscaping, earthworks, wing-wall reinforcement works, installation of welding shelter and concrete pours for east and west wingwalls were underway.
- Noise and vibration were undertaken in the vicinity of Chalfont St Peter Vent Shaft worksite (ref.: CSP) where landscaping, stockpile management and temporary access road removal works were underway.
- Noise and vibration were undertaken in the vicinity of Twyford worksite (ref.: TW) where cutting - reinstatement of batter toes, wingwall foundation concrete works, formwork installation, falsework installation, waterproofing, noise barrier wingwall works, steel fixing activities, concrete pours, deliveries, landscaping, operation and maintenance of site access and mass haul road and water management / pumping activities were underway.
- Noise and vibration were undertaken in the vicinity of Rocky Lane Embankment worksite (ref.: RLE) where culvert waterproofing works, in-situ concrete works and concrete surface repairs works were underway.
- Noise and vibration were undertaken in the vicinity of Woodlands worksite (ref.: WDL) where structure works and earthworks were underway.
- Noise and vibration were undertaken in the vicinity of Nash Lee Lane worksite (ref.: NLL) where overbridge deck construction & finishing activities, earthworks, drainage works and road construction works were underway.
- Noise and vibration were undertaken in the vicinity of Wendover Dean Viaduct worksite (ref.: WDV) where reinforced concrete preparation works were underway.
- Noise and vibration were undertaken in the vicinity of Waddesdon worksite (ref.: WAD) where landscaping, earthworks, installation of reinforcement and shutters for abutments, and concreting works were underway
- Noise and vibration were undertaken in the vicinity of Moat Farm Worksite (ref.: MF) where overbridge deck construction, overbridge drainage, wingwall structural backfill, and overbridge steel works were underway.

- Noise and vibration were undertaken in the vicinity of Thame Valley Viaduct worksite (ref.: TVV) where viaduct platform removal, scour protection, waterproofing activities and overbridge deck repair works were underway.
- Noise and vibration were undertaken in the vicinity of South Heath worksite (ref.: SH) where overbridge works, earthworks and landscaping activities were underway.
- Noise and vibration were undertaken in the vicinity of A422 Turweston North worksite (ref.: A422 TN) where bridleway construction works and operation and maintenance of site access and mass haul road were underway.
- Noise and vibration were undertaken in the vicinity of Hermitage worksite (ref.: HC) where track drainage installation works, embankment earthworks, road realignment works, operation and maintenance of site access and mass haul road and water management / pumping activities were underway.
- Noise and vibration were undertaken in the vicinity of School End worksite (ref.: SE) where removal of sheet piles, landscaping, compound maintenance activities, operation and maintenance of site access and mass haul road and water management / pumping activities were underway.
- Noise and vibration were undertaken in the vicinity of Calvert worksite (ref.: CAL) where structure works and earthworks were underway.
- Noise and vibration were undertaken in the vicinity of Quainton worksite (ref.: QAR) where structure works and earthworks were underway.
- Noise and vibration were undertaken in the vicinity of North Portal worksite (ref.: NP) where North Portal Building works, porous portal works, concrete finishing works, earthworks and landscaping activities were underway.
- Noise and vibration were undertaken in the vicinity of Wendover Green Tunnel worksite (ref.: WGT) where landscaping works, installation of precast segments, reinforced concrete base slab activities, waterproofing activities, earthworks, prefabrication of rebar cages and delivery of pre-cast units were underway.

Further works, where monitoring did not take place, were also undertaken at:

- Twyford cutting and Calvert cutting where earthworks and structure works were undertaken.

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 two (2) times during the reporting period.

There were no exceedances of trigger levels as defined in section 61 consents during the reporting period at any monitoring position.

One complaint was 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
L _{Aeq,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, L _{pAeq,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 L _{Aeq,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 $\text{m/s}^{1.75}$.

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 Buckinghamshire Council (BC) area for the period 1-31 May 2026.

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

- Calvert worksite Ref.: CAL (See plan 3 in Appendix A), where work activities included:
 - Structure works
 - Earthworks
- Woodlands worksite, Ref.: WDL (See plan 4 in Appendix A), where work activities included:
 - Structure works
 - Earthworks
- Wendover Green Tunnel worksite, Ref.: WGT (See plan 7 in Appendix A), where work activities included:
 - Landscape works
 - Installation of precast segment
 - Reinforced concrete base slab
 - Waterproofing activities
 - Earthworks
 - Prefabrication of rebar cages
 - Delivery of pre-cast units
- Rocky Lane Embankment worksite, Ref.: RLE (See plan 7 in Appendix A), where work activities included:
 - Culvert waterproofing works
 - in-situ concrete works
 - Continued concrete surface repairs
- Aylesbury Golf Course worksite, Ref.: GC (See plan 6 in Appendix A), where work activities included:
 - Landscaping
 - Earthworks

- Wing-wall reinforcement work
 - Installation of welding shelter
 - Concrete pour for east and west wingwall
- North Portal worksite, Ref.: NP (See plan 8 in Appendix A), where work activities included:
 - North Portal Building works
 - Porous portal works
 - Concrete finishing works
 - Earthworks
 - Landscaping
- Chalfont St Peter Vent Shaft worksite, Ref.: CSP (See plan 12 in Appendix A), where work activities included:
 - Landscaping
 - Stockpile management
 - Temporary access road removal
- Hermitage worksite, Ref.: HC (See plan 2 in Appendix A), where work activities included:
 - Track Drainage Installation
 - Embankment earthworks prior to stabilisation
 - Road Realignment works
 - Operation and maintenance of site access and mass haul road
 - Water management / pumping activities
- Quanton worksite, Ref.: QAR (See plan 4 in Appendix A), where work activities included:
 - Structure works
 - Earthworks
- Nash Lee Lane worksite, Ref.: NLL (See plan 6 in Appendix A), where work activities included:
 - Overbridge deck construction & finishing including delivery and installation of precast parapets and waterproofing works
 - Earthworks
 - Drainage
 - Road construction - surfacing and finishing
- Twyford worksite, Ref.: TW (See plan 2 in Appendix A), where work activities included:
 - Cutting - reinstatement of batter toes
 - Wingwall foundation concrete
 - Formwork panel installation
 - Falsework deck installation
 - Waterproofing
 - Noise barrier Wingwall works
 - Steelfixing
 - Concrete pours
 - Deliveries
 - Landscaping
 - Operation and maintenance of site access and mass haul road
 - Water management / pumping activities

- A422 Turweston North worksite, Ref.: A422 TN (See plan 1 in Appendix A), where work activities included:
 - Bridleway construction
 - Operation and maintenance of site access and mass haul road
- School End worksite, Ref.: SE (See plan 2 in Appendix A), where work activities included:
 - Removal of sheet piles
 - Landscaping
 - Compound maintenance
 - Operation and maintenance of site access and mass haul road
 - Water management / pumping activities
- Wendover Dean Viaduct worksite, Ref.: WDV (See plan 7 in Appendix A), where work activities included:
 - Reinforced concrete preparation works
- Waddesdon worksite, Ref.: WAD (See plan 5 in Appendix A), where work activities included:
 - Landscaping
 - Earthworks
 - Installation of reinforcement and shutters for abutments
 - Concreting works
- South Heath worksite, Ref.: SH (See plan 8 in Appendix A), where work activities included:
 - Overbridge works
 - Earthworks
 - Landscaping
- Moat Farm Worksite ref.: MF (See plan 6 in Appendix A), where work activities
 - Overbridge deck construction
 - Overbridge drainage
 - Wingwall structural backfill
 - Overbridge steel work
- Thame Valley Viaduct worksite, Ref.: TVV (See plan 5 in Appendix A), where work activities included:
 - Viaduct platform removal
 - Scour protection
 - Waterproofing
 - Overbridge deck repairs
- West Street Overbridge worksite, Ref.: WSO (See plan 2 in Appendix A), where work activities included:
 - Structure works

1.1.3 Further works, where monitoring did not take place, were also undertaken at:

- Twyford cutting and Calvert cutting where the following activities were taking place:
 - Earthworks
- Calvert cutting where the following activities were taking place:
 - Structure

1.1.4 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 27 noise and 6 vibration monitoring installations were active in May in the Buckinghamshire Council area. Tables 2a and 2b summarise the position of noise and vibration monitoring installations within the Buckinghamshire Council area in May 2026.
- 1.2.2 Maps showing the position of noise and vibration monitoring installations are presented in Appendix B.
- 1.2.3 The following monitor was removed from site:
- Nosie monitors ref. CSG-NMP, LM-NMP1 and MDL-NMP1 were decommissioned and removed from site.
 - Vibration monitor ref. WC-Vib 1 was decommissioned and removed from site.

Table 2a: Noise Monitoring Locations

Worksite Reference	Measurement Reference	Address
NP	BFH-NMP1	Bury Farm, Great Missenden
	BLH-NMP1	4 Bayleys Hatch South Heath Great Missinden
	ORC-NMP1	Orchard Cottage, Ballinger Road, South Heath
WGT	BL-NMP1	Bacombe Lane, Wendover
	ER-NMP1	Ellesborough Rd, Wendover
	WGT-NMP1	Wendover, Aylesbury
	WC-NMP1	Wendover compound, Wendover, Aylesbury
CSP	CSP-NMP2	Chalfont St Peter, ALIGN JV Site, Chesham Lane
CAL	FCC-NMP1	Calvert South
	SHC-NMP1	School Hill Compound, Calvert
GC	GC-NMP1	Aylesbury, Buckinghamshire
HC	HC-NMP1	Hermitage, Chetwode
SH	HHF-NMP1	Hammonds Hall Farm, Potter Row, South Heath
	PKF-NMP1	Park Farm, South Heath, Great Missenden
MF	MF-NMP1	Moat Farm, Marsh Lane
RLE	NCAS6-NMP1	Chesham Lane, The Lee, Wendover
NLL	NLL-NMP2	Nash Lee Lane, Nash Lee
QAR	QAR-NMP2	Station Road, Quainton
	LSF-NMP1	Upper South Farm
SE	SE-NMP1	School End, Chetwode
A422 TN	TN-NMP1	Turweston North, Brackley
TVV	TVV-NMP1	Aylesbury, Buckinghamshire
TW	TW-NMP1	Twyford, Buckinghamshire
WAD	WAD-NMP2	Waddesdon, Buckinghamshire
WDL	WDL-NMP1	Woodlands Farmhouse, Station Rd, Quainton

WDV	WDV-NMP1	Upper Wendover Dean Farm, A413, Wendover
WSO	WSO-NMP1	West Street, Twyford

Table 2b: Vibration Monitoring Locations

Worksite Reference	Measurement Reference	Address
CAL	BRA-Vib1	13 Brackley Lane, Calvert Village
WGT	ER-Vib1	Ellesborough Rd, Wendover
WSO	PF-Vib1	Twyford, Buckinghamshire
SE	SE-Vib1	School End, Chetwode
QAR	SR-Vib1	Station Road, Quainton
WDL	WDL-Vib1	Station Road, Quainton

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
NP	BFH-NMP1	Bury Farm, Great Missenden	Free field	43.7 (47.4)	53.5 (67.9)	47.9 (59.6)	45.5 (57.4)	42.1 (54.3)	41.5 (43.8)	46.3 (49.5)	49.4 (51.6)	46.9 (53.1)	41.1 (55.4)	44.8 (49.8)	42.8 (53.8)
	BLH-NMP1	Bayleys Hatch South Heath	Free field	46.5 (48.8)	51.2 (63.8)	48.6 (51.3)	48.5 (61.0)	41.3 (49.6)	43.9 (44.4)	52.7 (63.7)	53.4 (59.1)	51.0 (56.2)	42.3 (53.3)	50.7 (69.6)	42.2 (49.6)
	ORC-NMP1	Orchard Cottage, Ballinger Road, South Heath	Free field	45.9 (48.70)	55.7 (63.3)	55.4 (63.3)	46.7 (61.9)	43.7 (51.7)	43.2 (44.3)	49.5 (52.1)	50.8 (54.5)	49.7 (60.8)	43.3 (50.3)	45.9 (51.0)	43.8 (50.0)
WGT	BL-NMP1	Bacombe Lane, Wendover	Free field	46.2 (49.4)	47.4 (50.0)	45.0 (49.0)	43.9 (51.7)	41.5 (48.3)	43.8 (46.3)	45.3 (45.8)	48.6 (58.6)	43.9 (47.7)	40.9 (46.1)	44.2 (53.2)	41.8 (48.7)
	ER-NMP1	Ellesborough Rd, Wendover	Free field	56.0 (59.9)	56.0 (68.1)	54.8 (61.2)	52.8 (56.2)	51.2 (58.7)	53.6 (56.7)	54.8 (58.8)	53.9 (56.2)	52.8 (54.4)	50.5 (54.1)	53.5 (56.1)	50.6 (57.3)
	WGT-NMP1	Wendover, Aylesbury	Free field	51.3 (57.3)	52.1 (62.0)	50.4 (57.3)	48.3 (55.3)	45.6 (56.7)	47.1 (52.1)	47.1 (53.0)	48.3 (53.6)	47.5 (54.9)	44.0 (48.9)	47.4 (54.3)	44.7 (55.4)
	WC-NMP1	Wendover compound, Wendover, Aylesbury	Free field	67.1 (68.6)	66.0 (67.1)	65.8 (67.1)	63.1 (68.4)	59.7 (67.5)	62.7 (63.5)	65.0 (65.9)	64.7 (65.5)	63.3 (67.4)	57.2 (60.4)	63.3 (65.8)	58.9 (67.1)
CSP	CSP-NMP2	Chalfont St Peter, ALIGN JV Site, Chesham Lane, SL9 0PG	Free field	46.4 (55.9)	47.3 (50.1)	46.9 (52.7)	44.0 (49.2)	40.3 (48.5)	43.2 (46.3)	47.2 (48.5)	46.8 (49.5)	46.3 (50.5)	40.5 (45.7)	45.2 (51.3)	38.8 (44.8)
CAL	FCC-NMP1	Calvert South	Free field	58.2 (63.5)	59.1 (61.3)	46.5 (49.3)	44.3 (49.1)	43.3 (51.3)	51.5 (54.5)	52.3 (56.3)	49.8 (55.0)	47.2 (55.3)	42.4 (47.5)	44.5 (50.4)	41.6 (48.4)
	SHC-NMP1	School Hill Compound, Calvert	Free field	56.9 (60.8)	60.1 (65.0)	51.7 (64.1)	49.1 (63.0)	46.7 (60.4)	51.3 (56.2)	56.9 (61.5)	52.5 (61.3)	49.5 (56.1)	44.0 (58.7)	47.6 (62.2)	42.8 (53.1)
HC	HC-NMP1	Hermitage, Chetwode	Free field	56.3 (62.7)	58.3 (61.7)	47.3 (53.4)	44.7 (51.1)	44.7 (51.2)	50.4 (54.4)	52.4 (55.7)	50.0 (58.0)	47.7 (55.5)	44.1 (48.5)	45.7 (53.9)	43.8 (49.7)
NLL	NLL-NMP2	Nash Lee Lane, Nash Lee	Free field	51.9 (55.2)	58.4 (60.6)	49.3 (53.1)	47.7 (50.1)	44.7 (54.0)	45.7 (48.7)	52.5 (62.1)	52.7 (56.7)	49.4 (58.2)	43.4 (47.8)	47.0 (53.2)	43.7 (51.1)
QAR	QAR-NMP2	Station Road, Quainton	Free field	49.1 (52.6)	51.0 (55.2)	48.4 (54.2)	44.8 (51.8)	43.5 (56.2)	43.7 (44.5)	47.2 (48.1)	47.2 (49.1)	47.7 (57.4)	44.4 (56.3)	48.3 (59.5)	41.7 (50.9)
	LSF-NMP1	Upper South Farm	Free field	54.3 (59.4)	59.1 (68.4)	47.3 (57.5)	46.3 (55.5)	45.8 (62.5)	49.1 (52.4)	57.3 (59.9)	57.0 (61.9)	52.5 (60.5)	45.0 (52.6)	52.7 (71.4)	43.5 (54.8)
SE	SE-NMP1	School End,	Free field	56.2	59.5	51.4	50.8	51.1	53.1	53.3	52.0	50.7	51.2	50.6	50.8

		Chetwode		(60.3)	(66.8)	(54.1)	(53.8)	(54.9)	(54.6)	(54.8)	(56.8)	(54.4)	(52.8)	(53.5)	(52.9)
MF	MF-NMP1	Moat Farm, Marsh Lane	Free field	50.5 (57.3)	61.3 (64.0)	50.1 (64.6)	47.2 (52.3)	44.2 (54.0)	44.8 (48.5)	52.9 (69.2)	52.8 (67.4)	52.4 (70.2)	42.6 (47.7)	45.8 (50.6)	43.6 (50.6)
RLE	NCAS6-NMP1	Chesham Lane, The Lee, Wendover	Free field	52.6 (58.5)	57.2 (62.6)	51.3 (54.4)	49.1 (54.5)	46.3 (51.9)	48.4 (49.5)	51.2 (57.3)	52.3 (58.8)	50.0 (59.6)	46.4 (49.4)	49.4 (55.1)	45.9 (50.6)
SH	HHF-NMP1	Hammonds Hall Farm, Potter Row, South Heath,	Free field	46.0 (47.8)	64.6 (66.5)	54.6 (61.7)	45.1 (53.9)	40.3 (51.0)	44.2 (45.8)	61.7 (65.9)	61.5 (68.1)	58.2 (65.7)	39.0 (44.4)	44.6 (48.1)	38.7 (44.4)
	PKF-NMP1	Park Farm, South Heath, Great Missenden	Free field	47.4 (51.8)	54.6 (61.1)	51.8 (59.2)	48.5 (57.5)	44.0 (54.8)	47.0 (48.6)	54.3 (61.4)	53.1 (58.2)	50.7 (57.8)	43.7 (50.8)	47.7 (52.7)	43.9 (52.8)
A422 TN	TN-NMP1	Turweston North, Brackley	Free field	48.9 (51.8)	53.5 (57.2)	46.4 (49.1)	46.3 (53.2)	45.7 (52.0)	48.2 (49.9)	52.2 (55.8)	51.9 (57.3)	47.3 (57.6)	44.6 (49.1)	47.1 (52.5)	45.0 (51.6)
TVV	TVV-NMP1	Aylesbury, Buckinghamshire	Free field	45.1 (48.8)	49.9 (66.0)	43.3 (49.4)	41.5 (47.6)	39.7 (47.5)	41.4 (47.4)	44.2 (46.0)	45.5 (48.0)	42.5 (51.1)	38.1 (45.3)	42.1 (46.7)	39.5 (49.1)
TW	TW-NMP1	Twyford, Twyford	Free field	44.0 (48.9)	52.9 (68.4)	42.3 (51.4)	42.7 (57.7)	39.8 (46.9)	42.3 (43.7)	47.4 (61.5)	47.4 (64.4)	44.3 (61.9)	39.6 (45.1)	41.9 (48.2)	39.6 (45.9)
GC	GC-NMP1	Aylesbury, Buckinghamshire	Free field	46.0 (49.4)	55.7 (63.2)	45.7 (57.9)	42.4 (47.0)	41.3 (48.8)	43.1 (44.6)	47.9 (54.0)	45.8 (48.8)	44.1 (52.7)	42.4 (53.7)	44.0 (49.7)	40.4 (48.4)
WAD	WAD-NMP2	Waddesdon, Buckinghamshire	Free field	51.1 (63.2)	58.1 (64.4)	45.2 (51.1)	42.4 (49.5)	40.6 (50.3)	47.8 (55.8)	51.1 (53.2)	50.0 (57.0)	46.2 (58.5)	40.3 (55.1)	44.1 (53.6)	38.7 (47.1)
WDL	WDL-NMP1	Woodlands Farmhouse, Station Rd, Quainton	Free field	63.0 (67.6)	66.9 (71.5)	51.8 (62.9)	48.7 (65.1)	47.0 (67.4)	56.3 (65.9)	63.3 (66.7)	60.3 (63.8)	55.6 (63.5)	46.2 (66.2)	51.6 (71.3)	44.1 (52.3)
WDV	WDV-NMP1	A413, Wendover, Upper Wendover Dean Farm site boundary	Free field	52.0 (61.7)	56.9 (59.9)	50.0 (56.2)	47.8 (62.2)	44.7 (53.1)	47.9 (54.8)	52.8 (57.9)	50.6 (53.8)	48.4 (54.7)	43.6 (48.4)	47.3 (53.2)	44.9 (52.4)
WSO	WSO-NMP1	West Street, Twyford	Free field	44.3 (47.2)	50.3 (57.2)	41.1 (51.9)	40.4 (50.6)	39.1 (47.3)	42.8 (47.2)	46.0 (56.6)	42.4 (43.7)	41.6 (48.1)	39.1 (48.2)	41.7 (46.3)	38.3 (46.6)

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
CAL	BRA-Vib1	13 Brackley Lane, Calvert Village	1.07 (Z-axis)
WGT	ER-Vib1	Ellesborough Rd, Wendover	3.02 (Y-axis)
WSO	PF-Vib1	Twyford, Buckinghamshire	1.53 (Y-axis)
SE	SE-Vib1	School End, Chetwode	3.42 (Y-axis)
QAR	SR-Vib1	Station Road, Quainton	1.51 (X-axis)
WDL	WDL-Vib1	Station Road, Quainton	3.59 (X-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 LOAEL and SOAEL

- 2.2.1 The lowest observed adverse effect level (LOAEL) is defined in the Planning Practice Guidance – Noise (PPG) as the level above which "noise starts to cause small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a perceived change in the quality of life".
- 2.2.2 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."
- 2.2.3 HS2 Phase One Information Paper E23: Control of Construction Noise and Vibration sets out the LOAEL and SOAELs for construction noise.
- 2.2.4 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.
- 2.2.5 Table 5 presents a summary of recorded exceedances of the LOAEL and SOAEL at each measurement location over the reporting period, including the number of exceedances during each time period.

Table 5: Summary of Exceedances of LOAEL and SOAEL

Worksite Reference	Measurement Reference	Site Address	Day (Weekday, Saturday, Sunday, Night)	Time period	Number of exceedances of LOAEL	Number of exceedances of SOAEL
A422 TN	TN-NMP1	Turweston, Buckinghamshire	Weekday	1900 - 2200	1	No exceedances
			Saturday	1400 - 2200	1	No exceedances
CSP	CSP-NMP2	Chalfont St Peter, ALIGN JV Site, Chesham Lane	All days	All periods	No exceedances	No exceedances
CAL	FCC-NMP1	Calvert South	Weekday	0700 - 0800	8	No exceedances
	SHC-NMP1	School Hill Compound, Calvert	Weekday	0700 - 0800	6	No exceedances
				1800 - 1900	2	No exceedances
			Saturday	1300 - 1400	1	No exceedances

GC	GC-NMP1	Aylesbury, Buckinghamshire	All days	All periods	No exceedances	No exceedances
HC	HC-NMP1	Hermitage, Chetwode	Weekday	0700 - 0800	3	No exceedances
			Saturday	1300 - 1400	1	No exceedances
				1400 - 2200	3	No exceedances
MF	MF-NMP1	Moat Farm, Marsh Lane	Weekday	1800 - 1900	1	No exceedances
			Saturday	0800 - 1300	1	No exceedances
				1300 - 1400	1	No exceedances
NLL	NLL-NMP2	Nash Lee Lane, Nash Lee	All days	All periods	No exceedances	No exceedances
NP	BFH-NMP1	Bury Farm, Great Missenden	Saturday	1400 - 2200	1	No exceedances
	BLH-NMP1	Bayleys Hatch South Heath Great Missenden	Saturday	0800 - 1300	1	No exceedances
				1300 - 1400	1	No exceedances
				1400 - 2200	4	No exceedances
	ORC-NMP1	Orchard Cottage, Ballinger Road, South Heath	Saturday	1400 - 2200	2	No exceedances
QAR	QAR-NMP2	Station Rd, Quainton	All days	All periods	No exceedances	No exceedances
	LSF-NMP1	Upper South Farm	Weekday	0700 - 0800	1	No exceedances
			Saturday	1300 - 1400	2	No exceedances
RLE	NCAS6-NMP1	Chesham Lane, The Lee, Wendover	Weekday	0700 - 0800	1	No exceedances
			Saturday	1300 - 1400	1	No exceedances
SE	SE-NMP1	School End, Chetwode, Buckinghamshire	Weekday	0700 - 0800	1	No exceedances
			Saturday	1400 - 2200	2	No exceedances
SH	HHF-NMP1	Hammonds Hall Farm, Potter Row, South Heath,	Weekday	1800 - 1900	6	No exceedances
			Saturday	0800 - 1300	2	No exceedances
				1300 - 1400	3	1
				1400 - 2200	4	2
	PKF-NMP1	Park Farm, South Heath, Great Missenden	Weekday	1800 - 1900	2	No exceedances
			Saturday	1300 - 1400	1	No exceedances
				1400 - 2200	2	No exceedances
TVV	TVV-NMP1	Aylesbury, Buckinghamshire	All days	All periods	No exceedances	No exceedances
TW	TW-NMP1	Twyford, Buckinghamshire	Saturday	1300 - 1400	1	No exceedances
				1400 - 2200	1	No exceedances
WAD	WAD-NMP2	Waddesdon, Buckinghamshire	Weekday	0700 - 0800	2	No exceedances
WDL	WDL-NMP1	Woodlands Farmhouse, Station Rd, Quainton	Weekday	0700 - 0800	18	No exceedances
				0800 - 1800	No exceedances	No exceedances
				1800 - 1900	4	No exceedances
				0700 - 0800	2	No exceedances
			Saturday	0800 - 1300	2	No exceedances

				1300 - 1400	4	No exceedances
WDV	WDV-NMP1	A413, Wendover, Upper Wendover Dean Farm site boundary	Weekday	0700 - 0800	1	No exceedances
WGT	BL-NMP1	Bacombe Lane, Wendover	Saturday	1300 - 1400	1	No exceedances
	ER-NMP1	Ellesborough Rd, Wendover	Weekday	1800 - 1900	1	No exceedances
	WGT-NMP1	Wendover, Aylesbury	Saturday	1400 - 2200	1	No exceedances
	WC-NMP1	Wendover compound, Wendover, Aylesbury	Weekday	0700 - 0800	18	No exceedances
				1800 - 1900	18	No exceedances
			Saturday	0700 - 0800	5	No exceedances
				0800 - 1300	5	No exceedances
				1300 - 1400	5	No exceedances
				1400 - 2200	5	No exceedances
WSO	WSO-NMP1	West Street, Twyford	All days	All periods	No exceedances	No exceedances

2.2.6 There were exceedances of the LOAEL, during May 2026, due to HS2 construction works.

2.2.7 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
SH	HHF-NMP1	Hammonds Hall Farm, Potter Row, South Heath, Great Missenden	2

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
-	-	-	-	-	-

2.4 Complaints

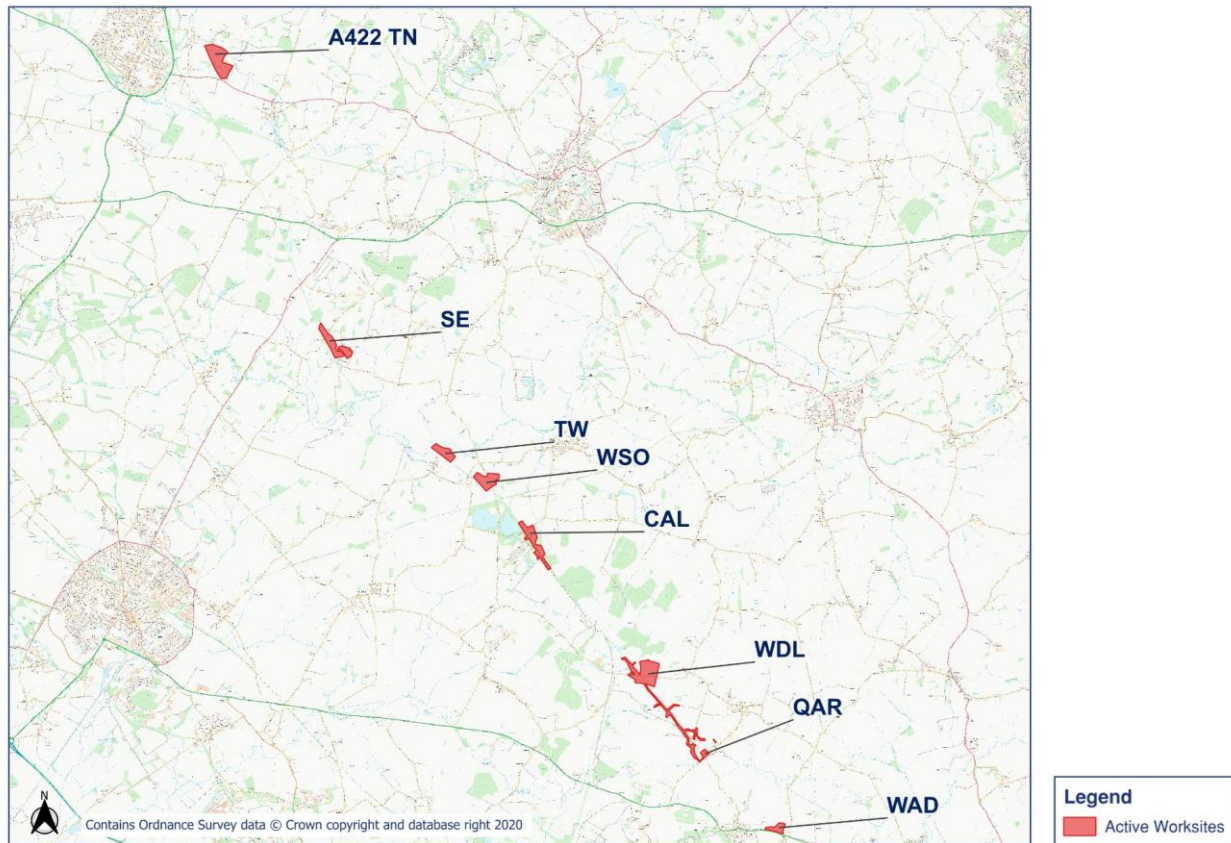
2.4.1 Table 8 provides a summary of complaint information related to noise and vibration received during the reporting period, along with the findings of any investigation.

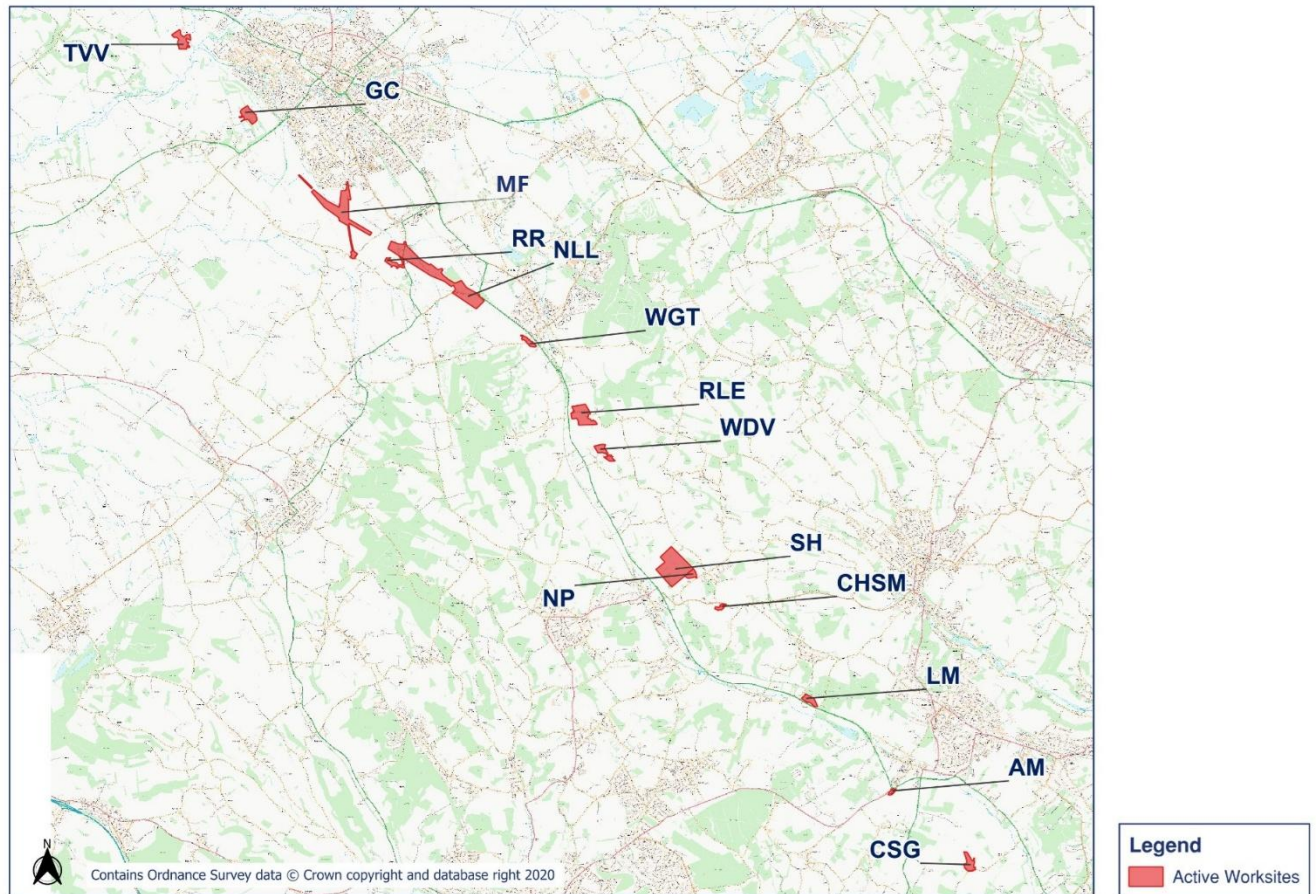
Table 8: Summary of Complaints

Complaint Reference Number	Worksite Reference	Description of Complaint	Results of Investigation	Actions Taken
INC26847	WGT	A noise complaint was received related to residents being awoken daily (Mon - Sat) between 7 - 8am by a noise likened to a plane landing.	Noise description provided matches that of a sweeper which was observed as operational onsite at the time specified in the complaint.	A specific briefing related to the non-noisy site setup and noise control of site maintenance activities was distributed to the work managers, general foreman, and foreman. No sweeping operations to take place before 8am

Appendix A Site Locations

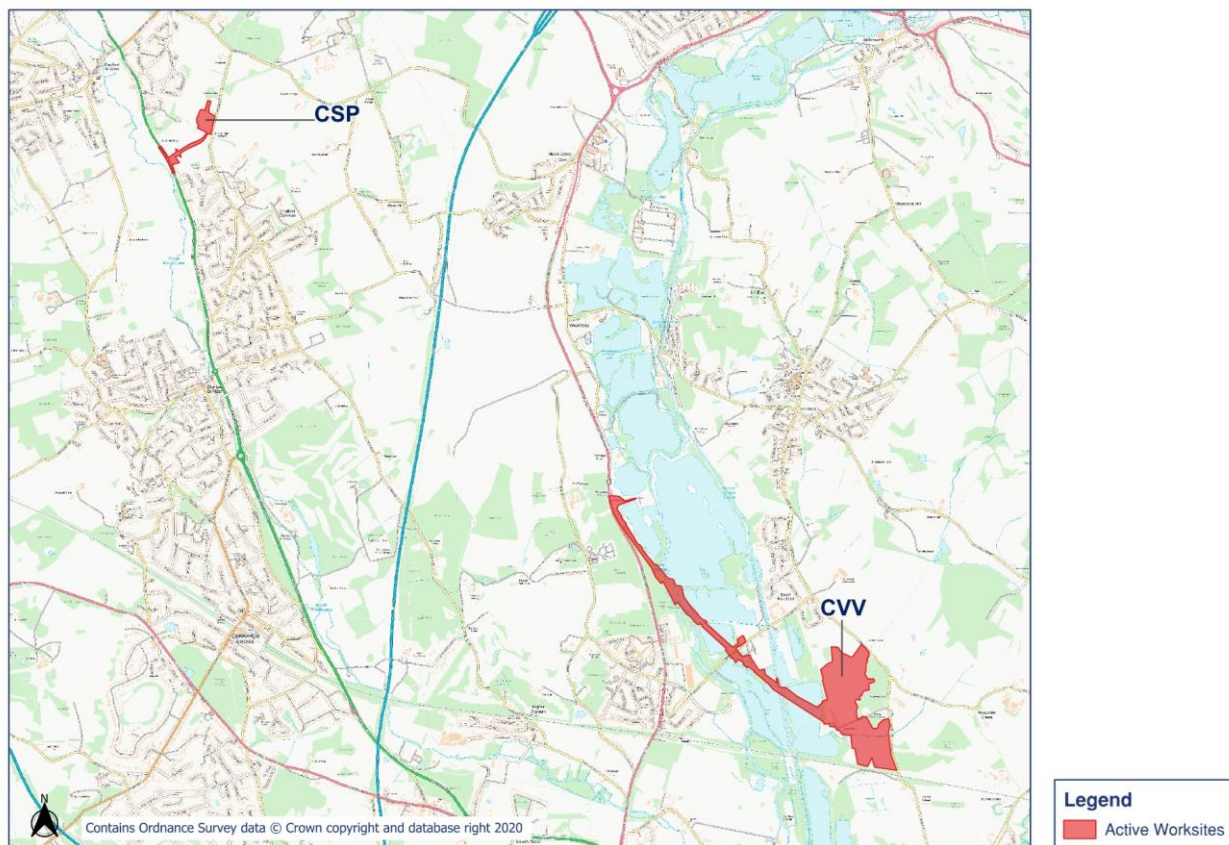
HS2 Worksite Identification Plan - Overview 1

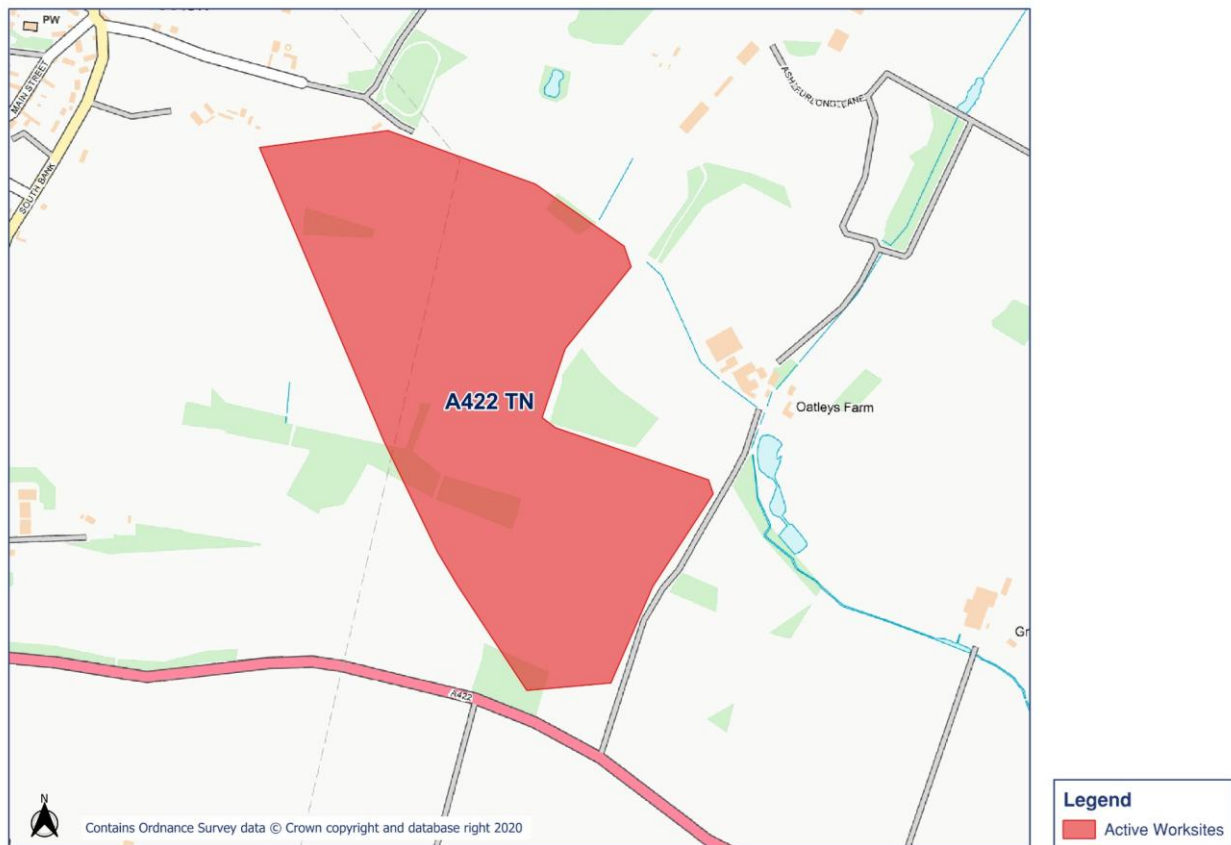


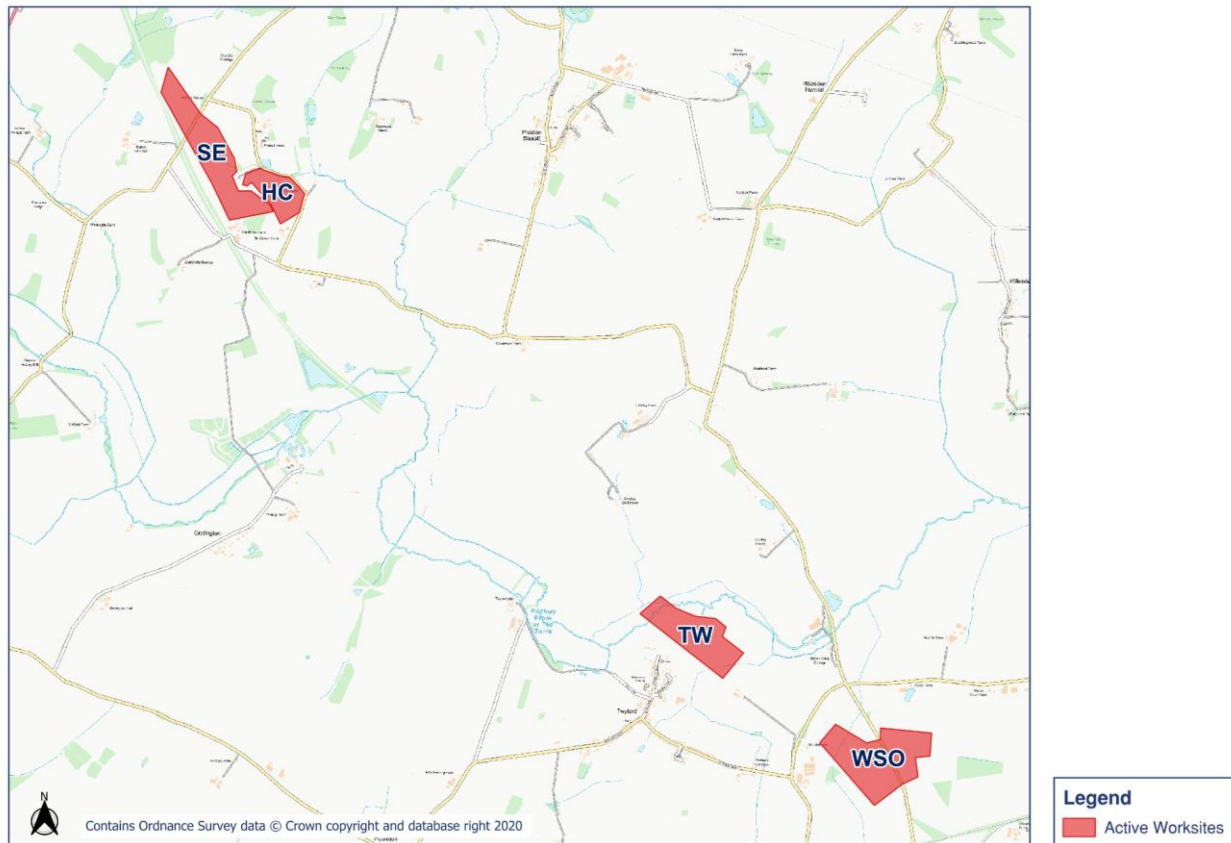


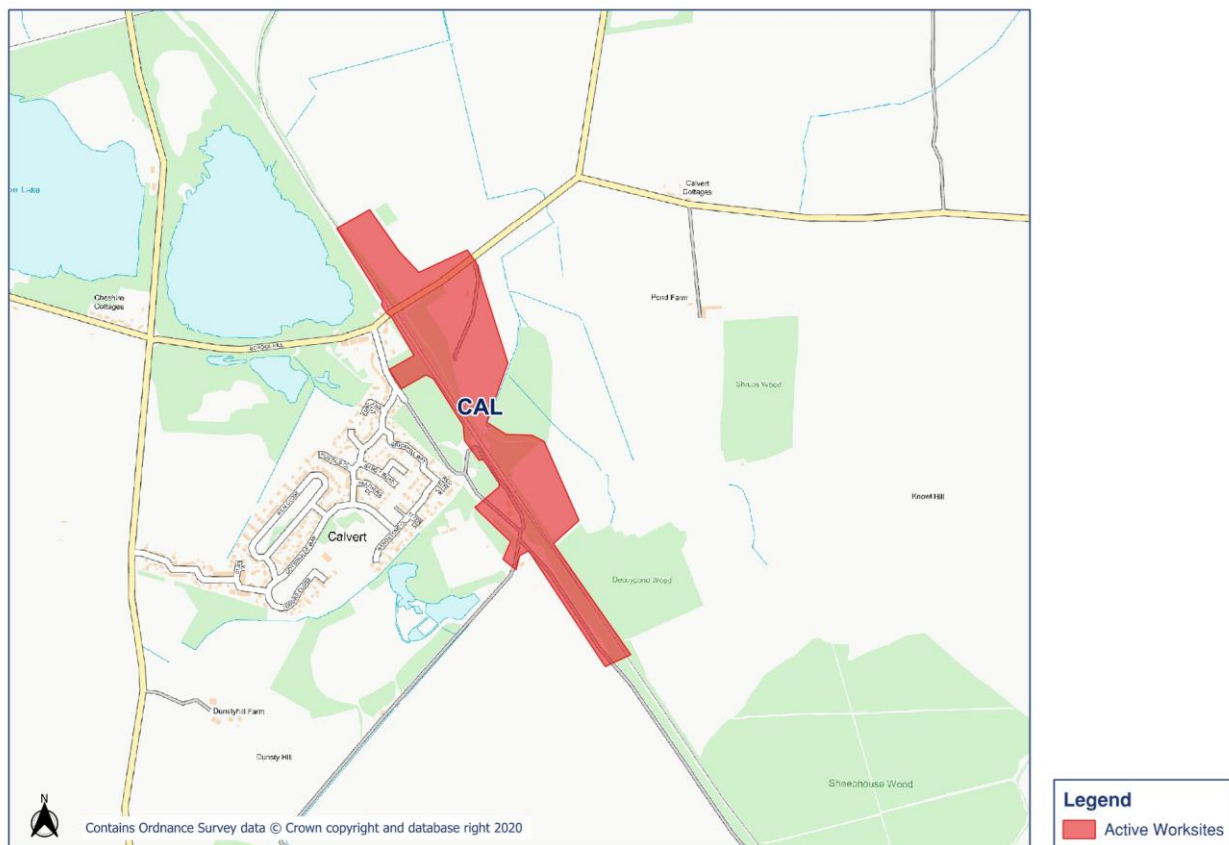
HS2

Worksite Identification Plan - Overview 3

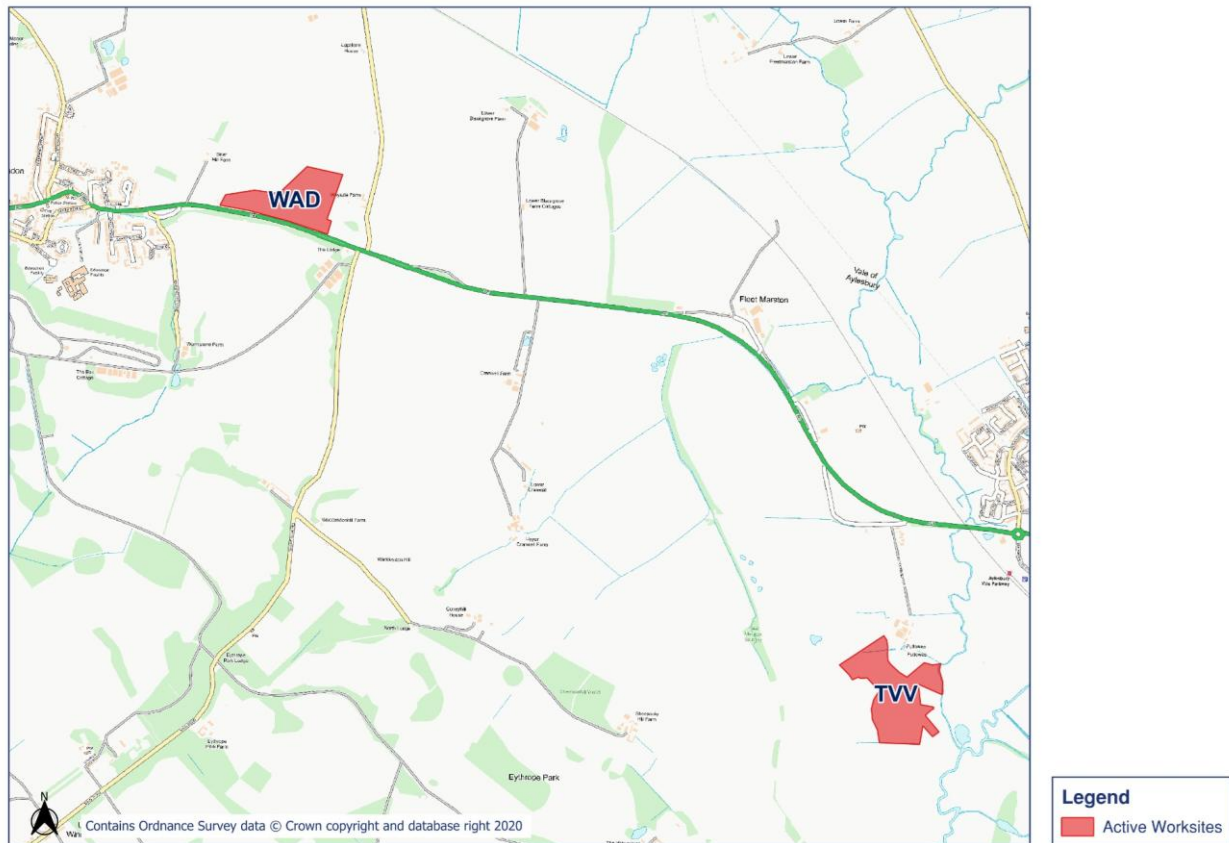


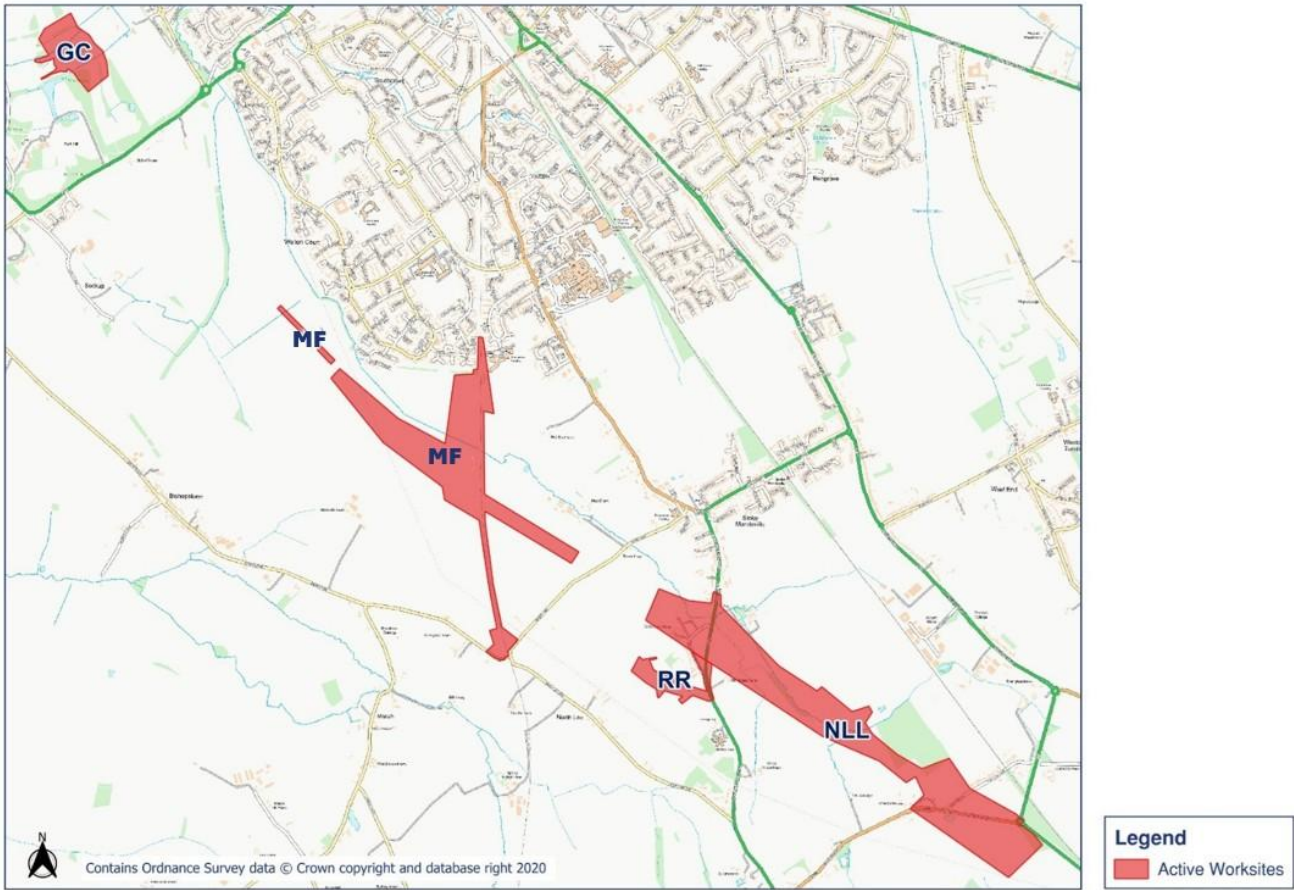


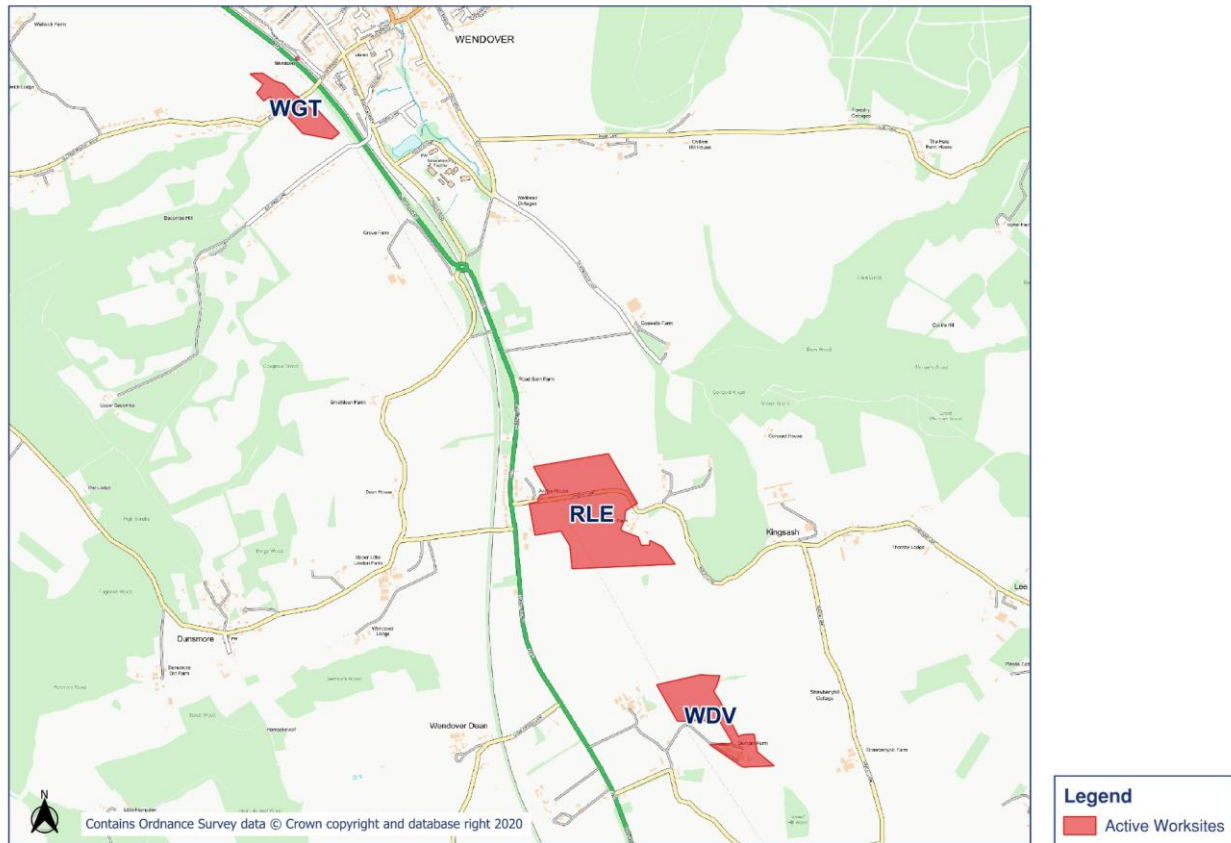


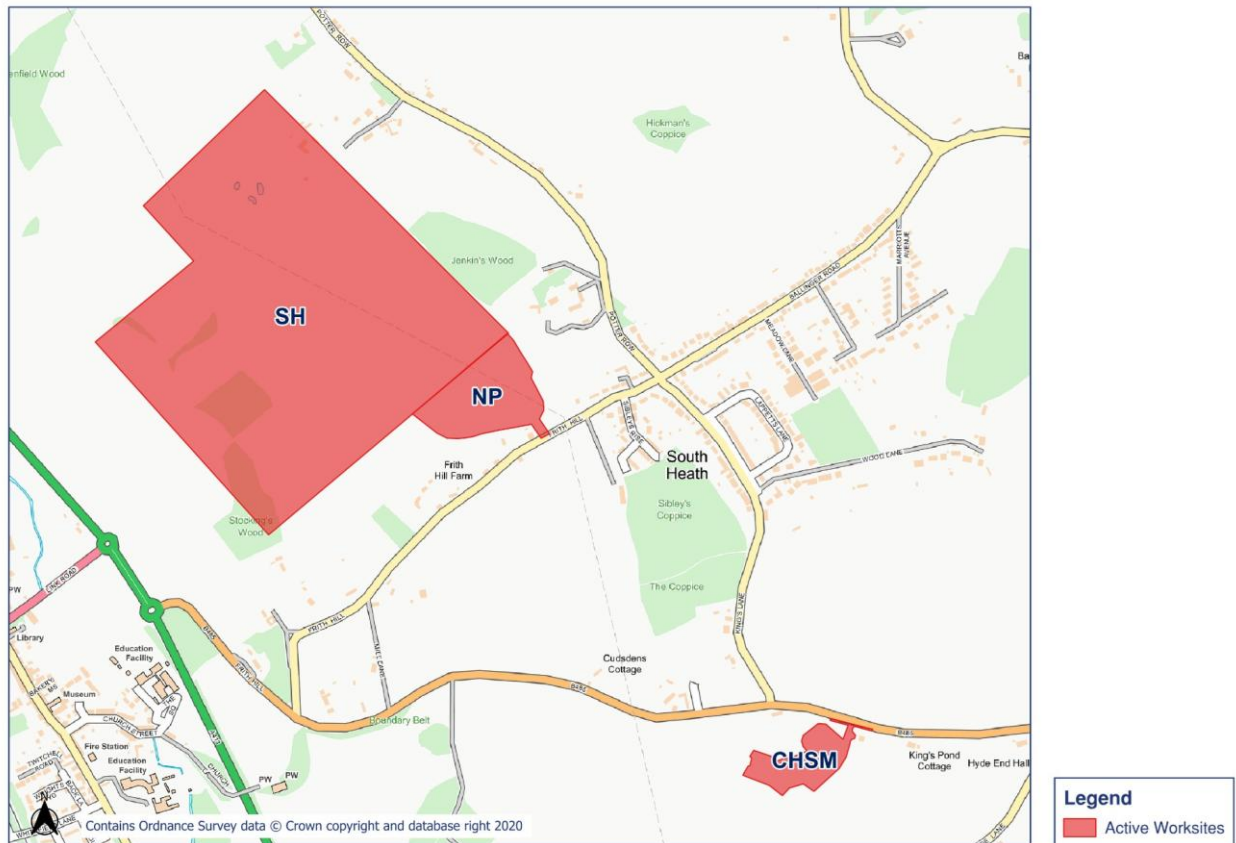








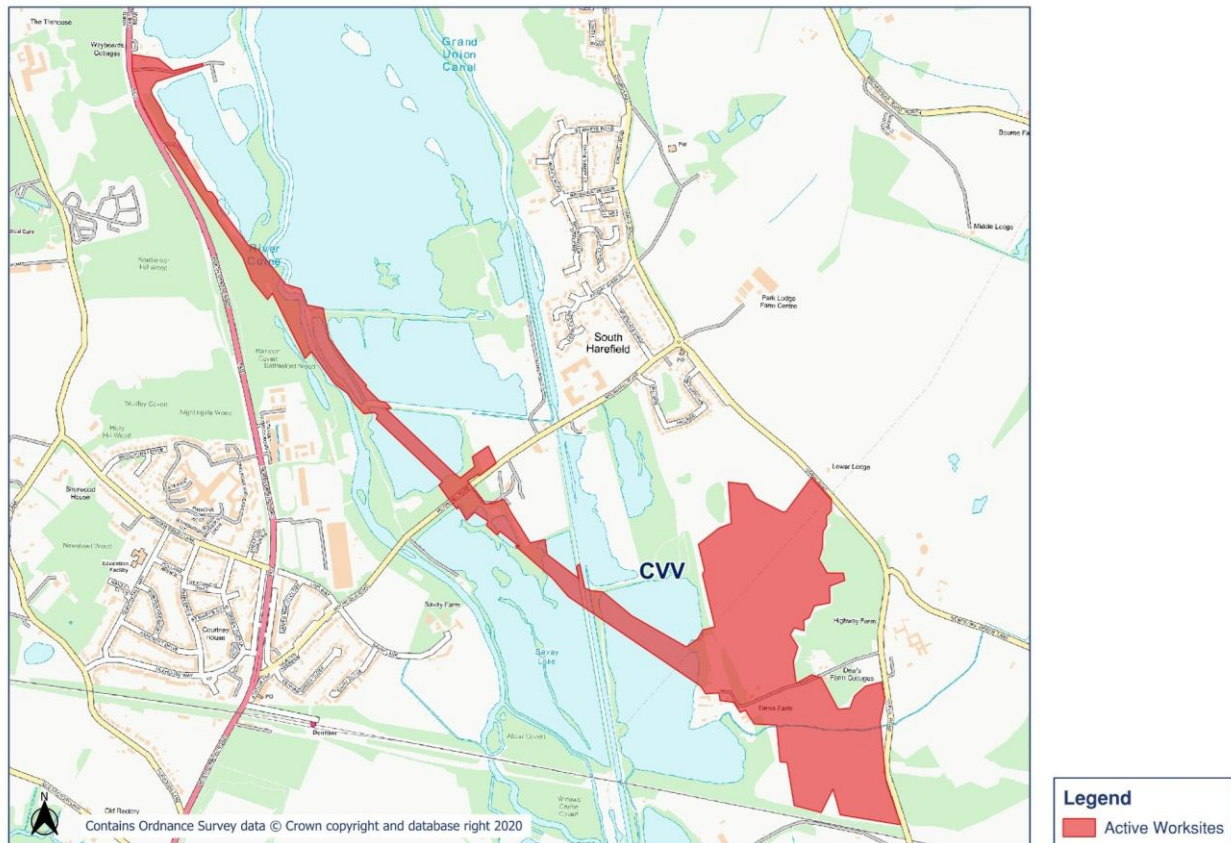






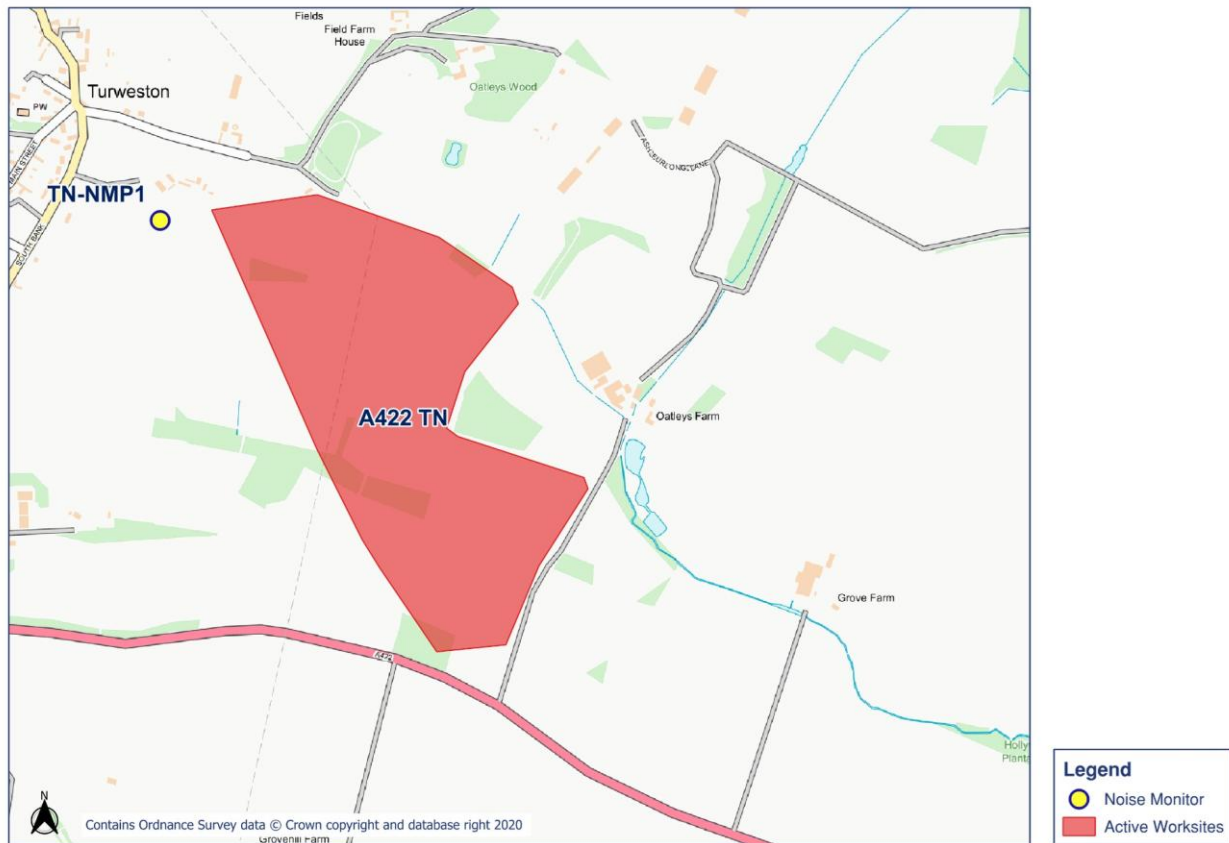




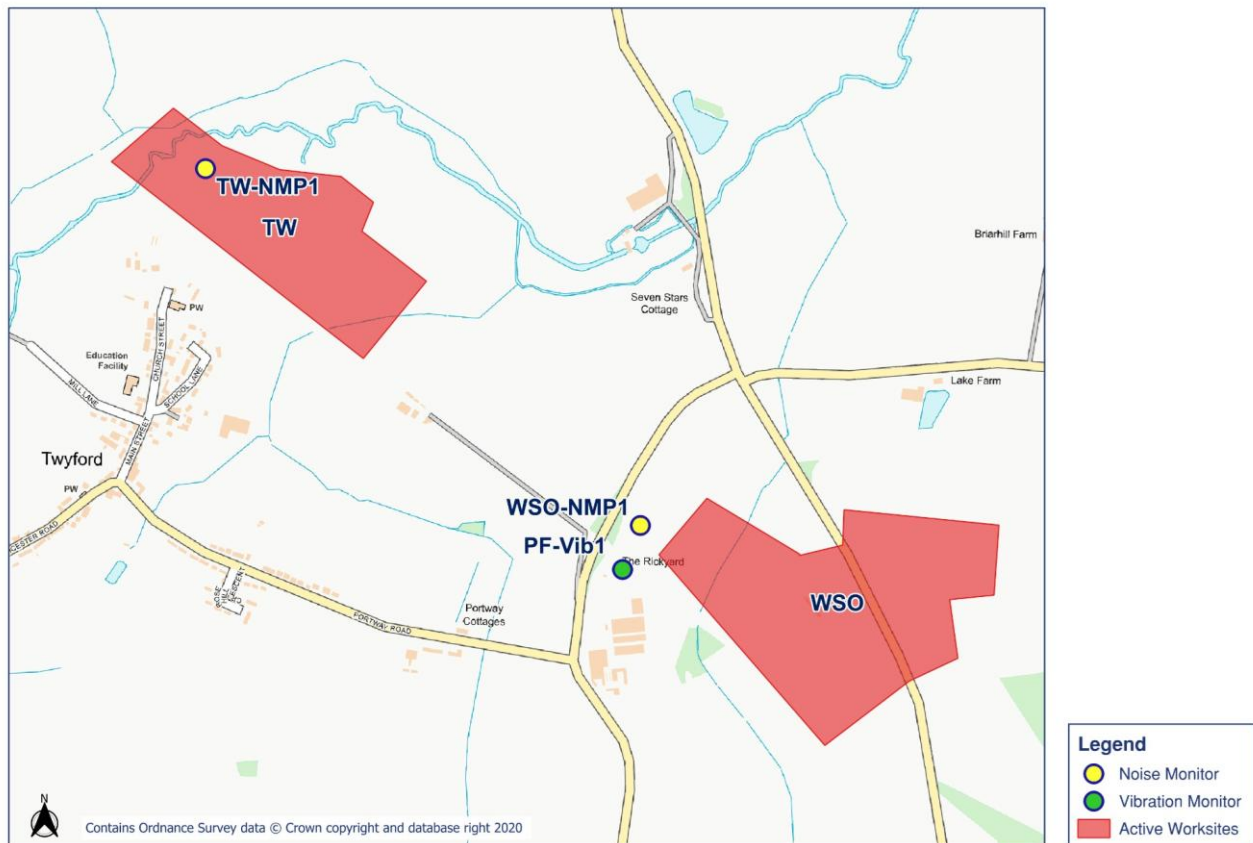


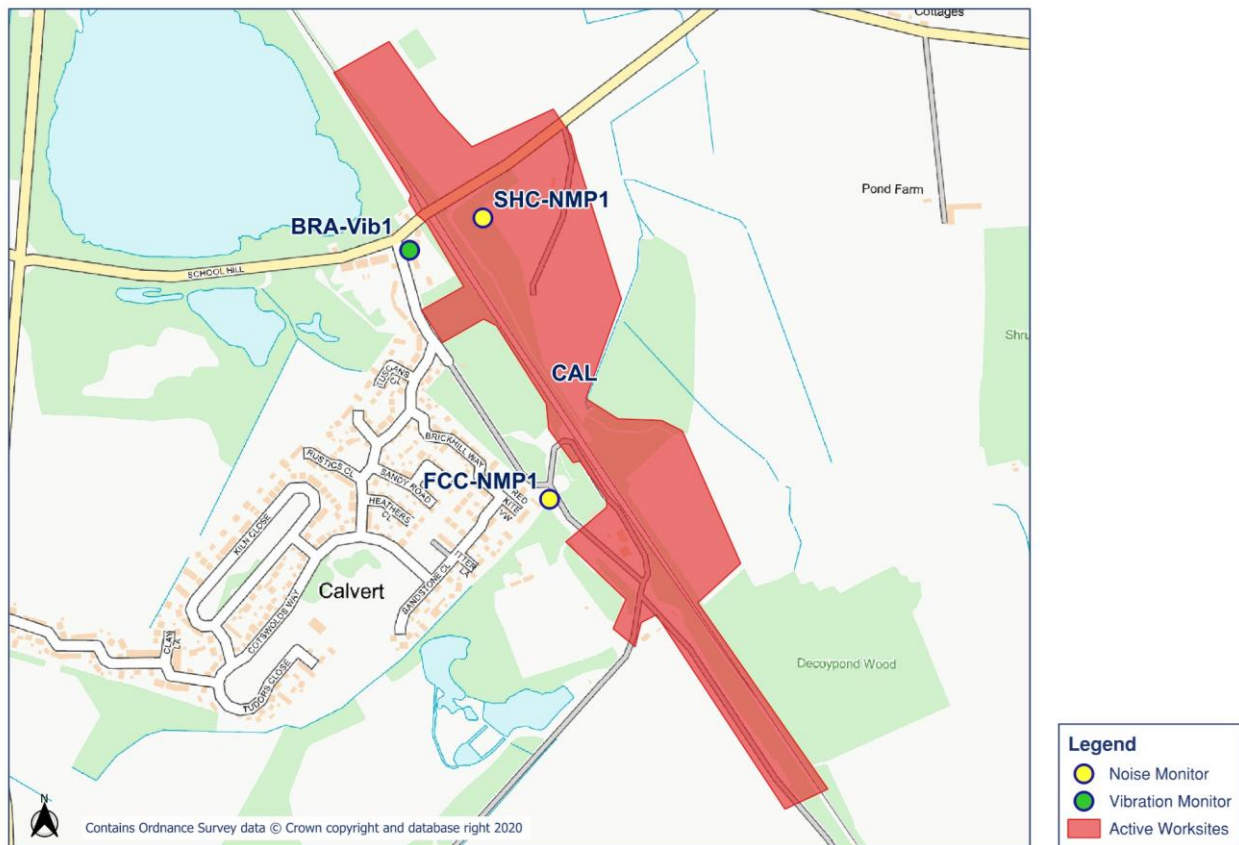
Appendix B Monitoring Locations

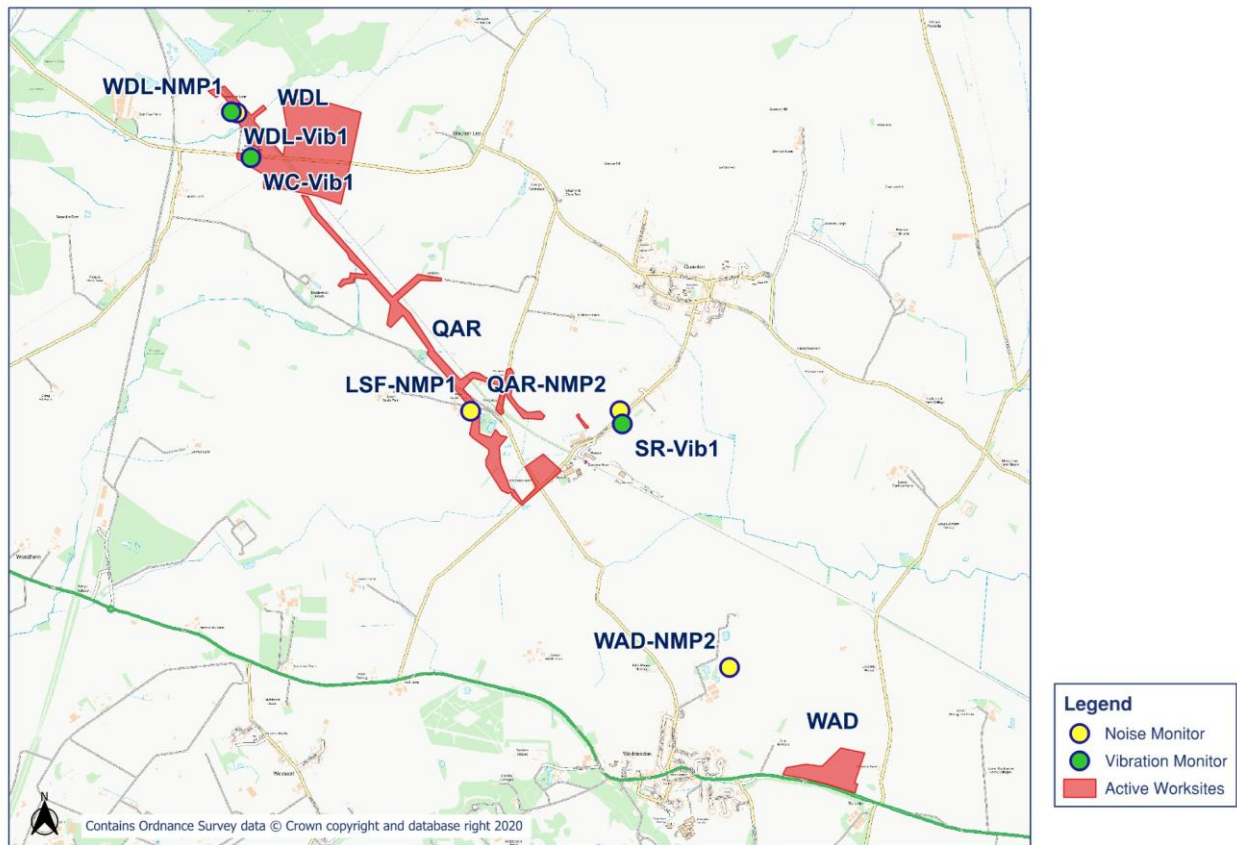
HS2 Noise and Vibration Monitoring Plan - 1





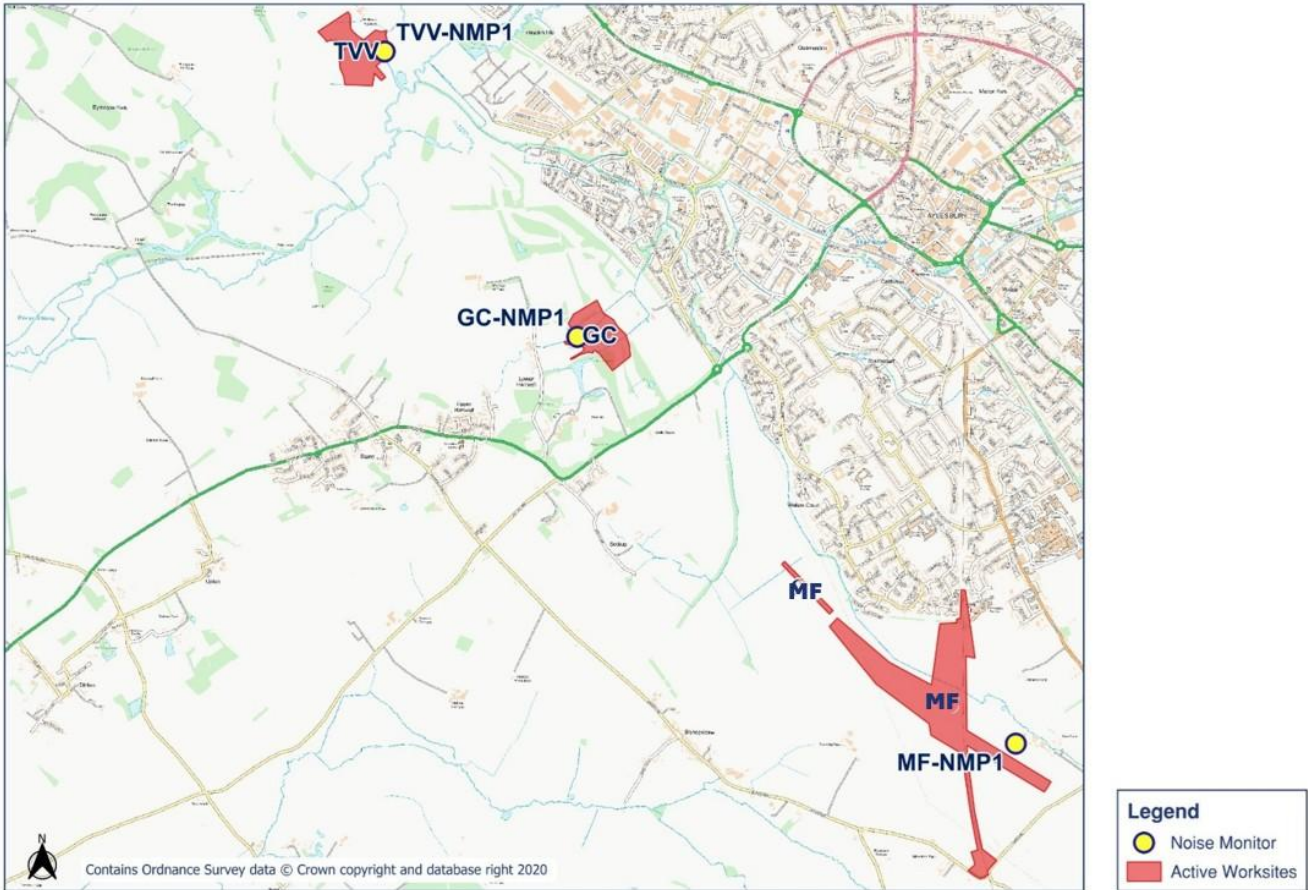


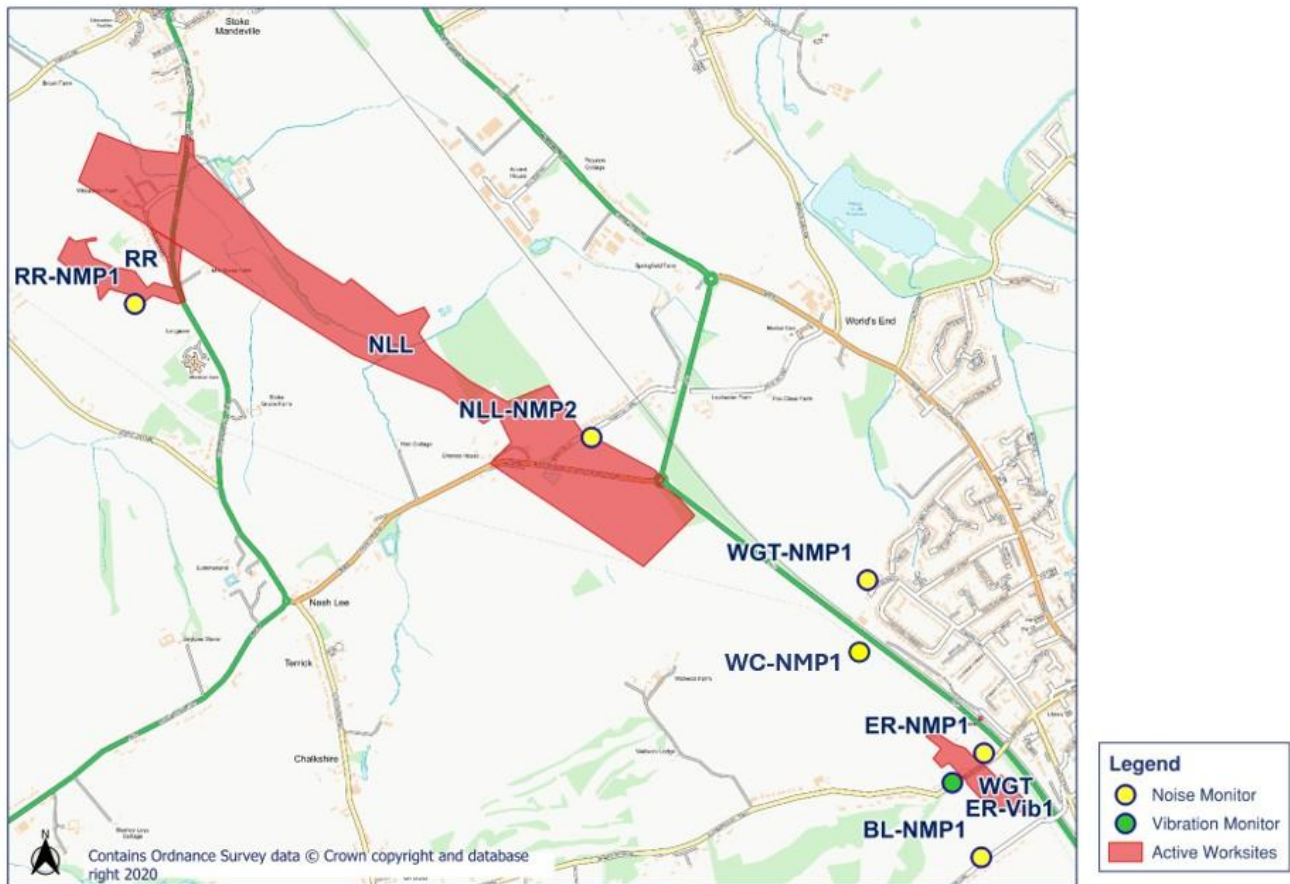


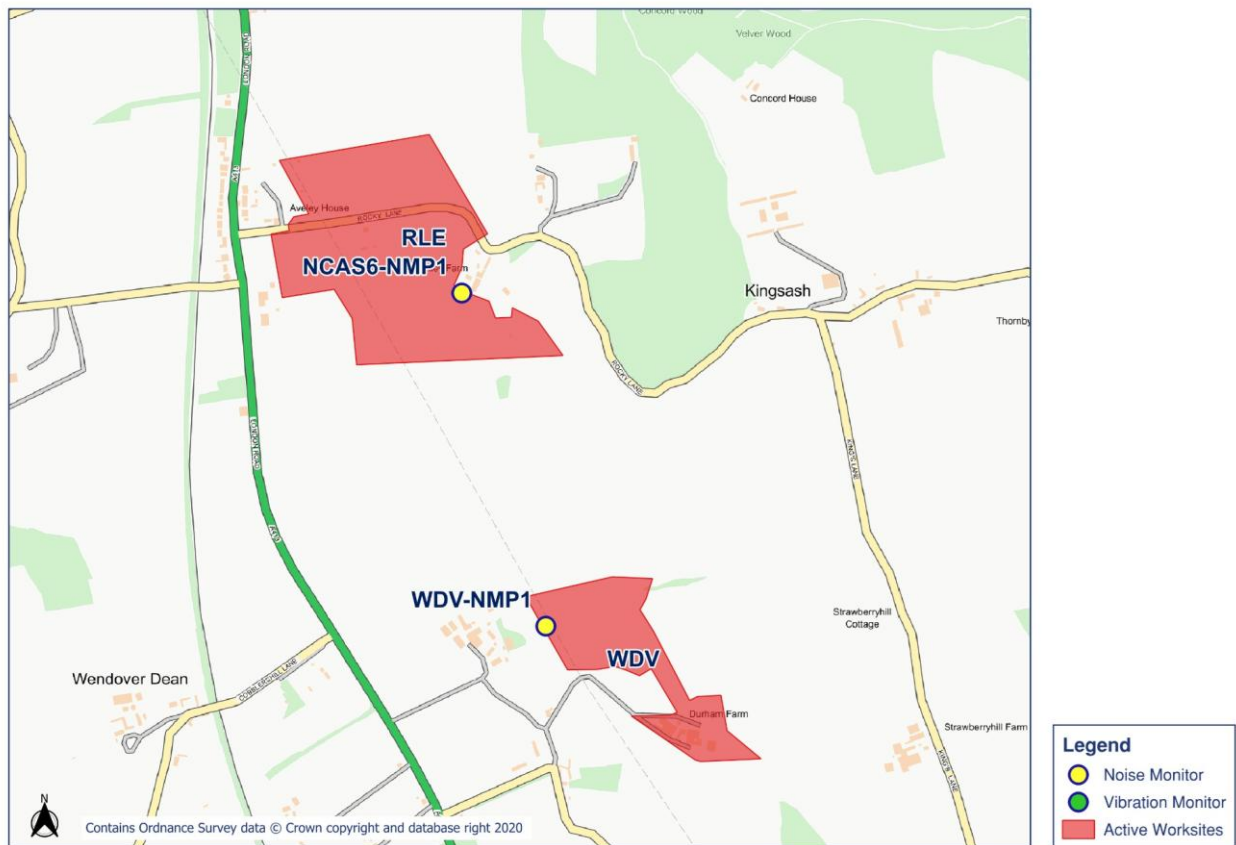


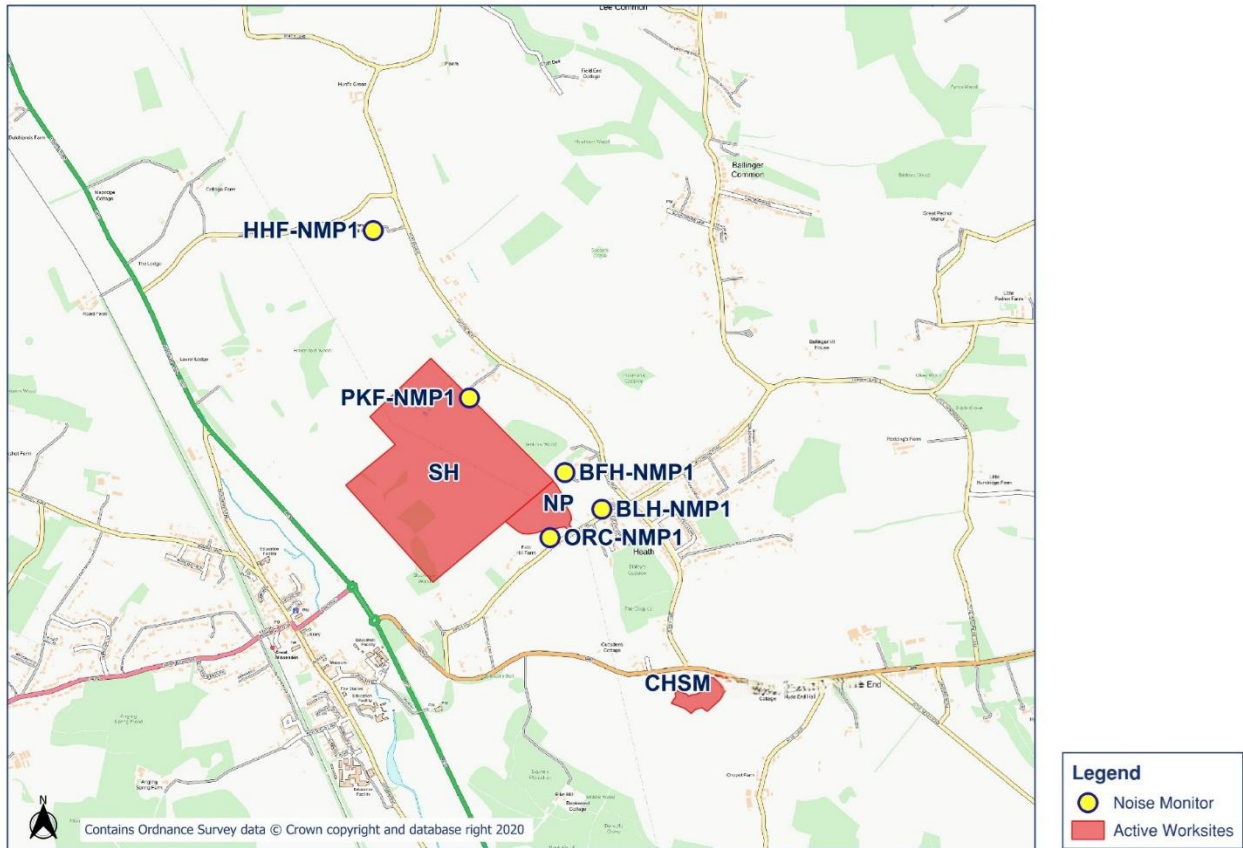
HS2

Noise and Vibration Monitoring Plan - 6

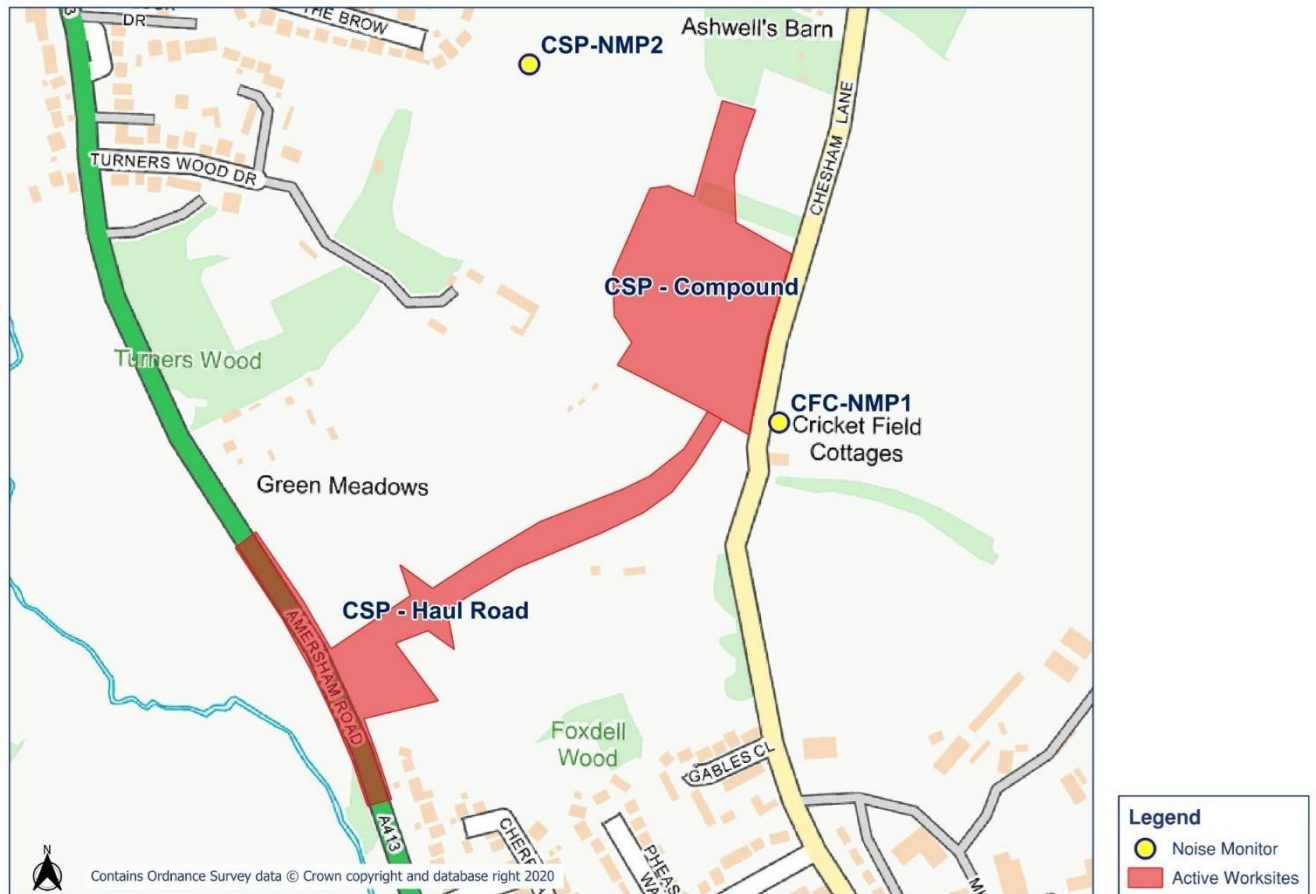








HS2 Noise and Vibration Monitoring Plan - 10

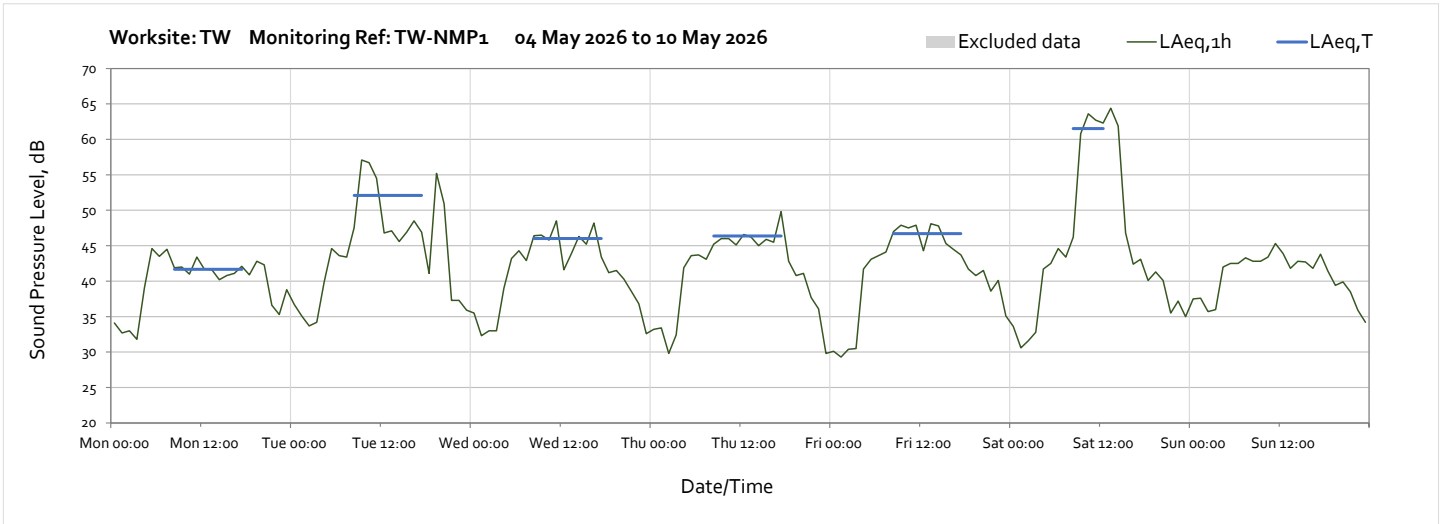
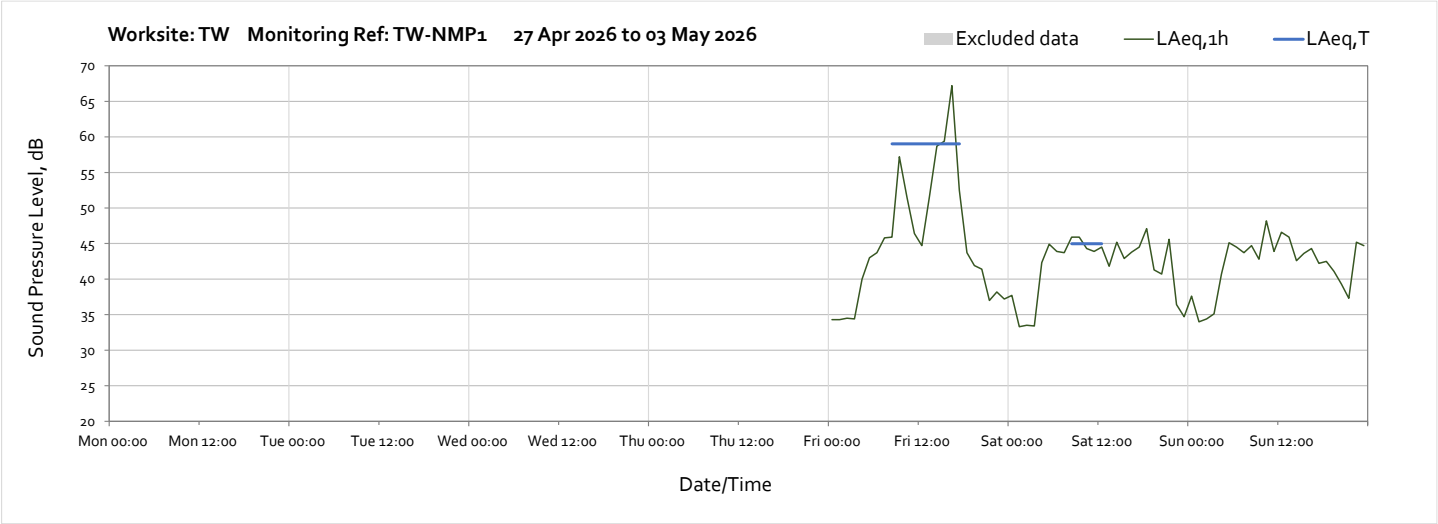


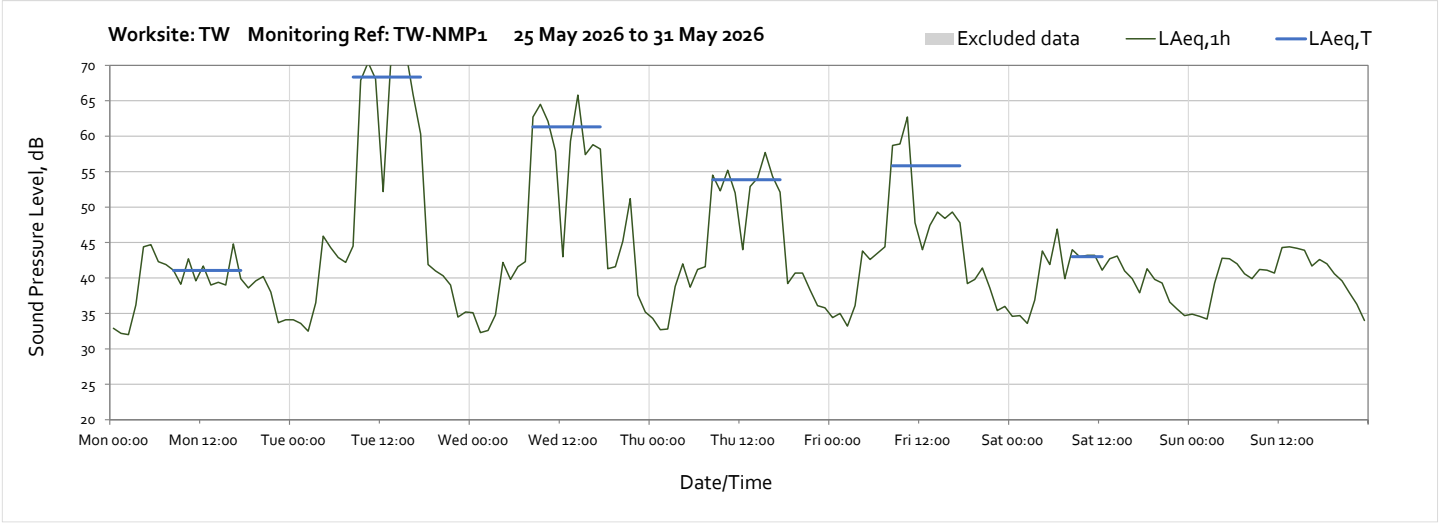
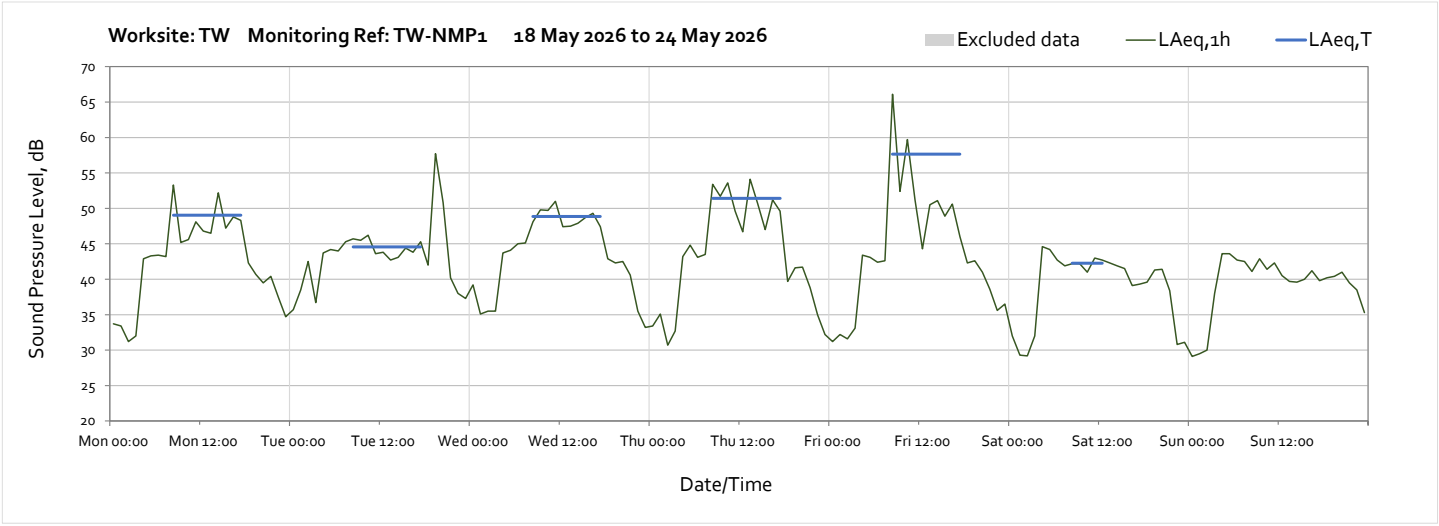
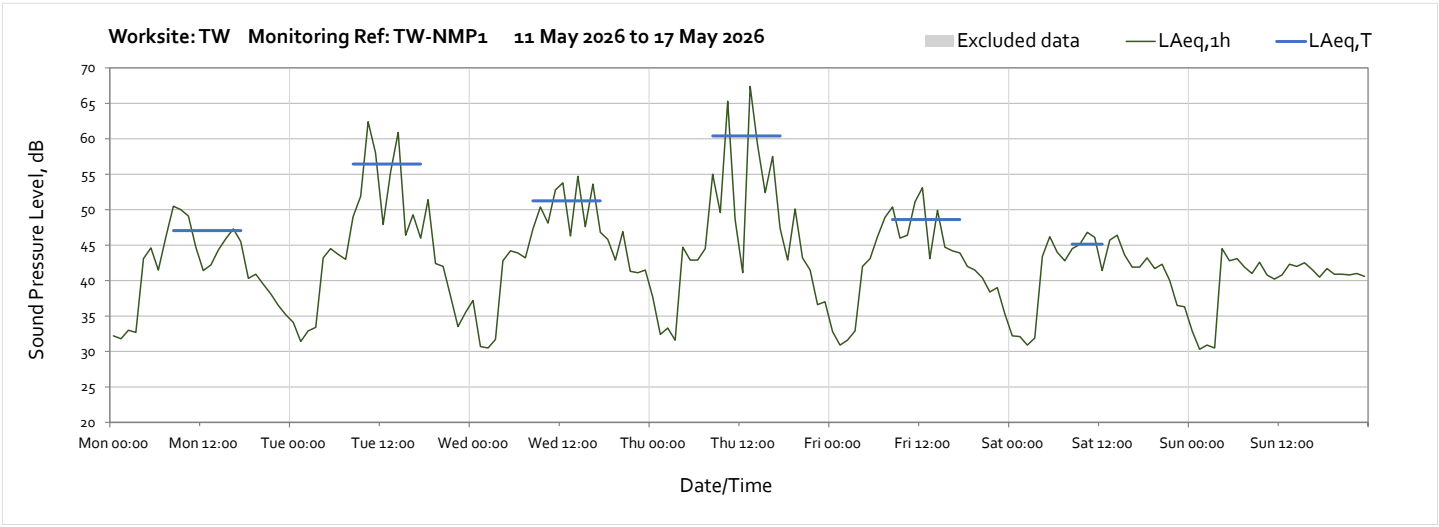
Appendix C Data

Noise

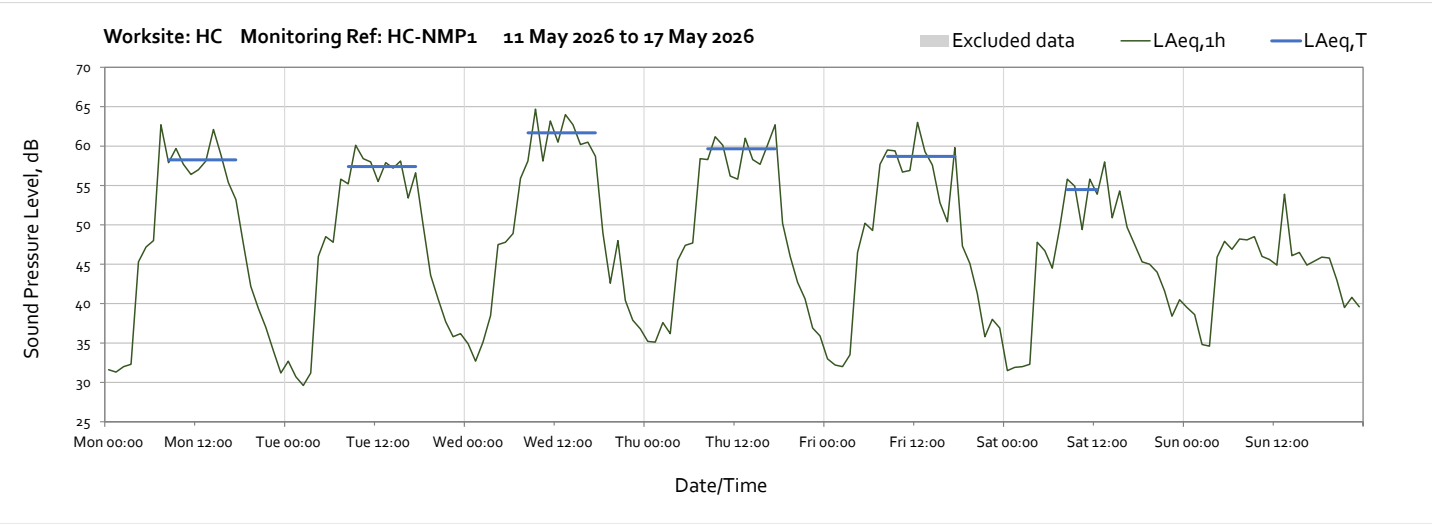
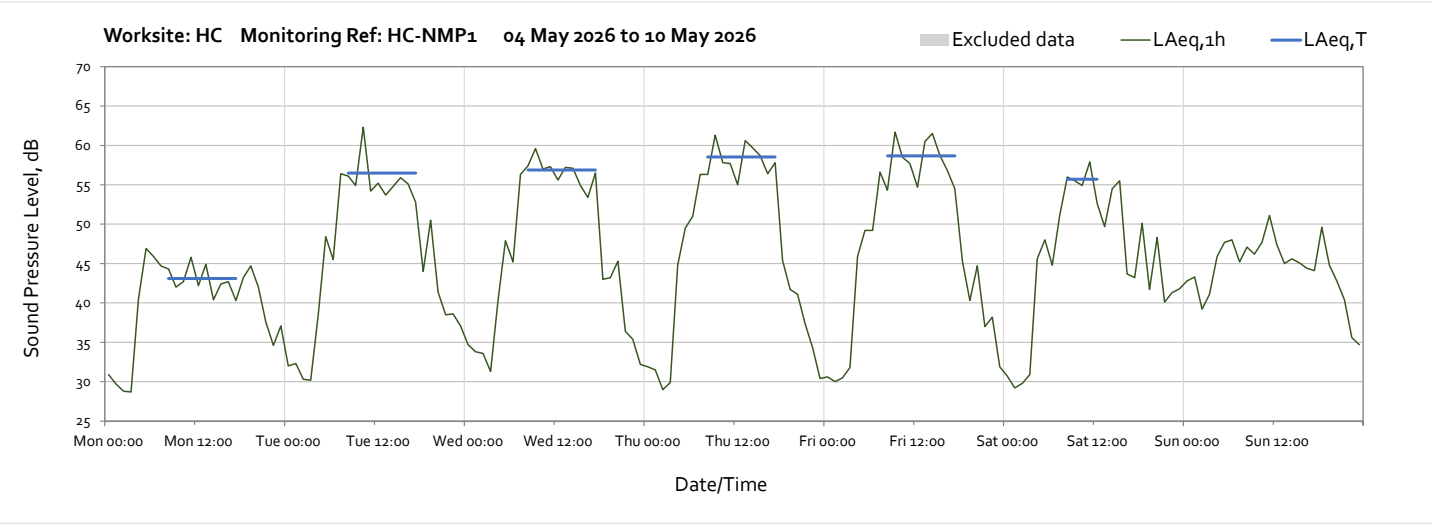
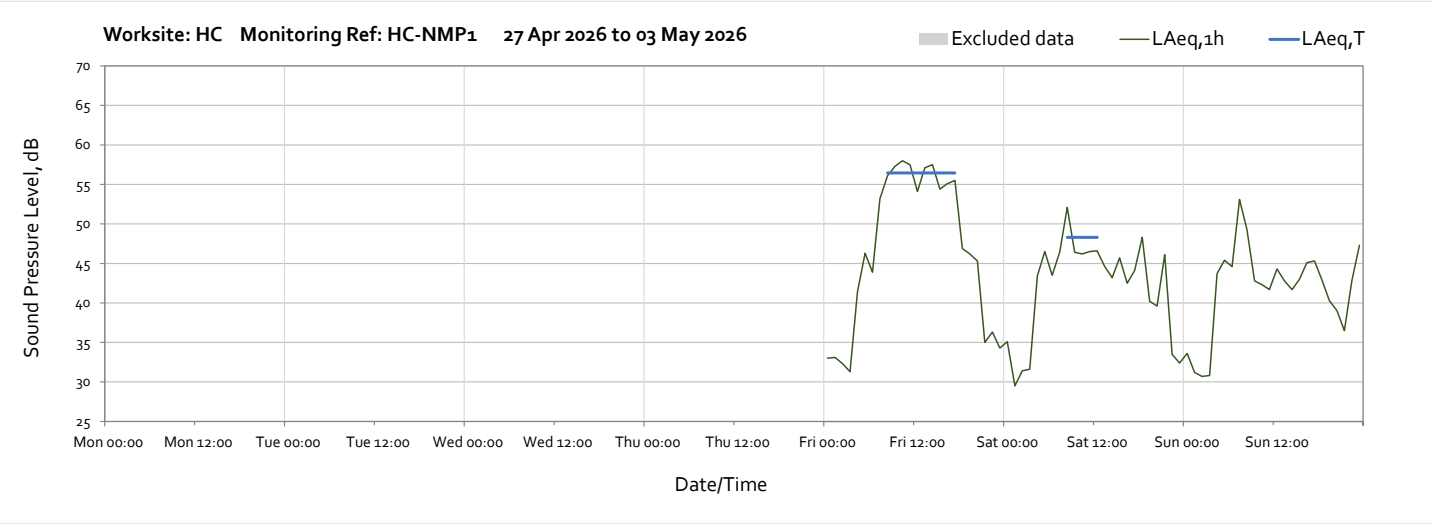
The following graphs show the hourly measured ambient noise level LAeq,1h and, where relevant, the averaged noise level LAeq,T values, where the time period T is as specified in Table 1 of HS2 Information Paper E23. Periods where noise levels are adversely affected by weather or only measured for part 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.

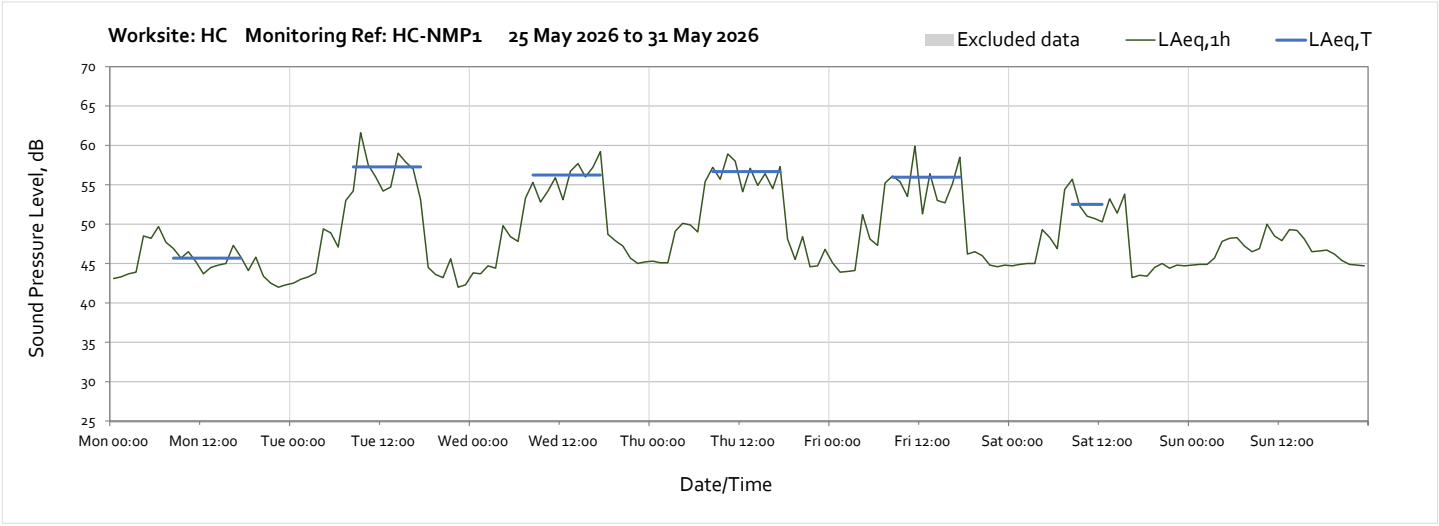
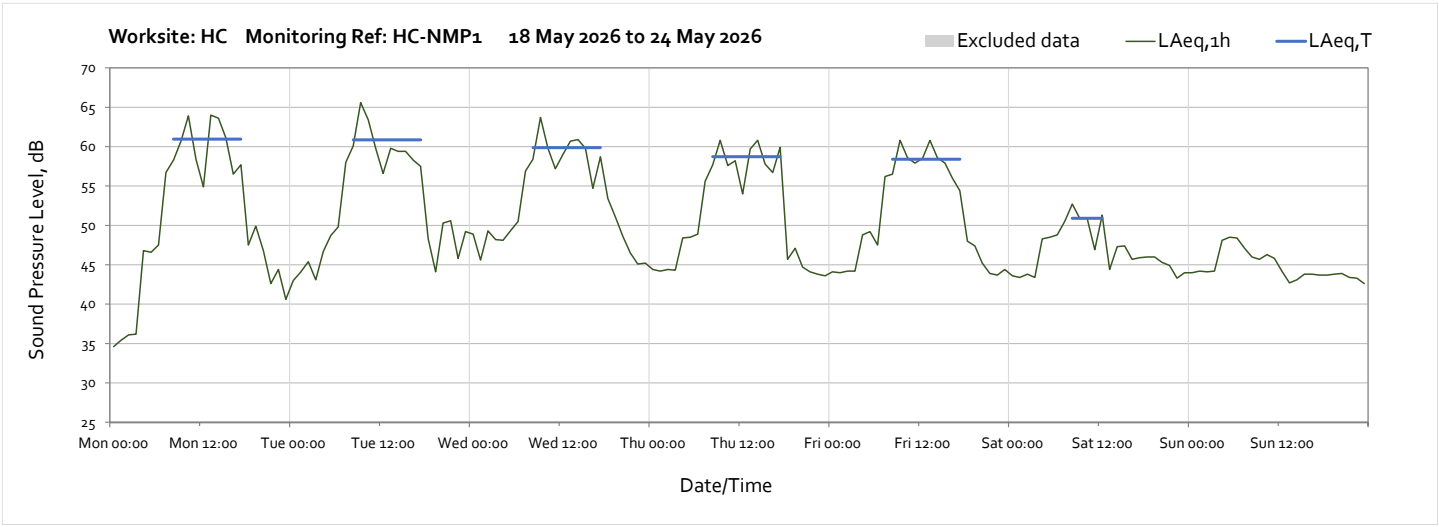
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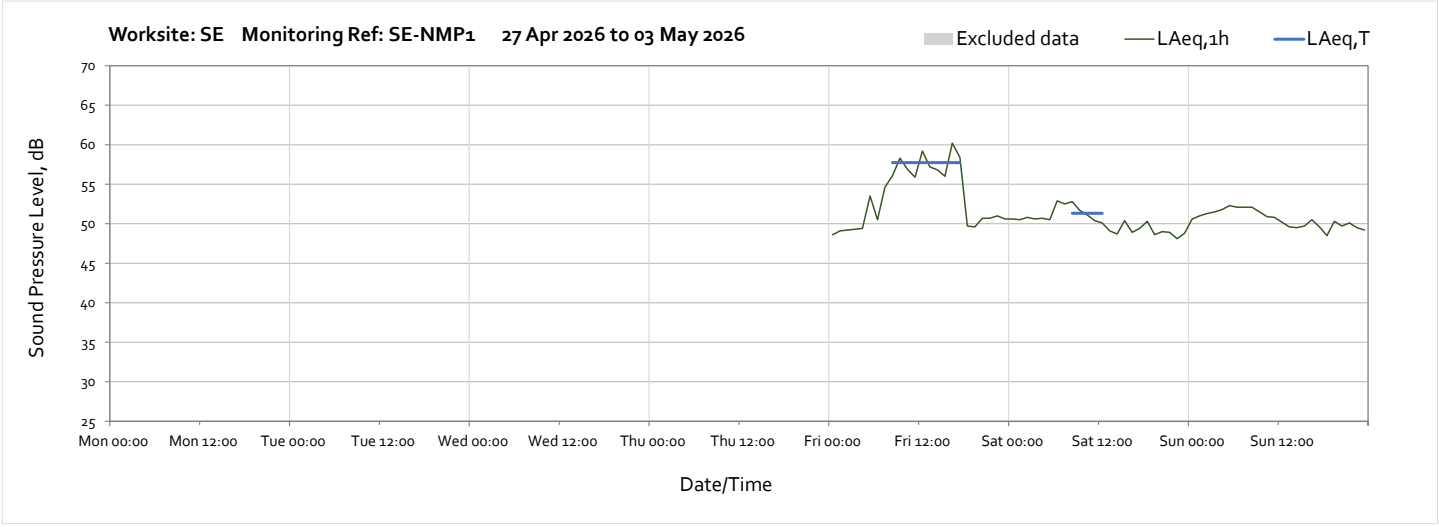


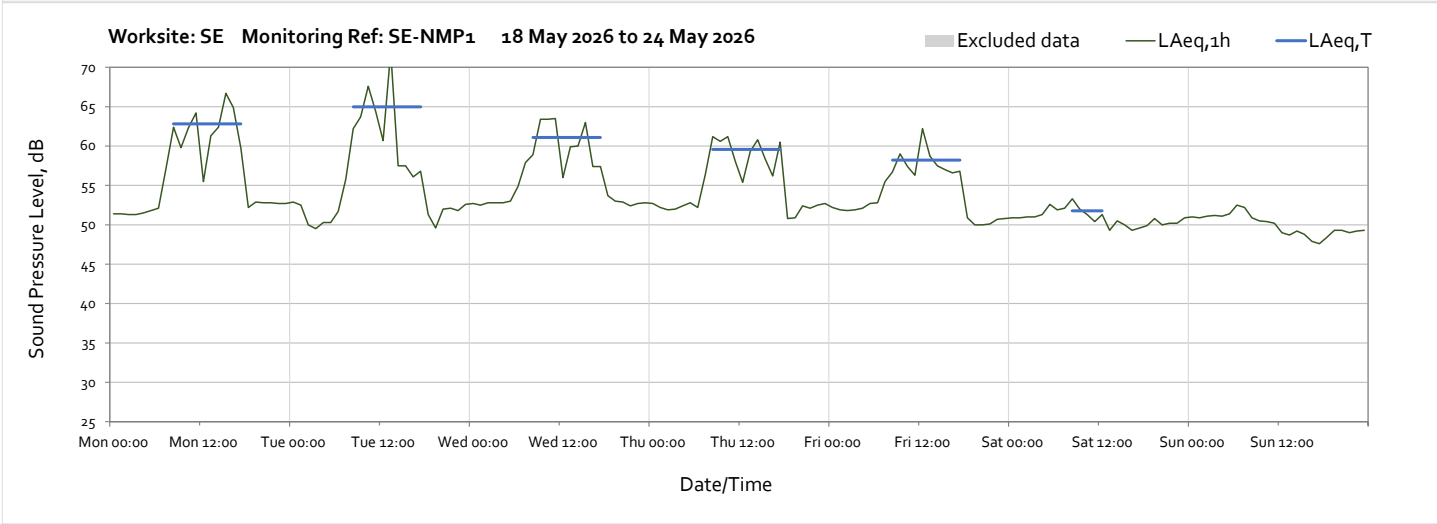
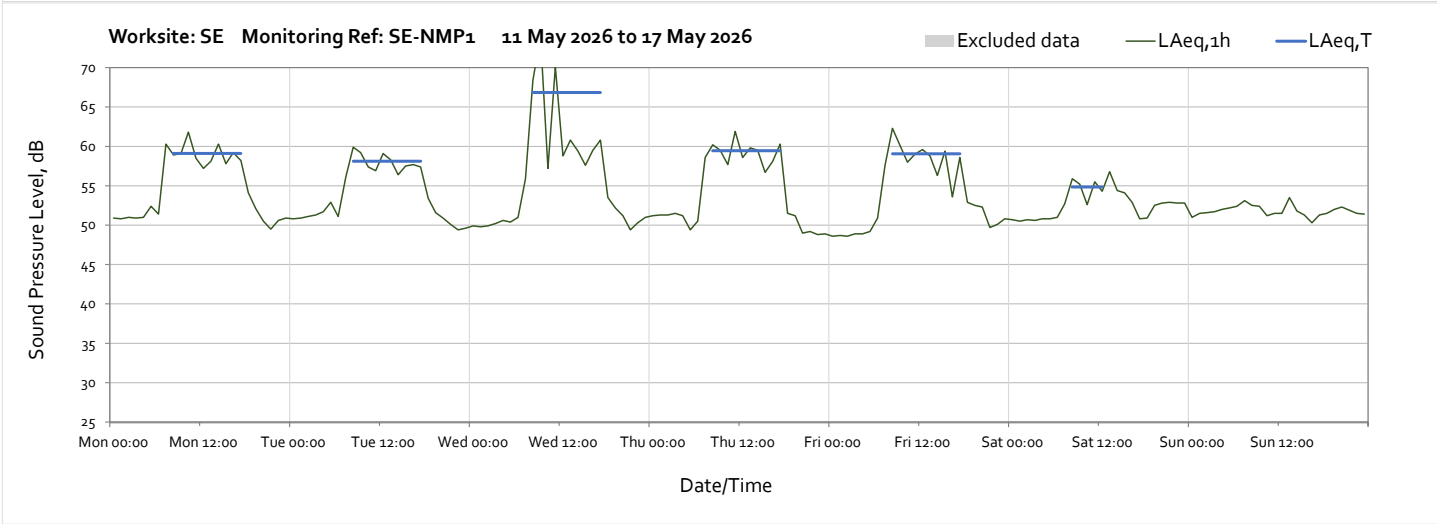
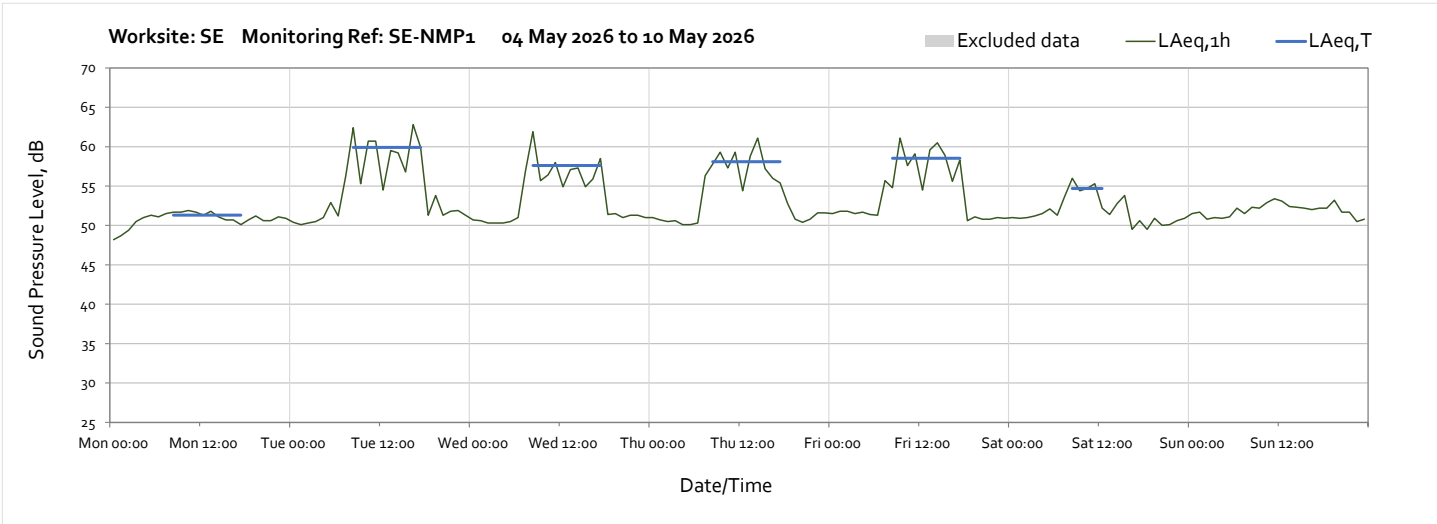
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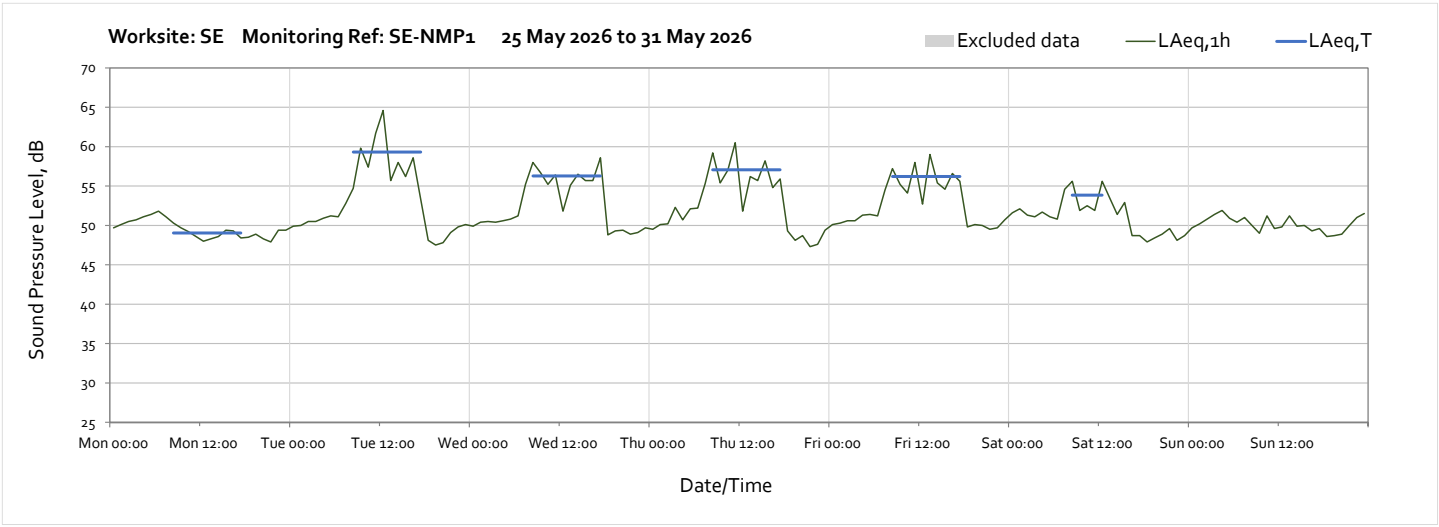




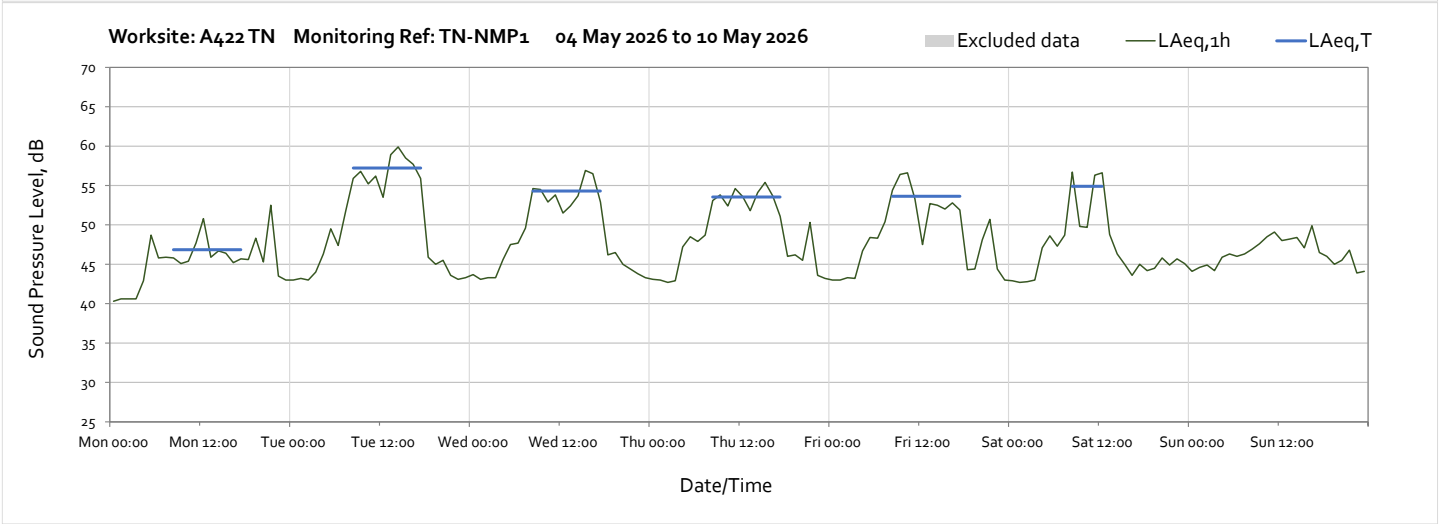
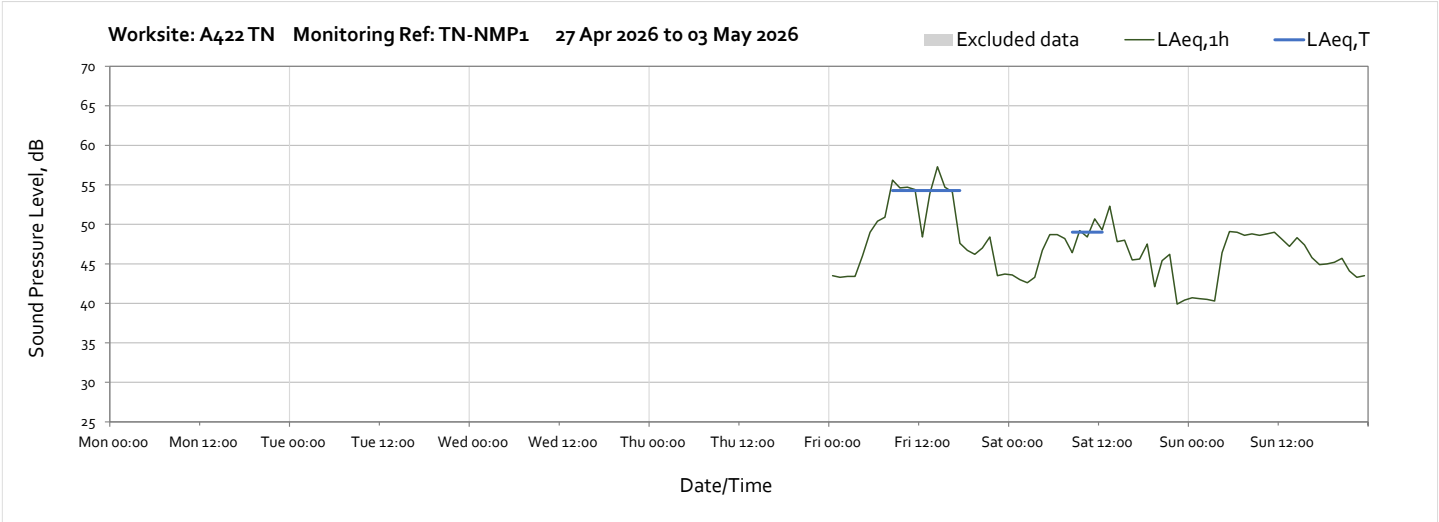
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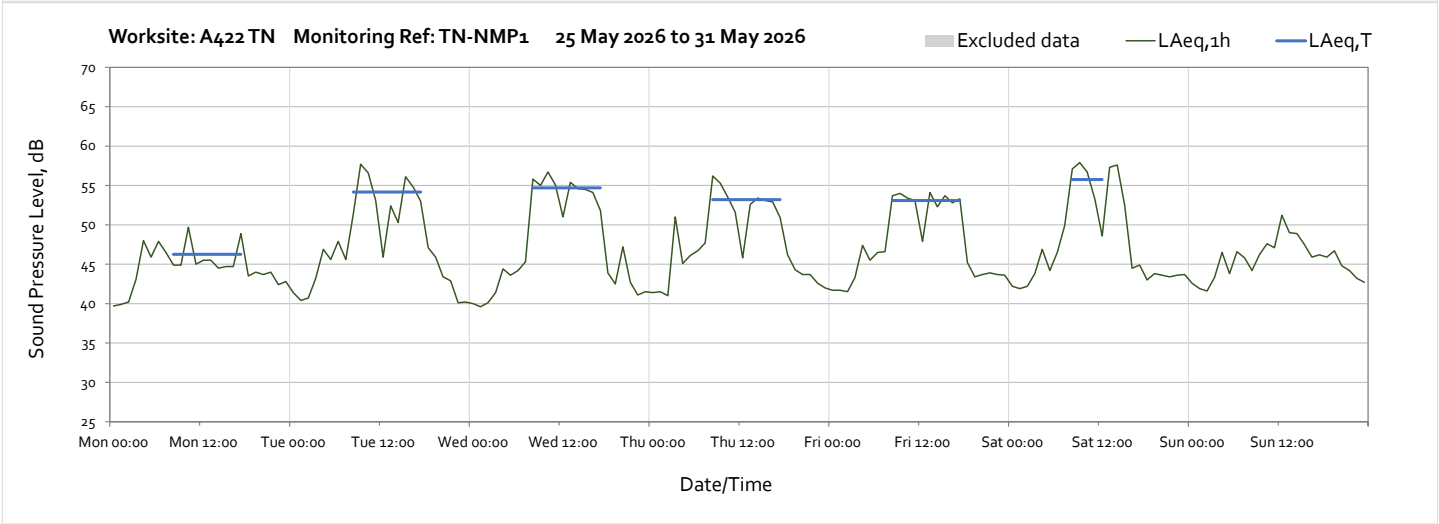
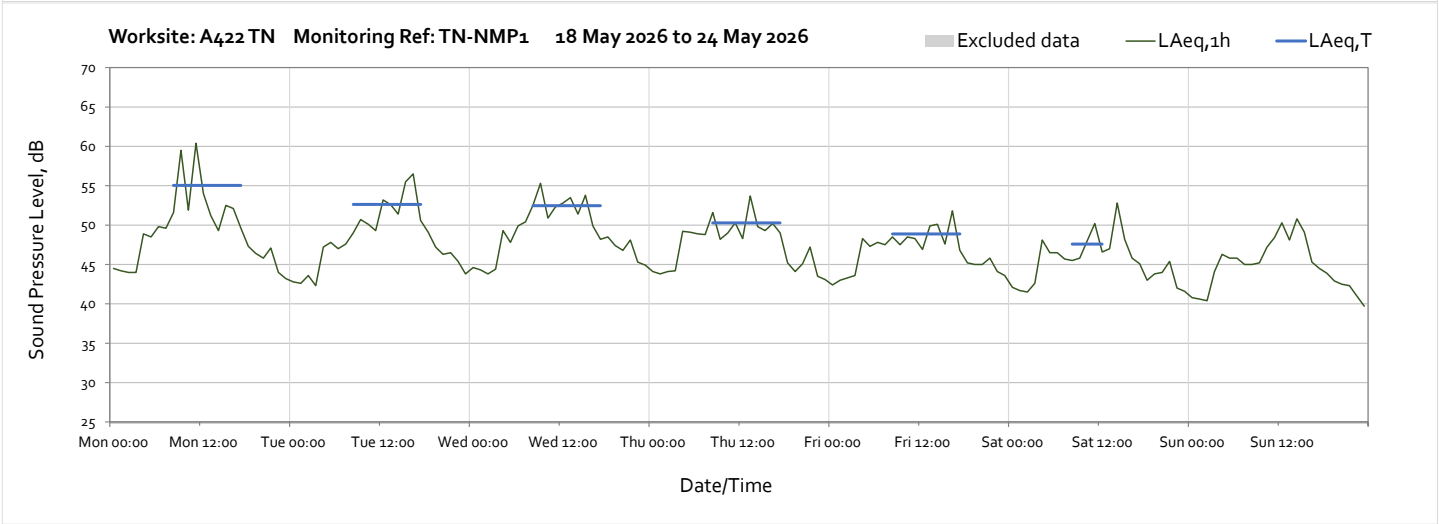
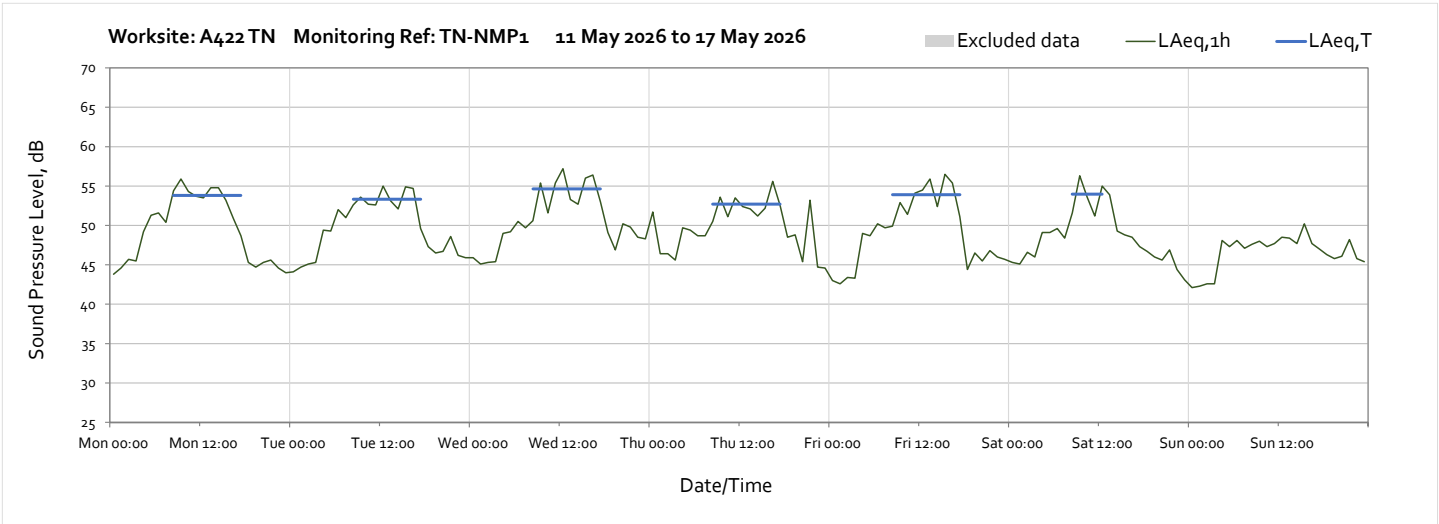




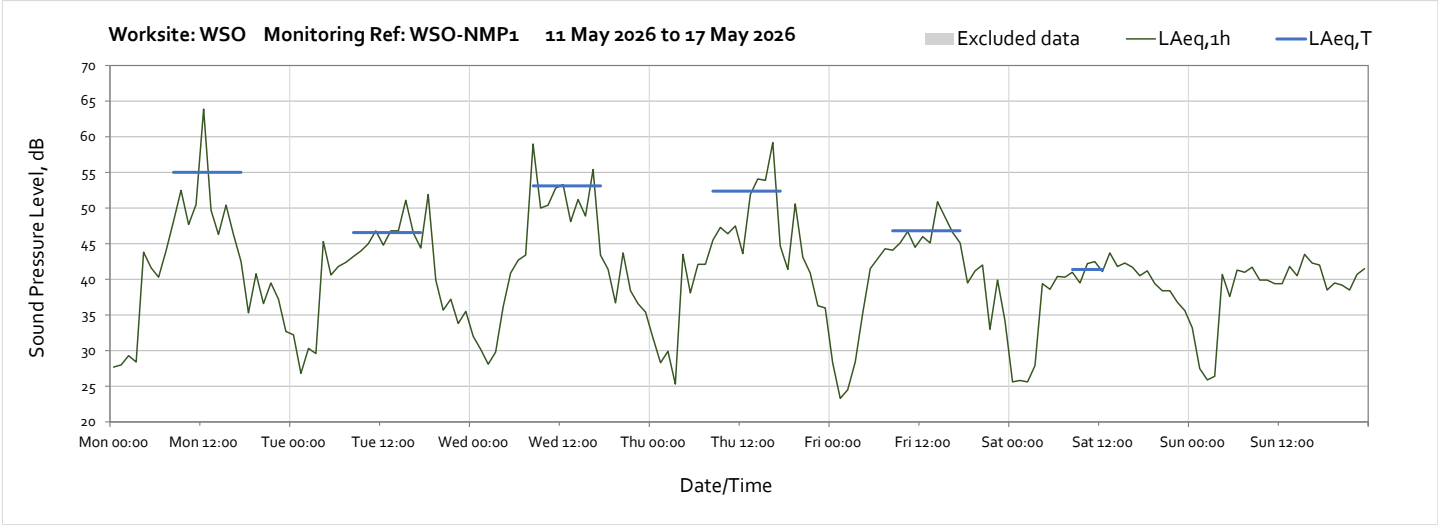
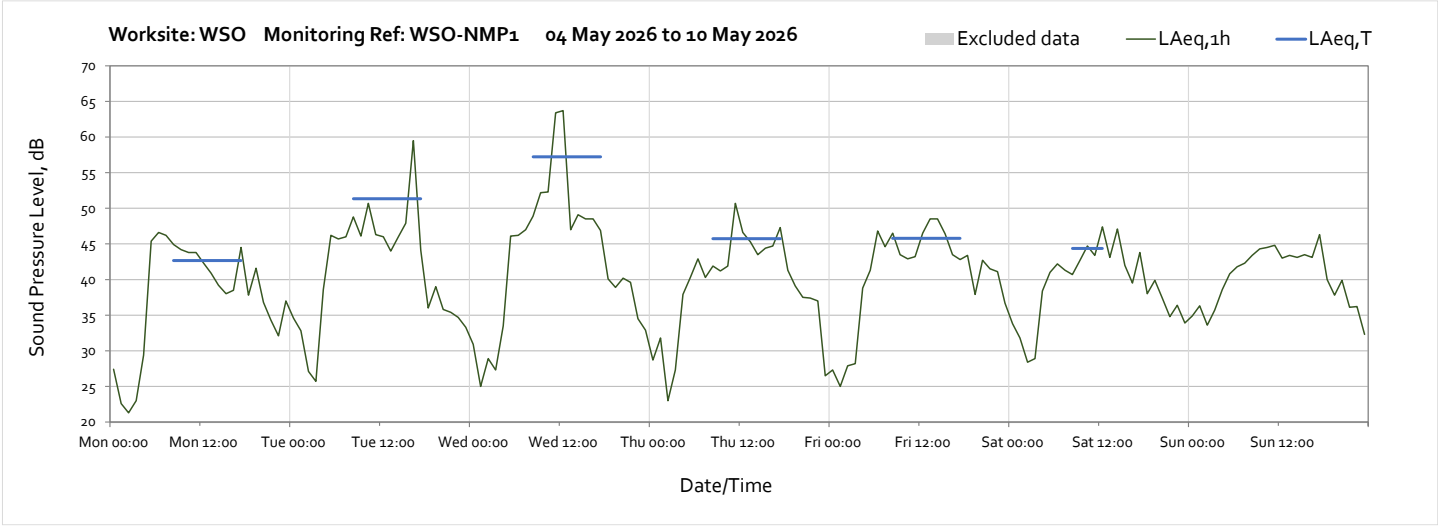
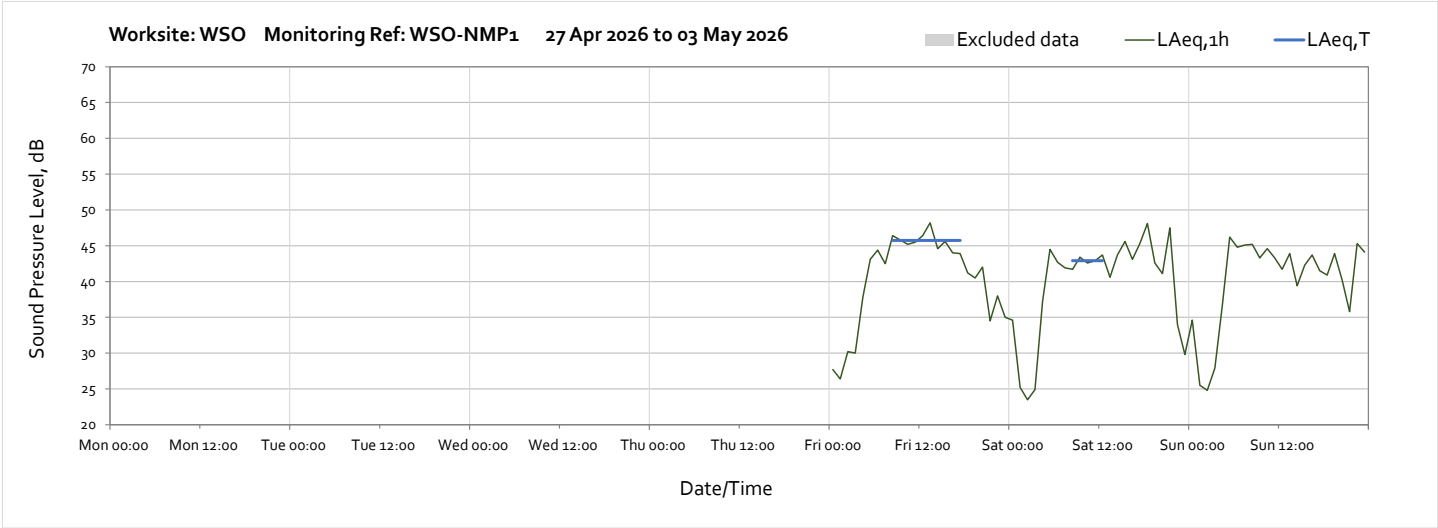


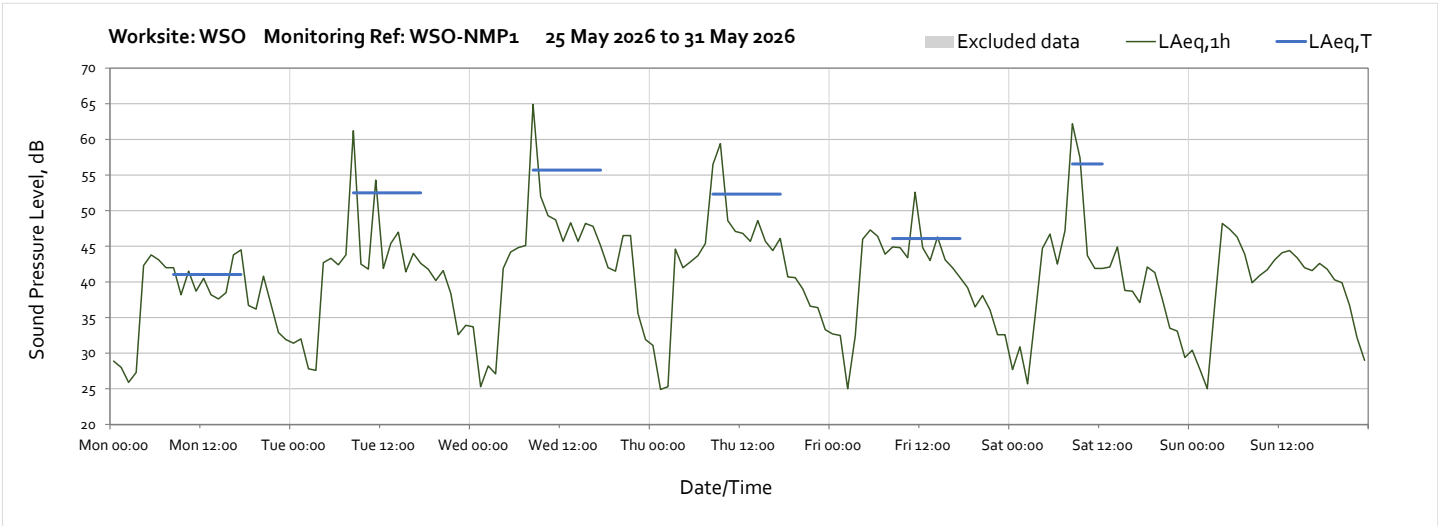
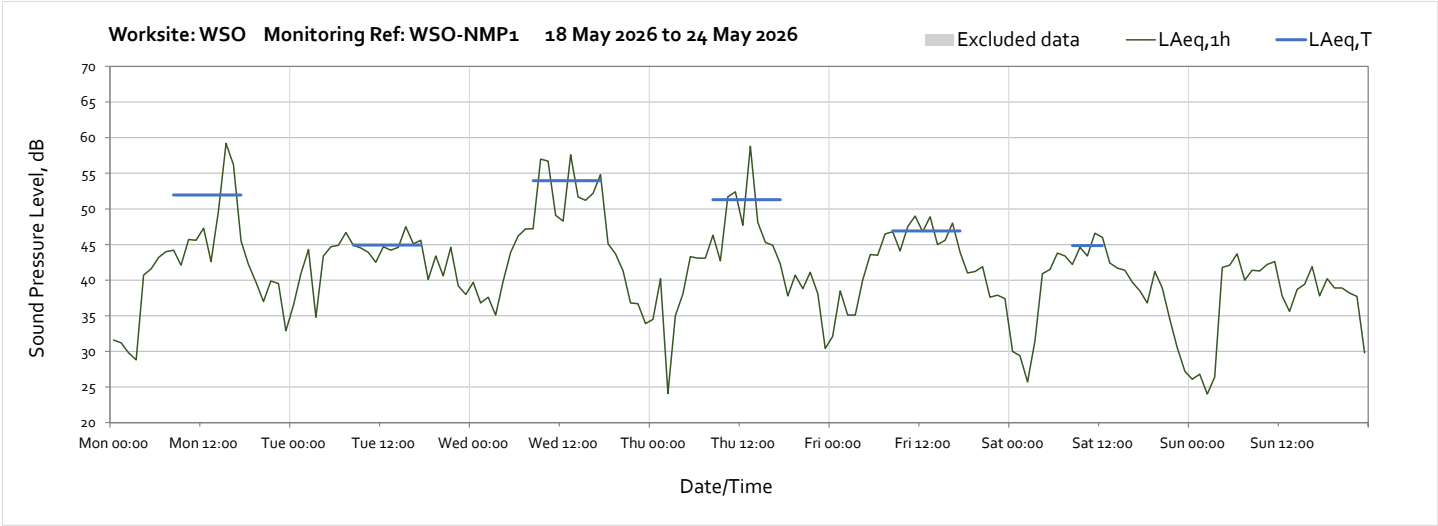
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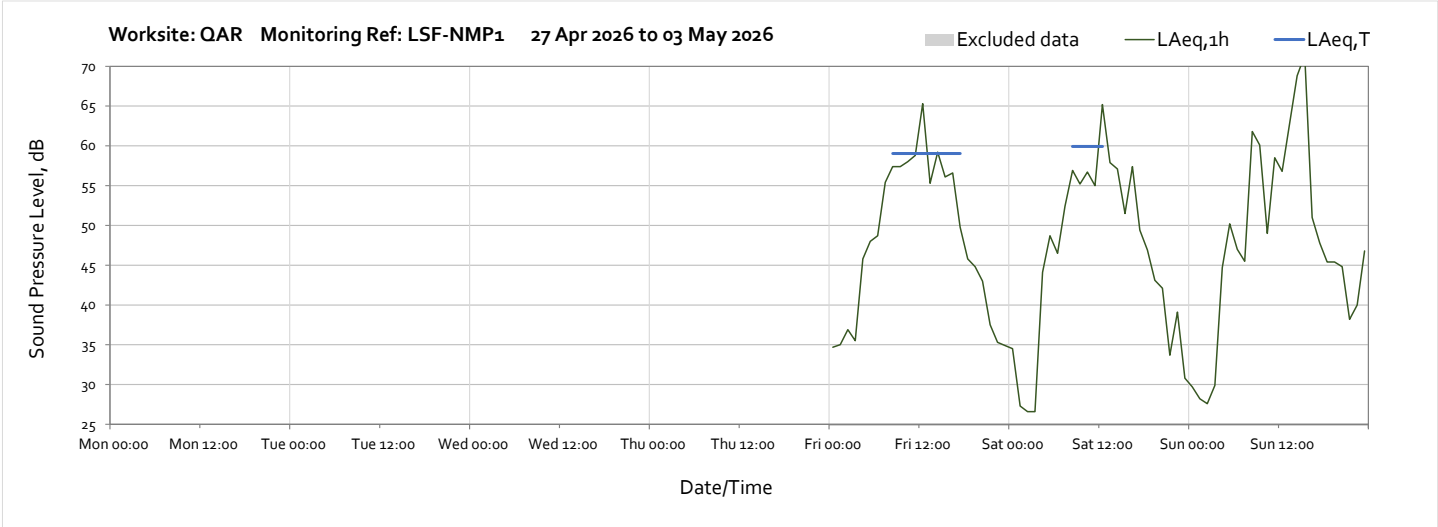


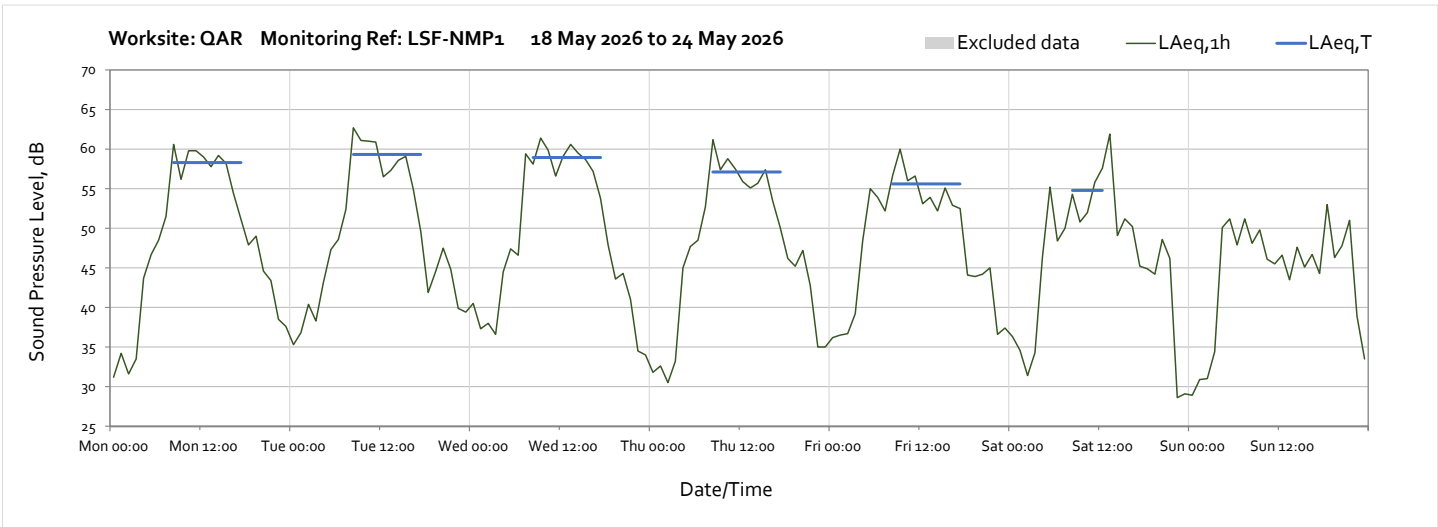
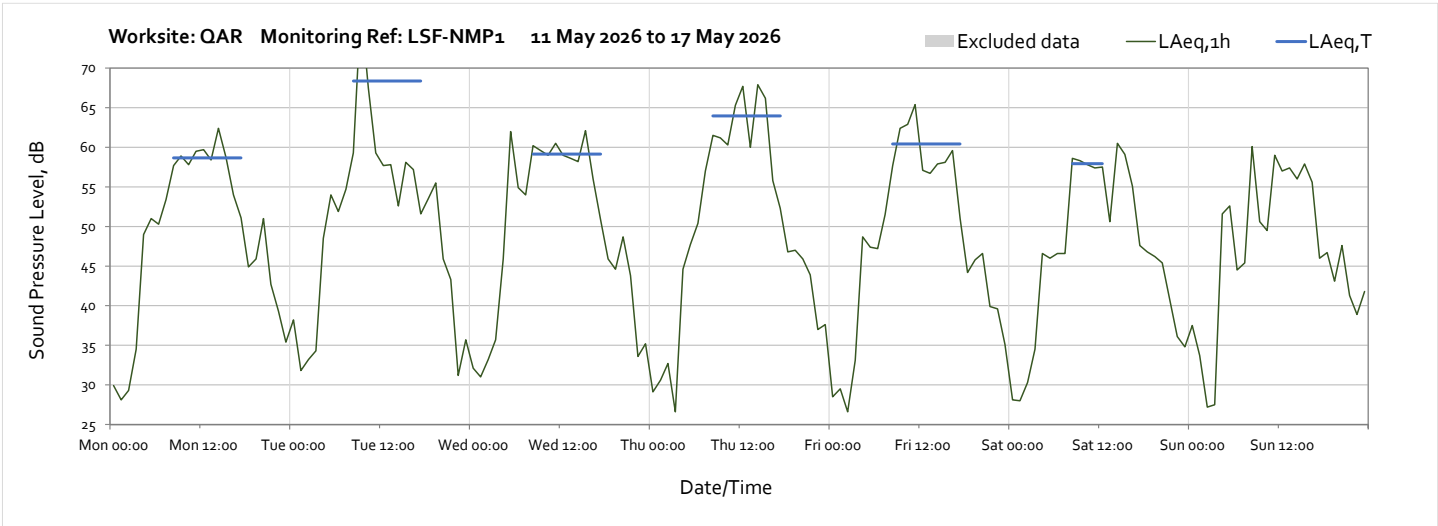
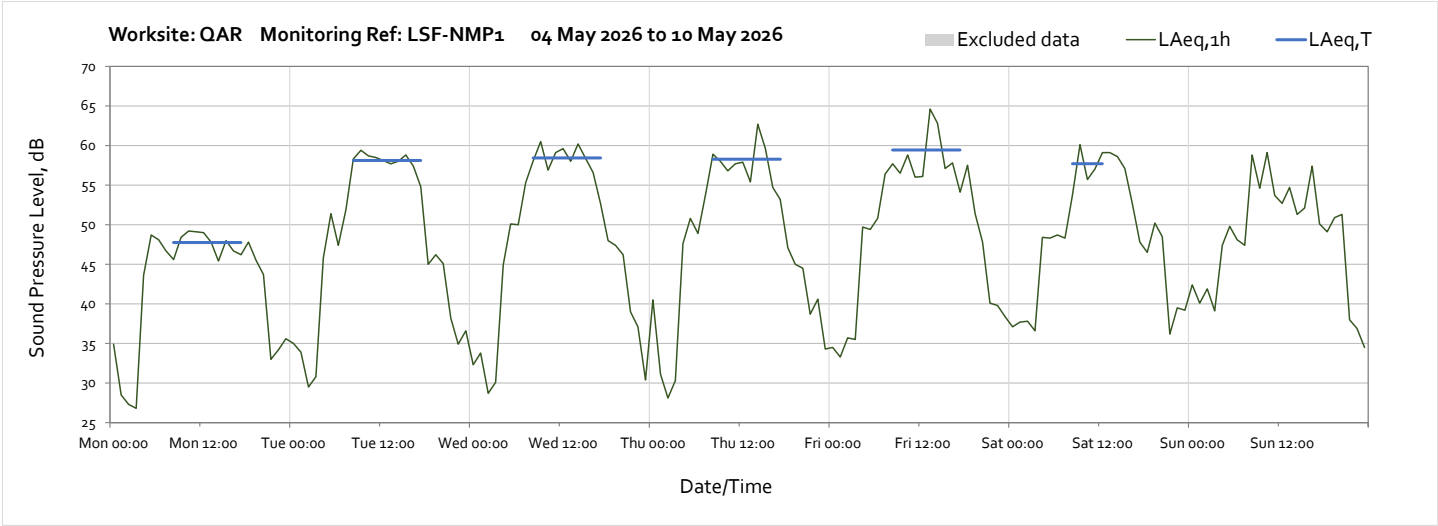
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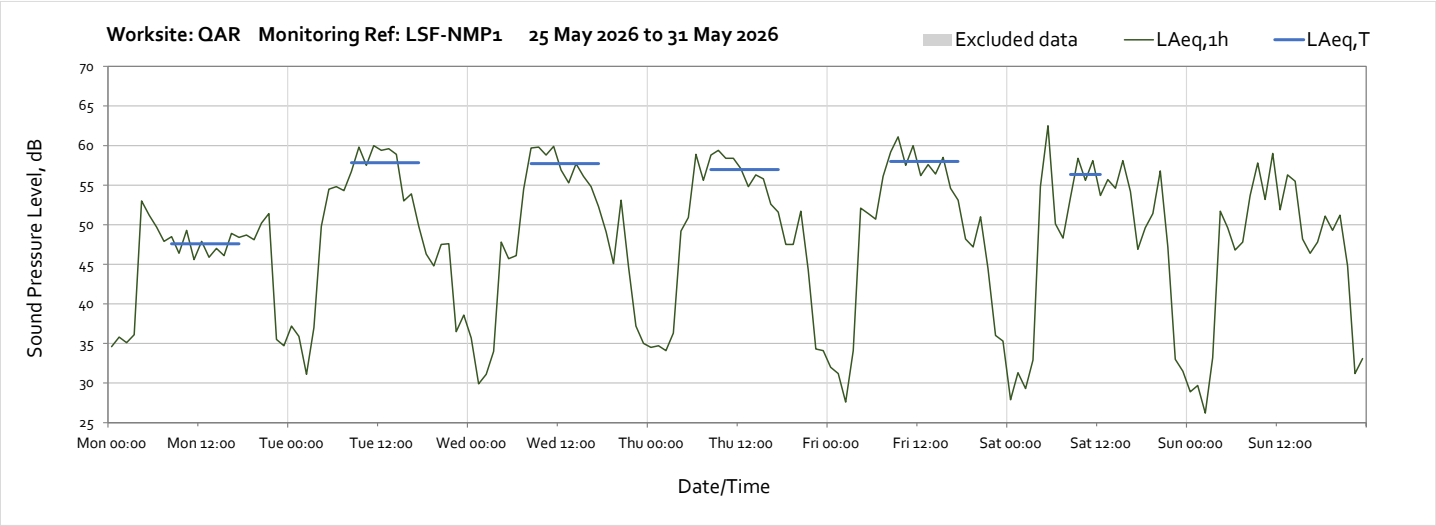




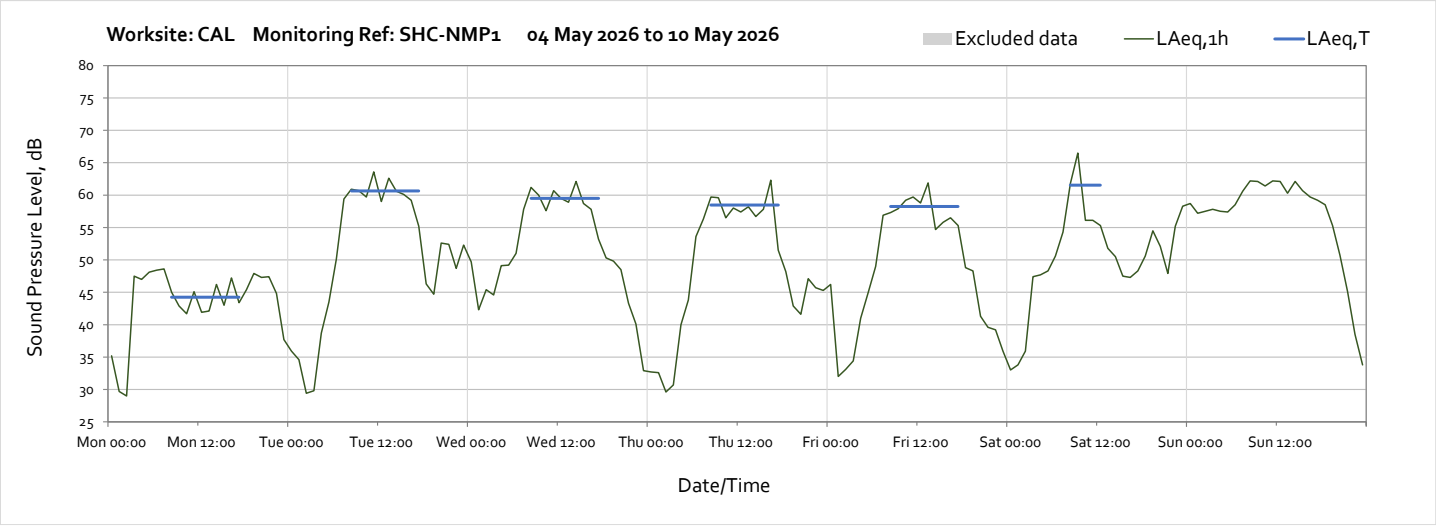
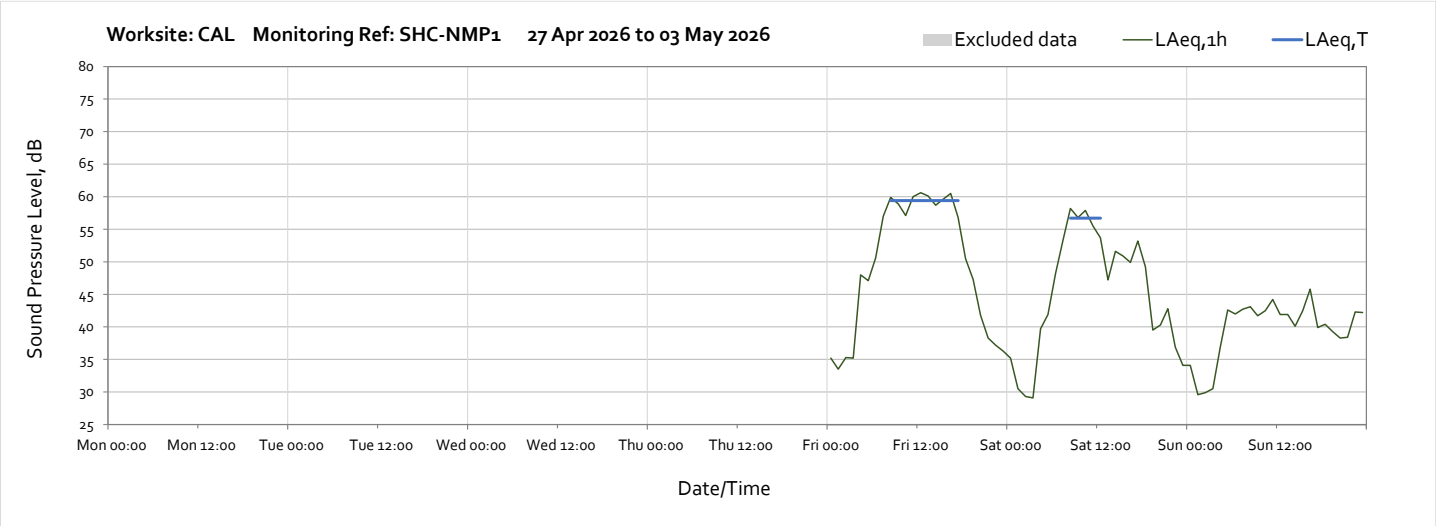
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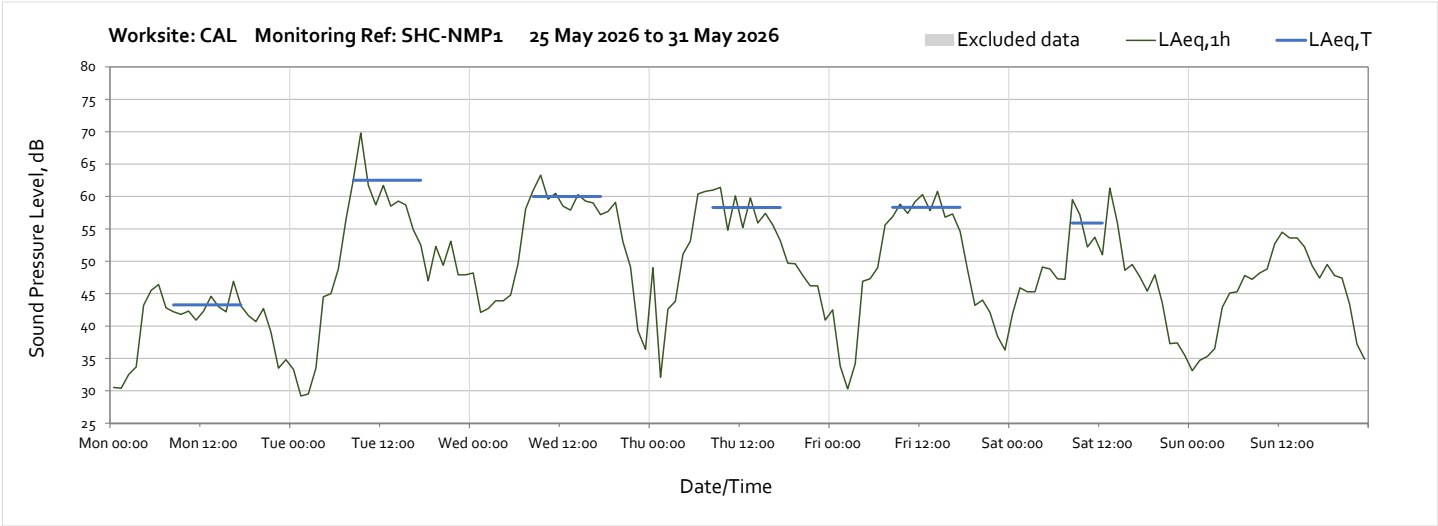
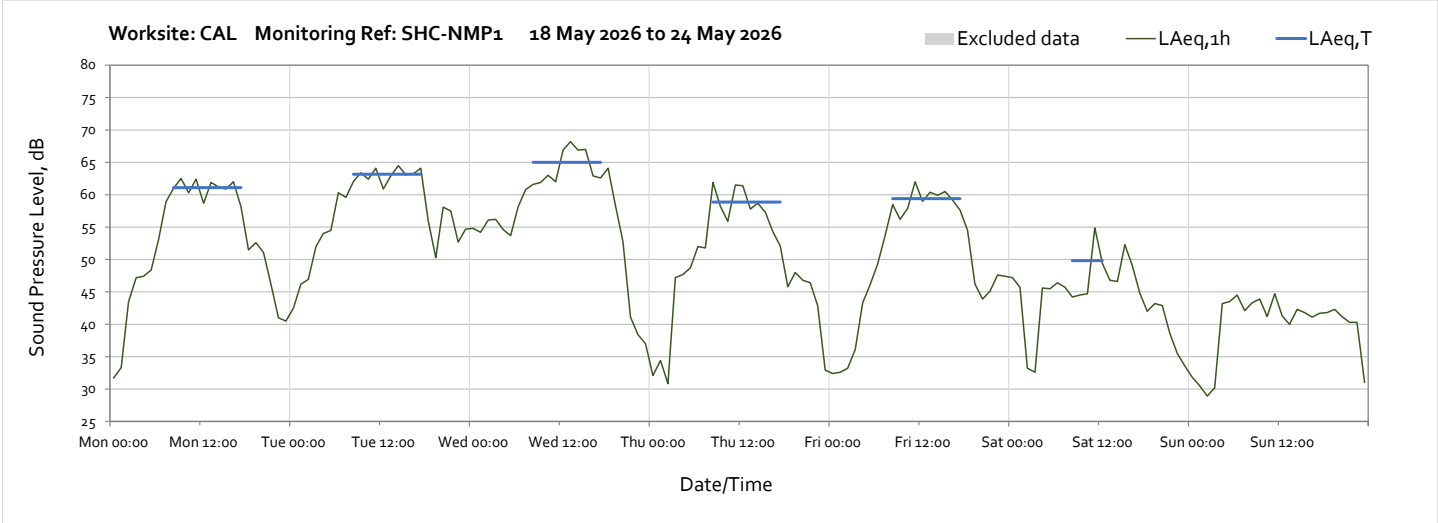
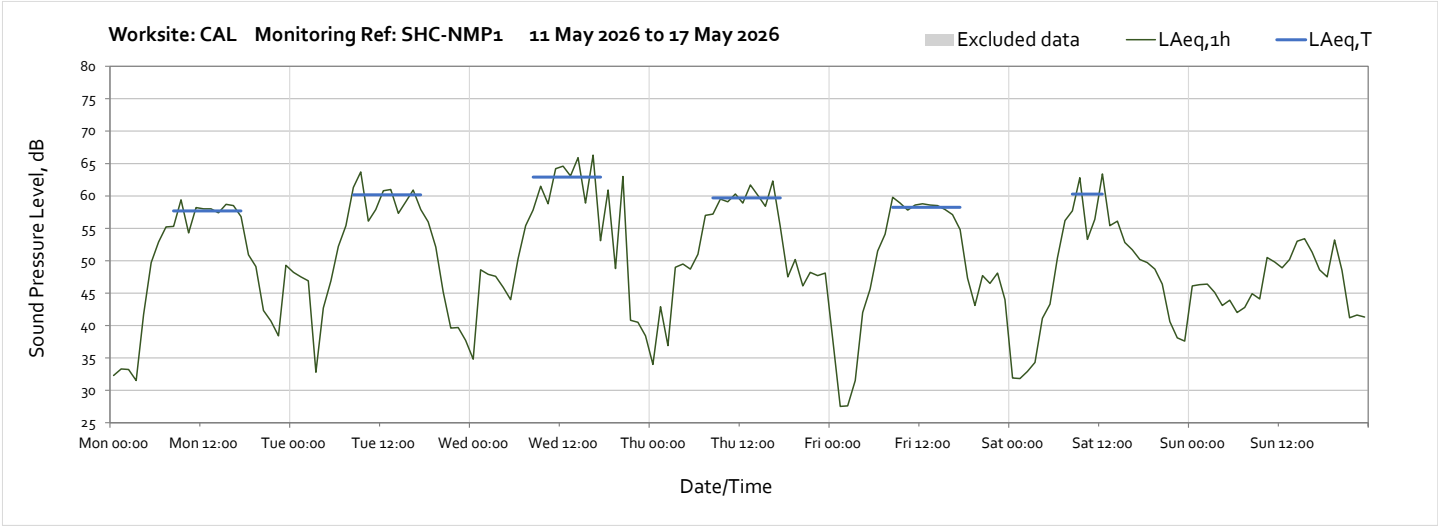




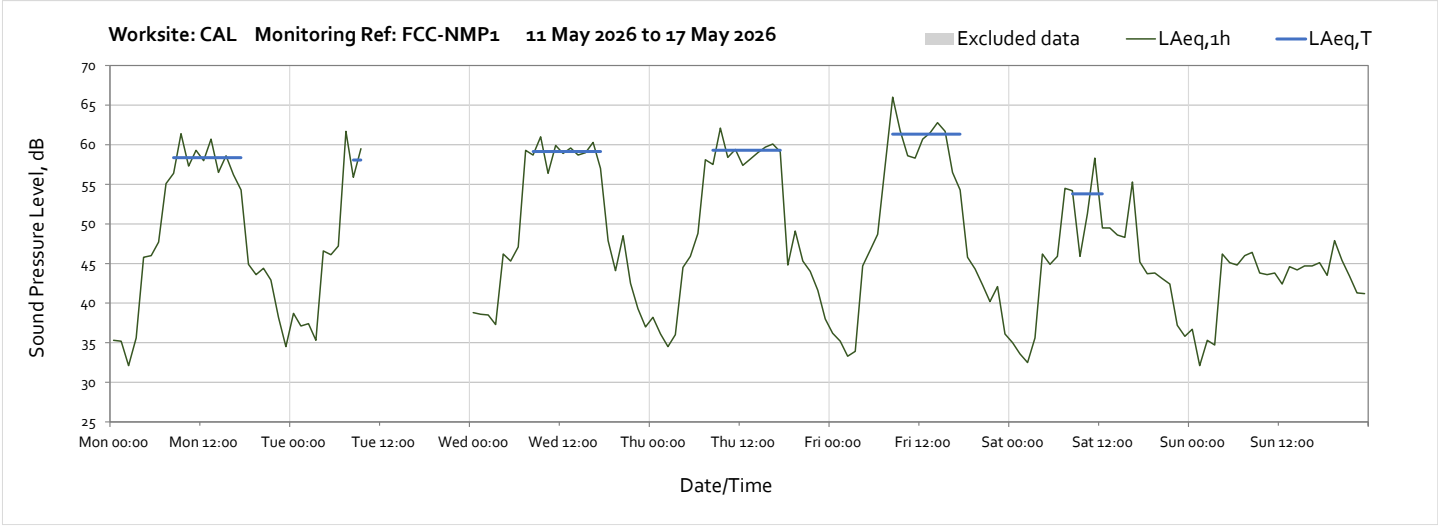
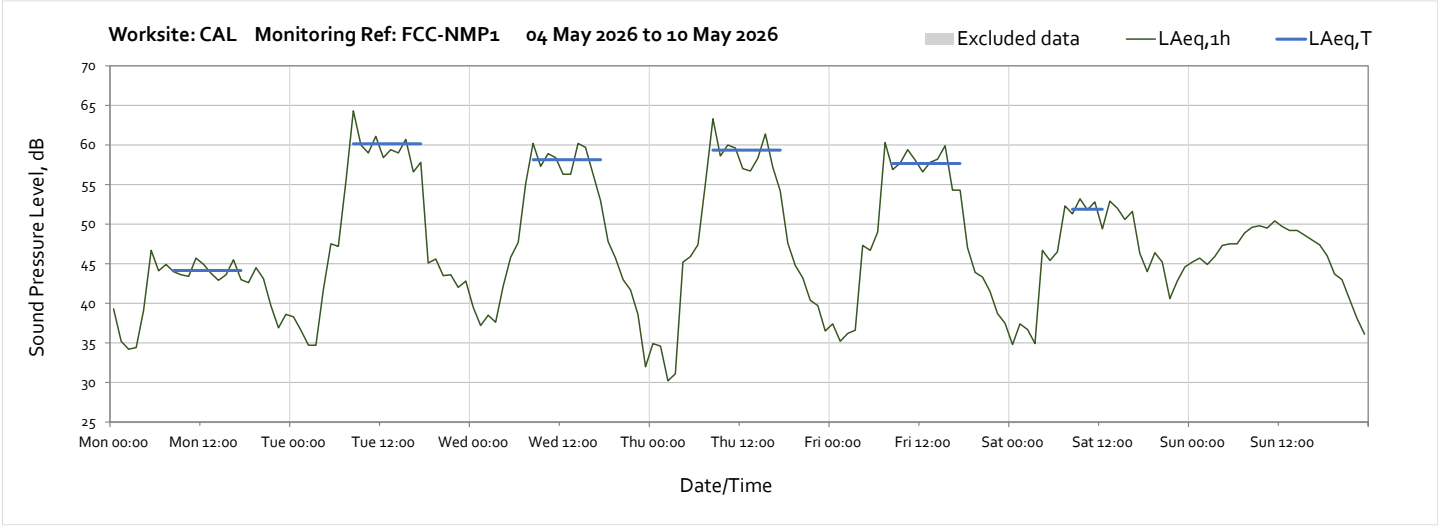
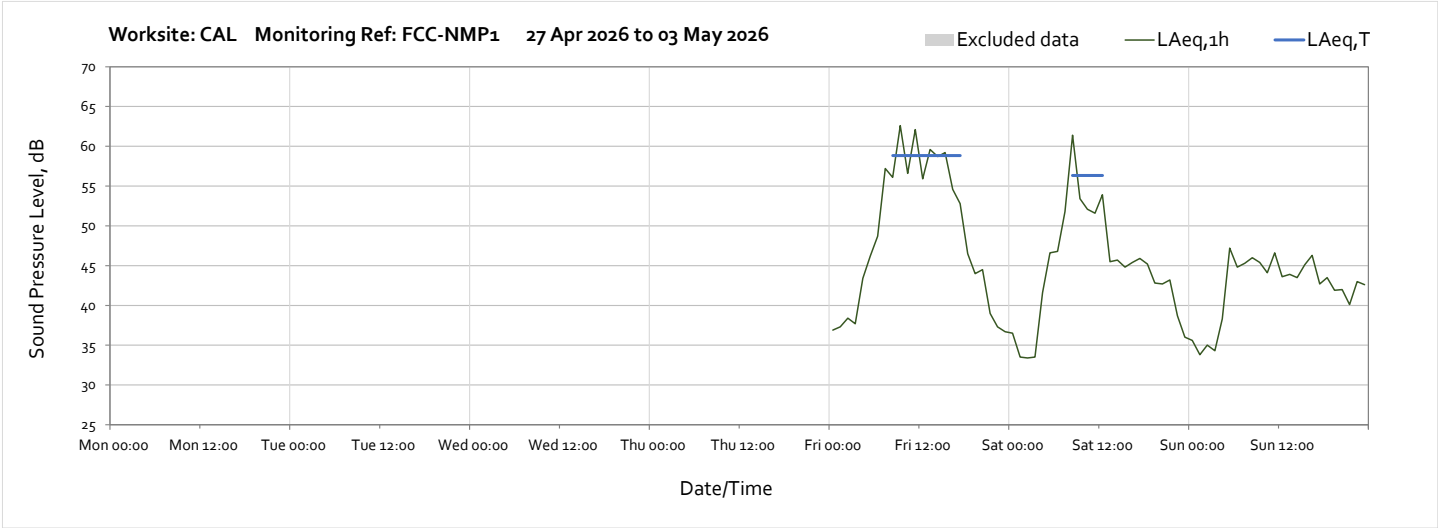


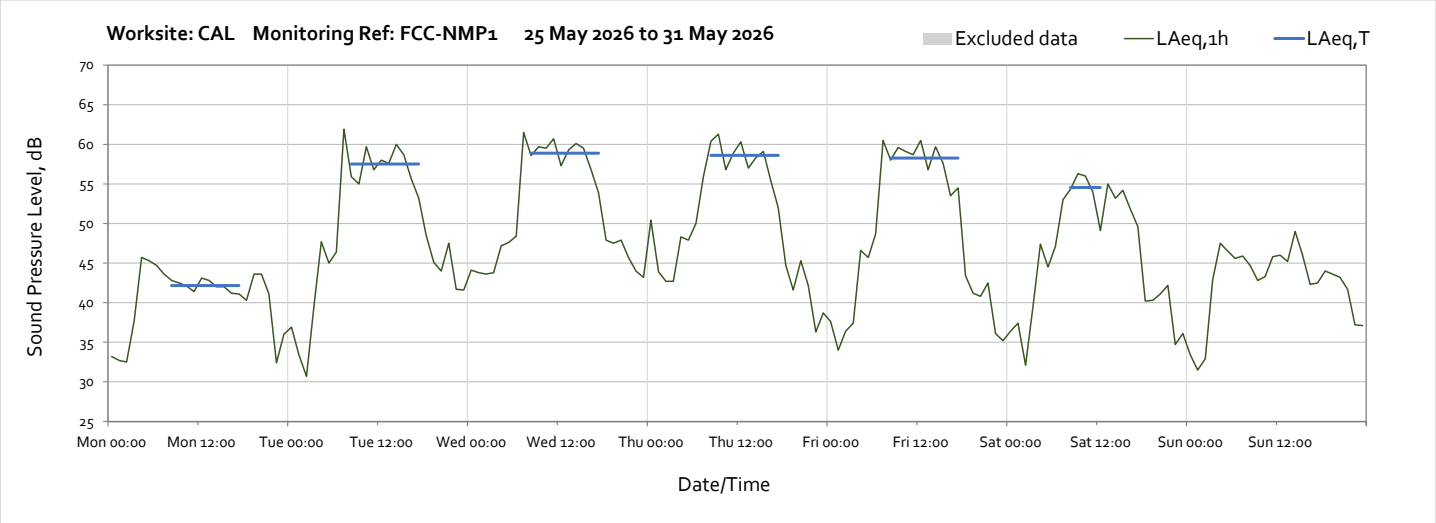
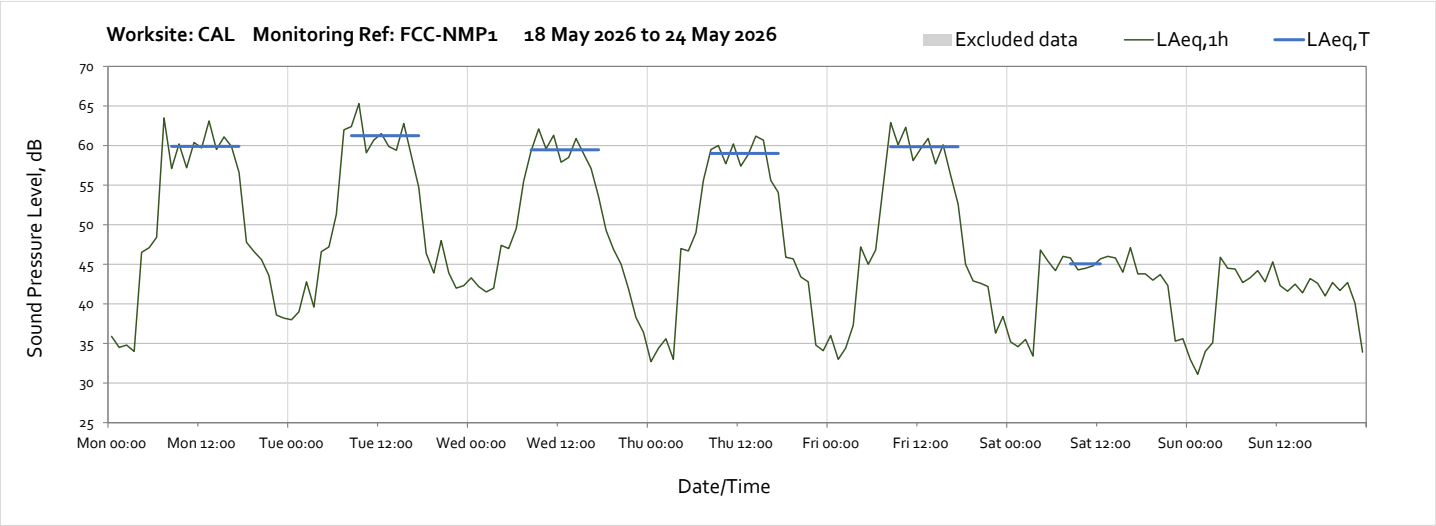
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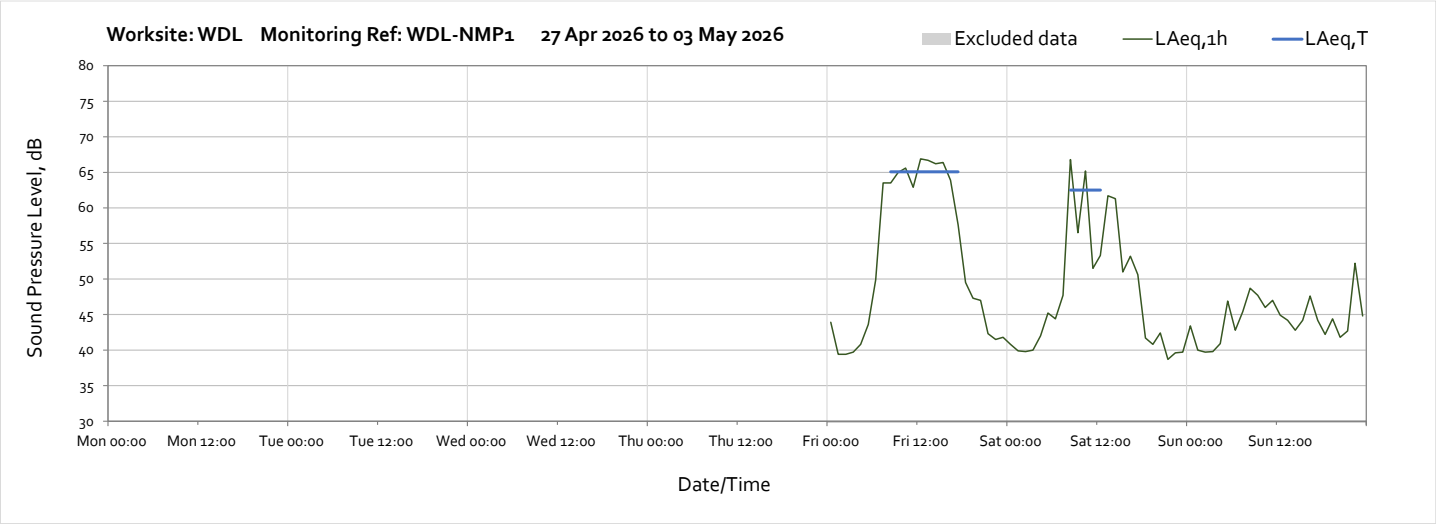


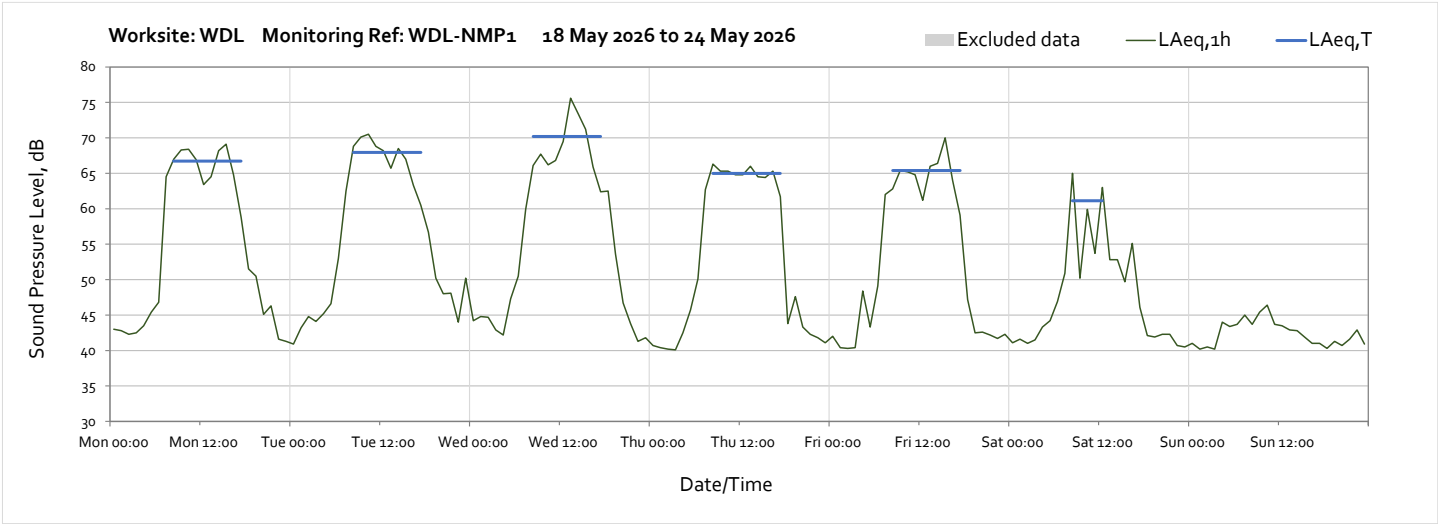
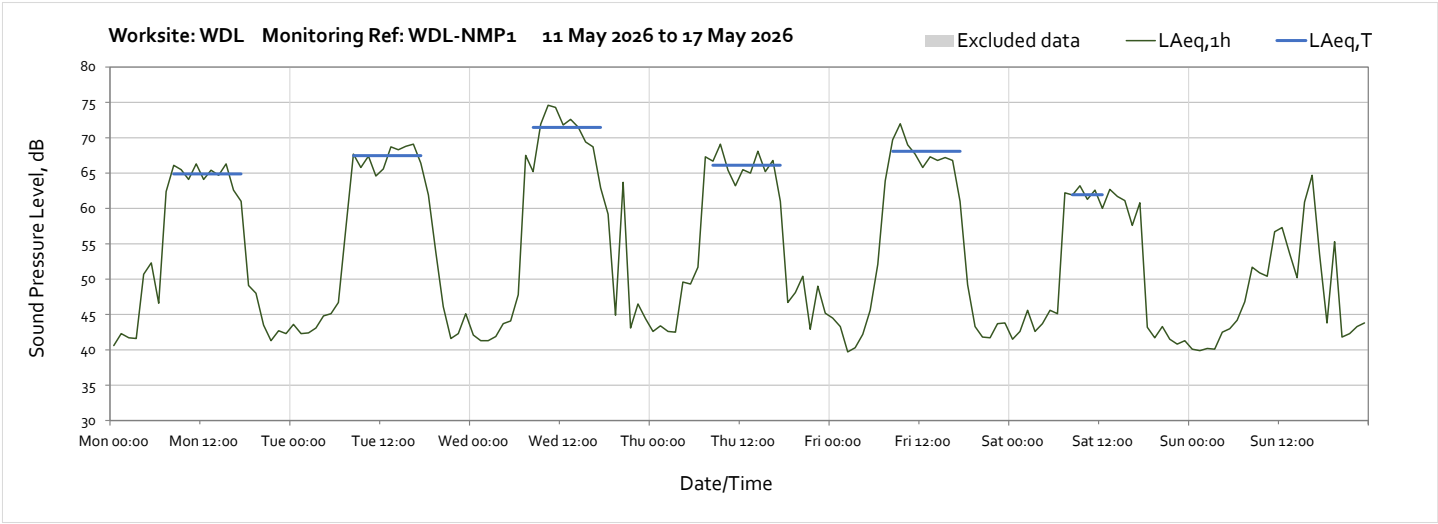
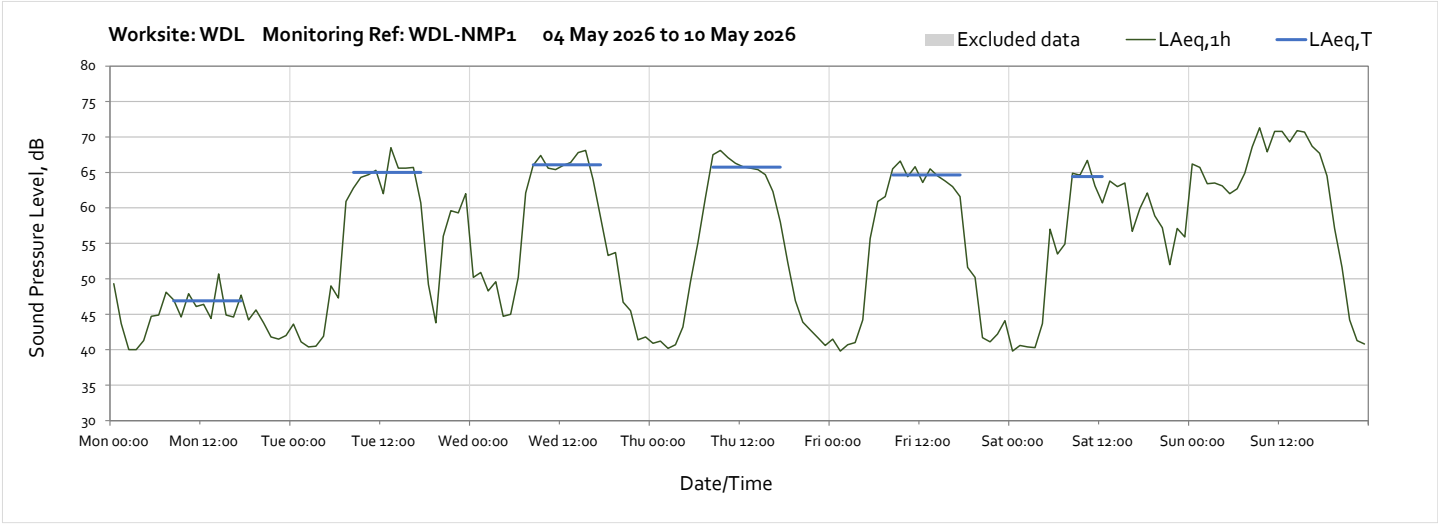
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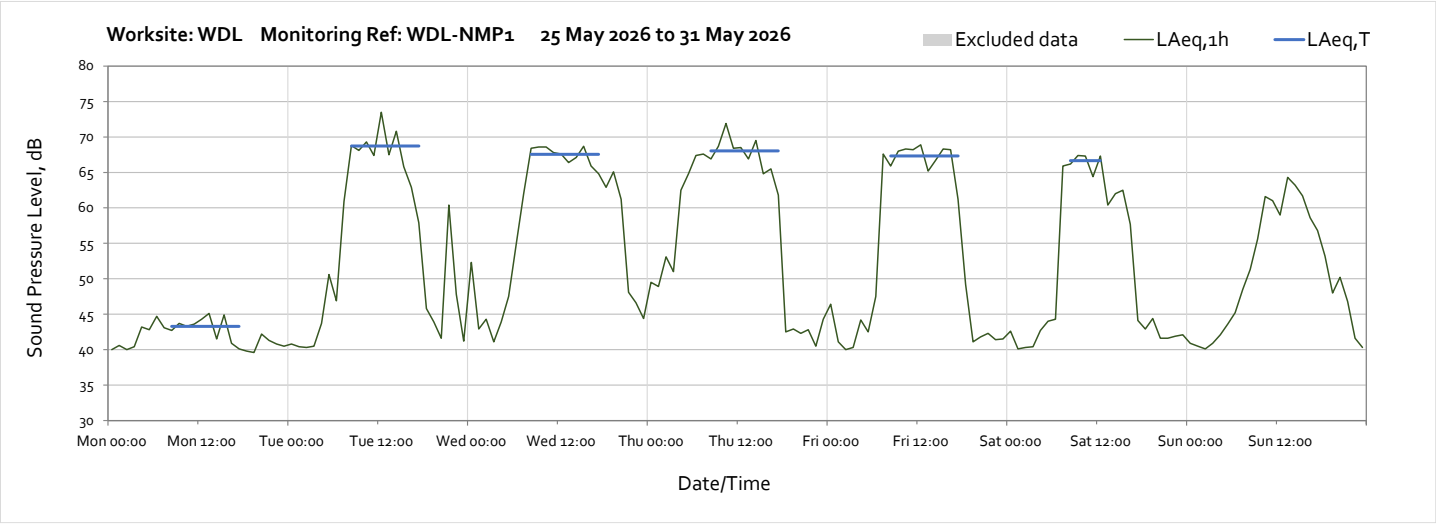




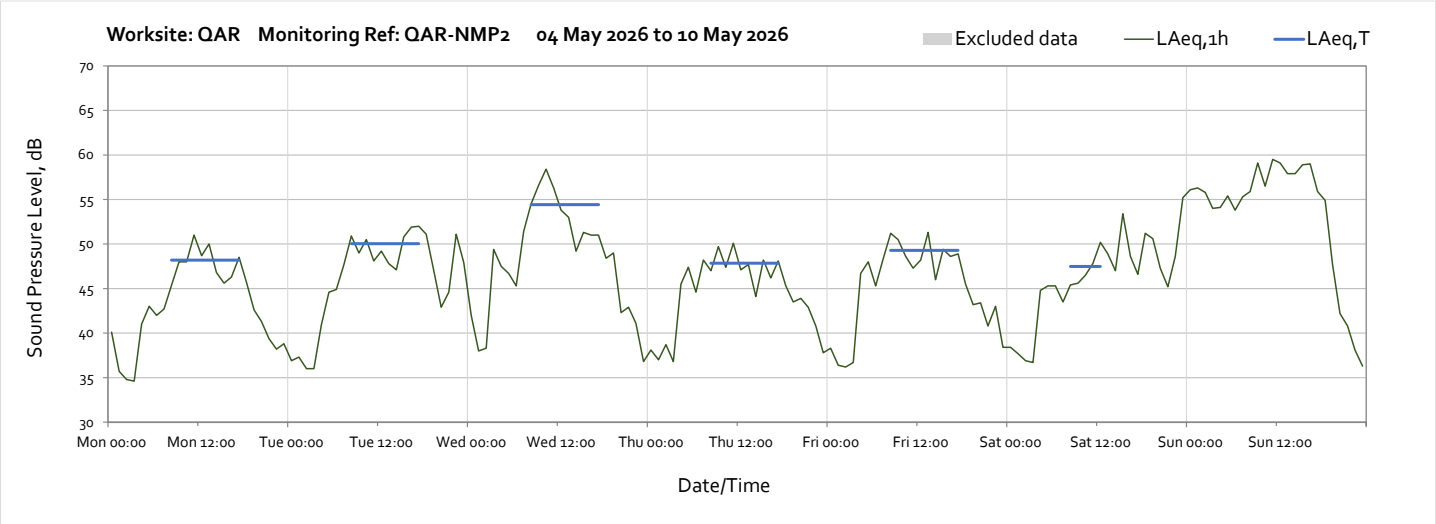
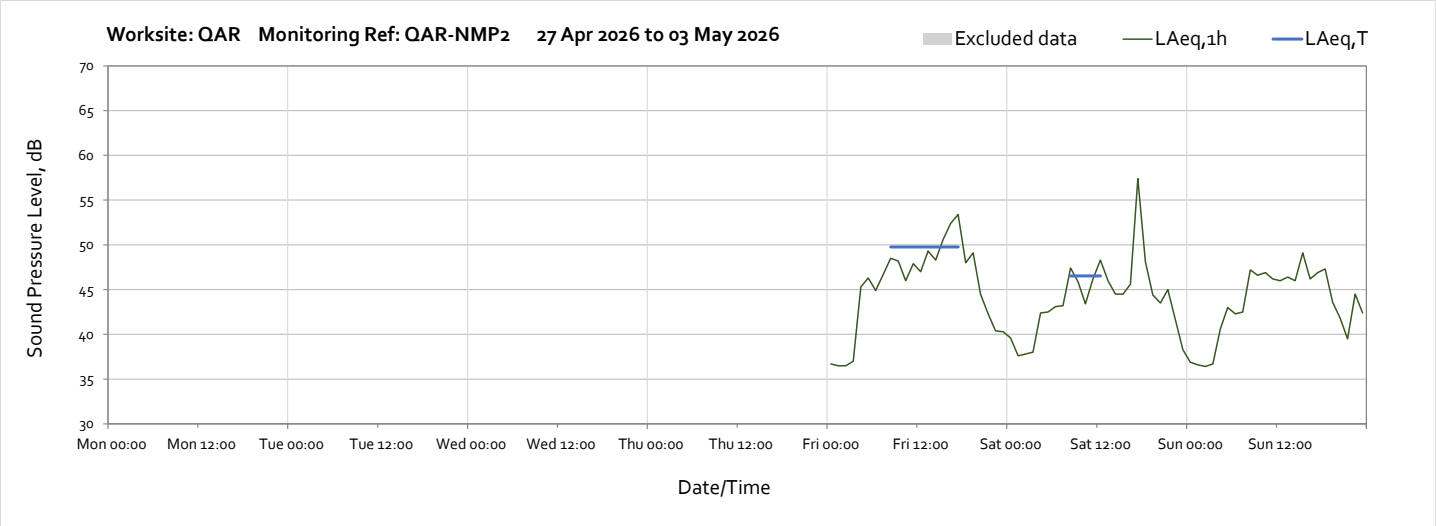
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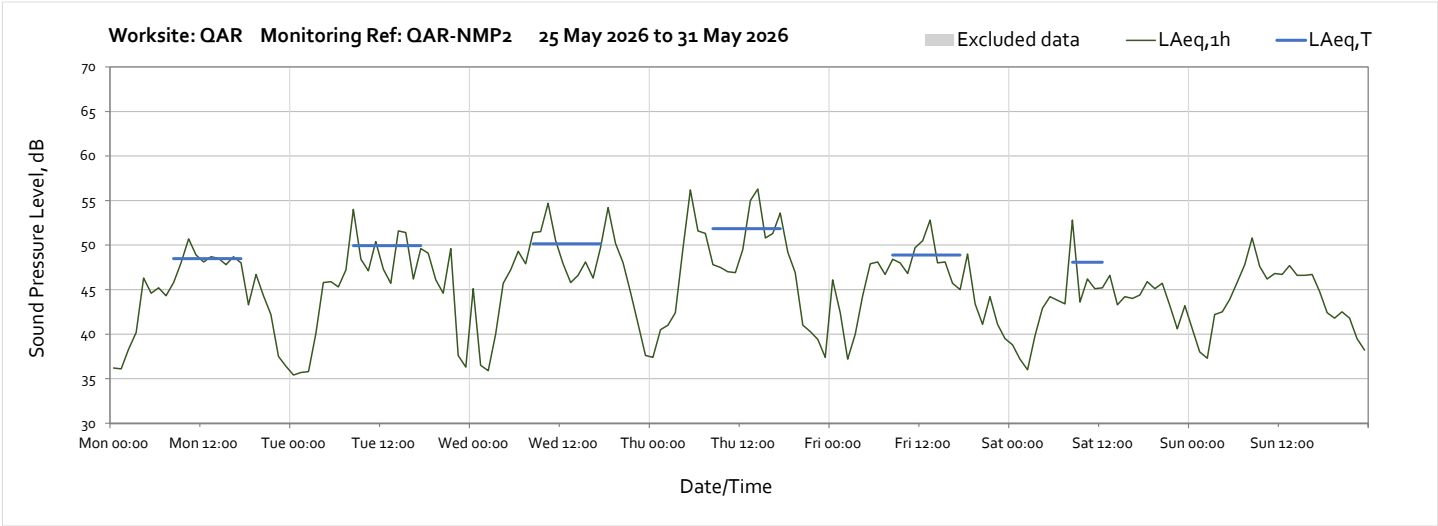
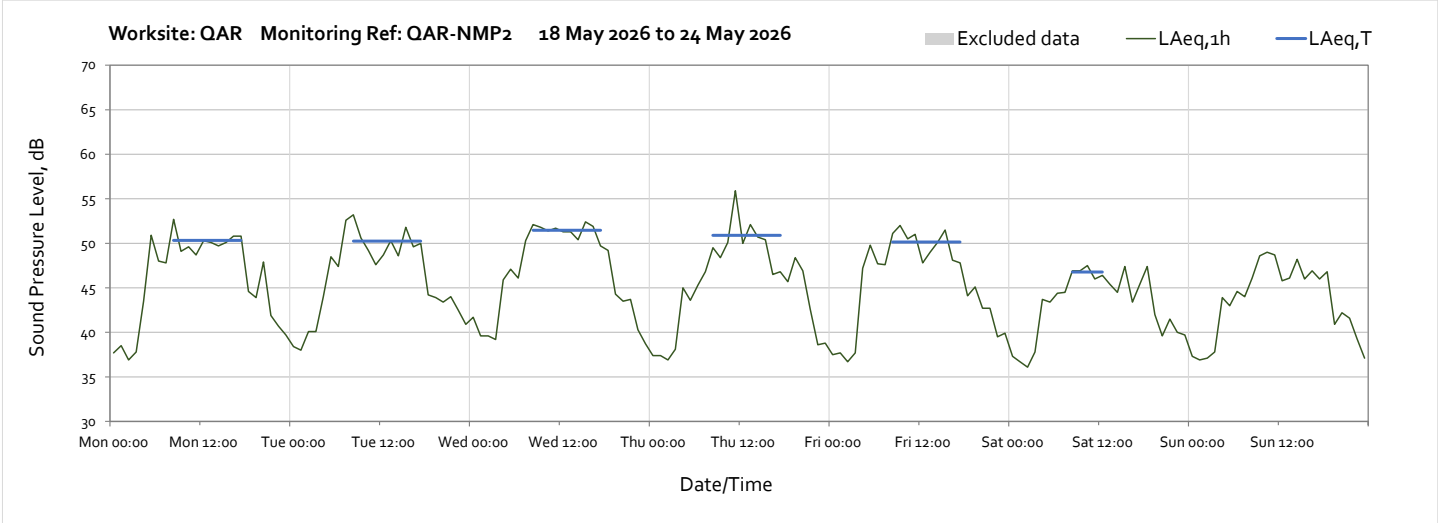
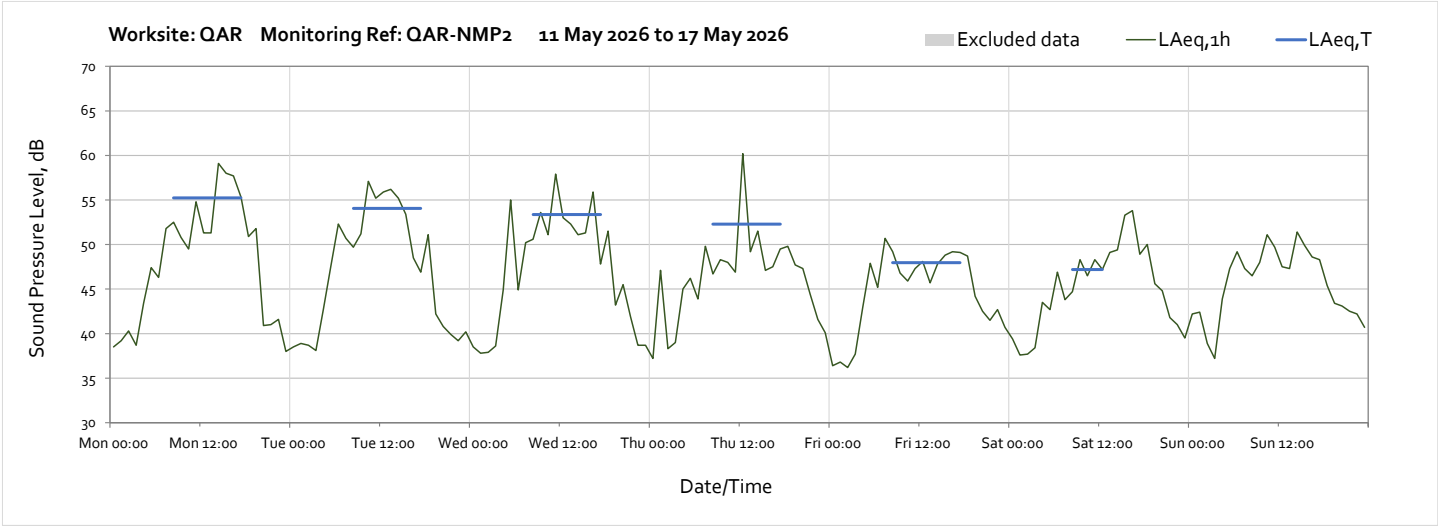




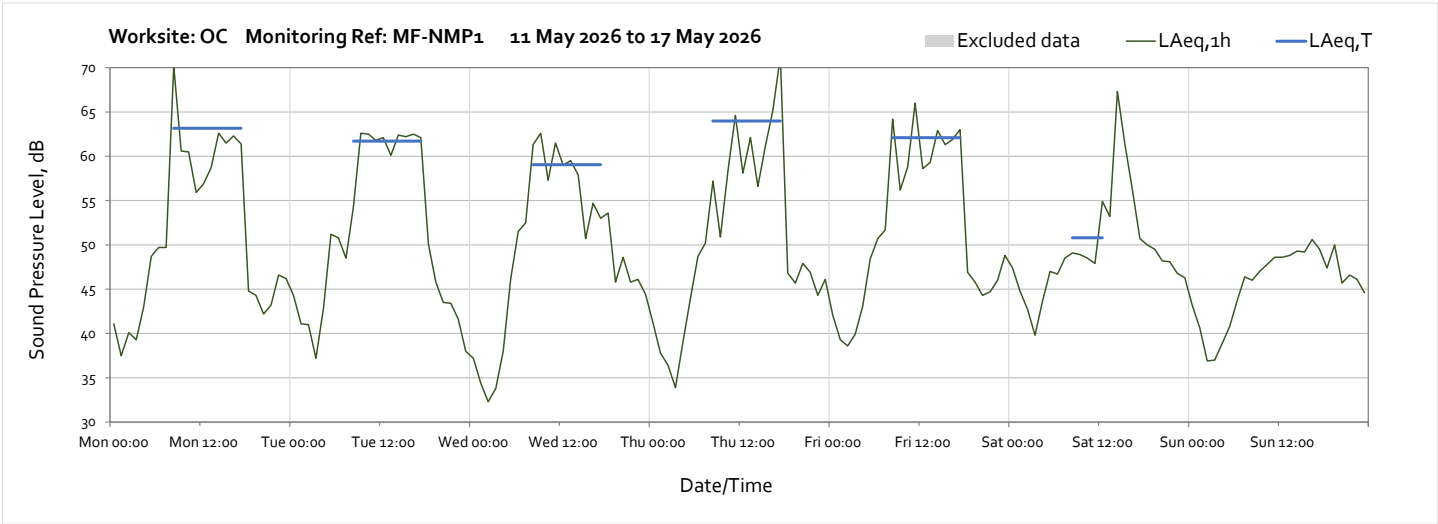
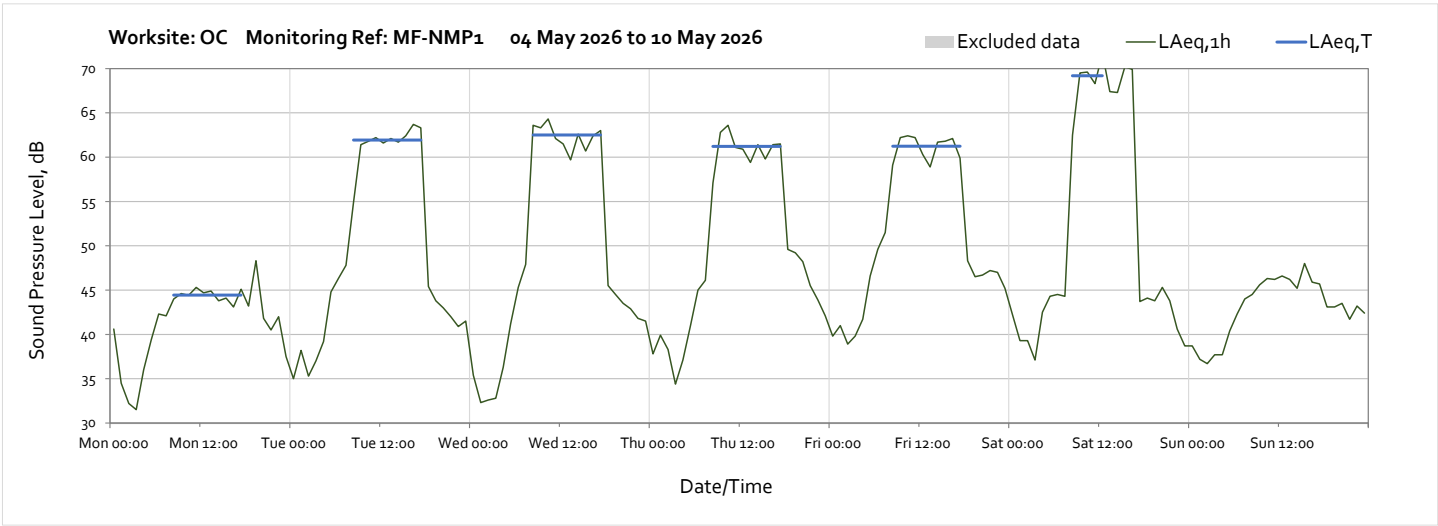
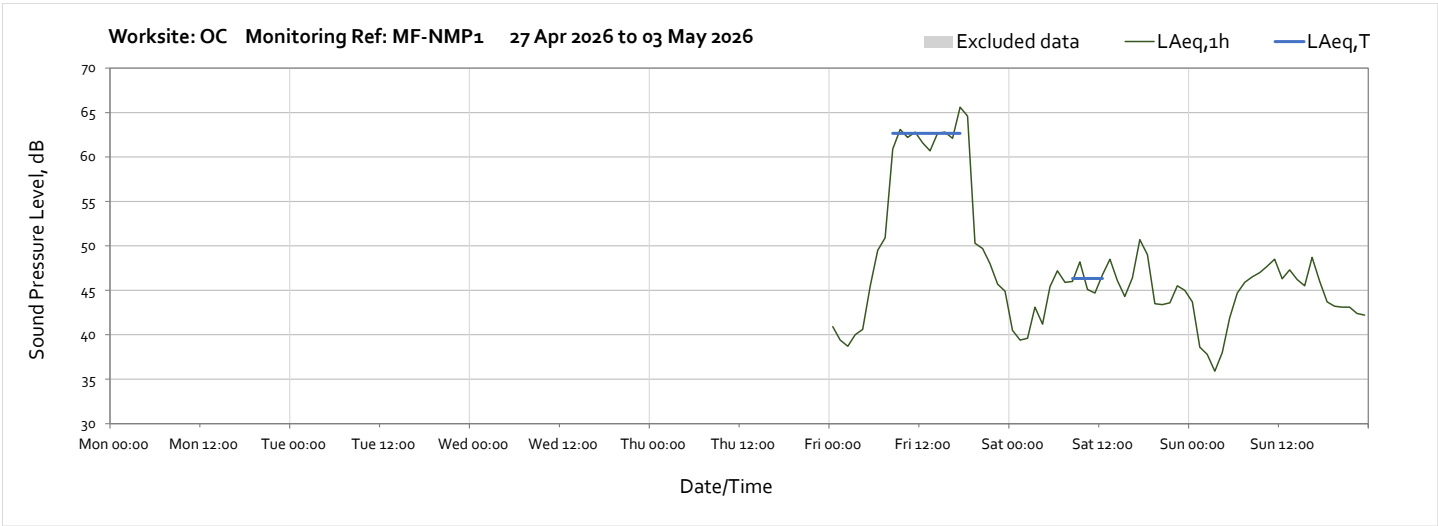


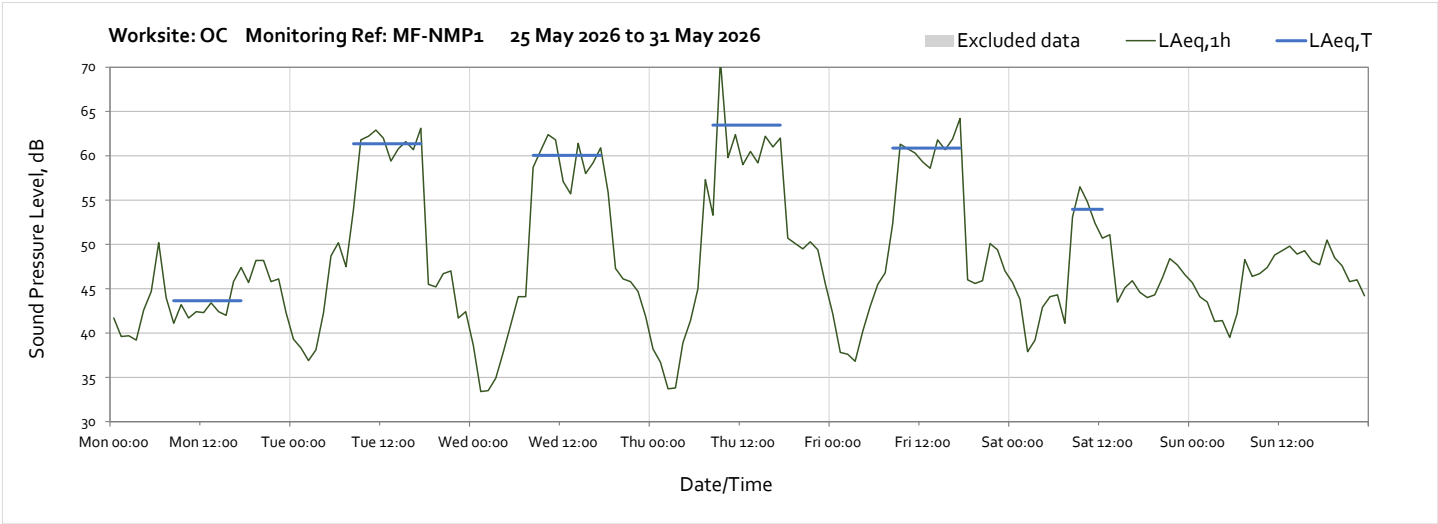
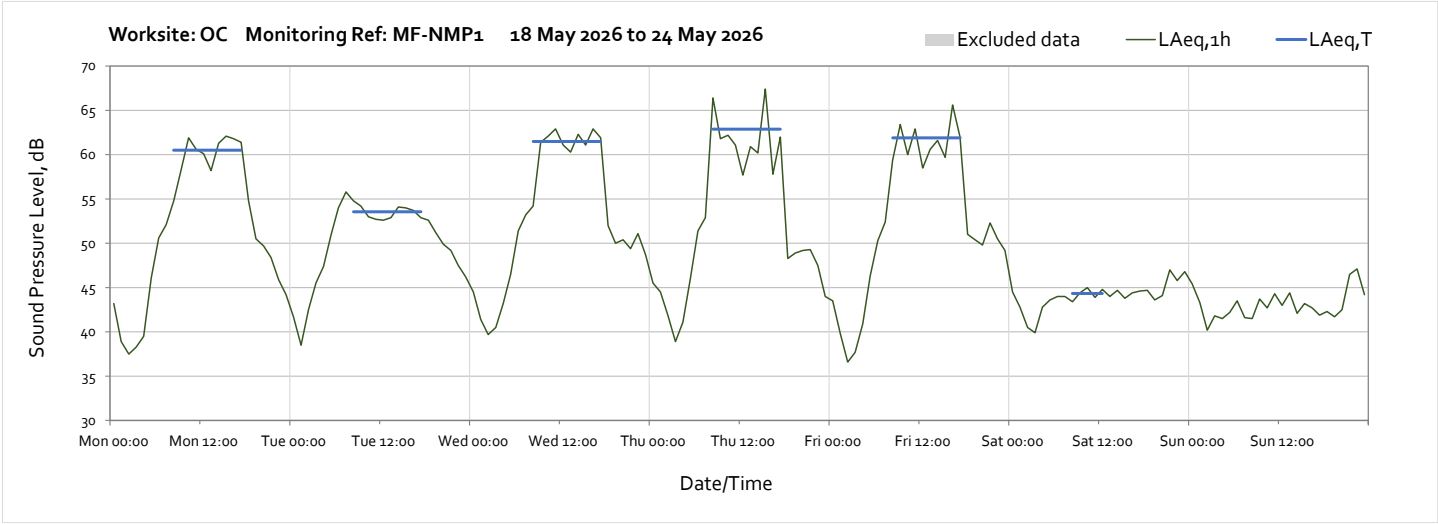
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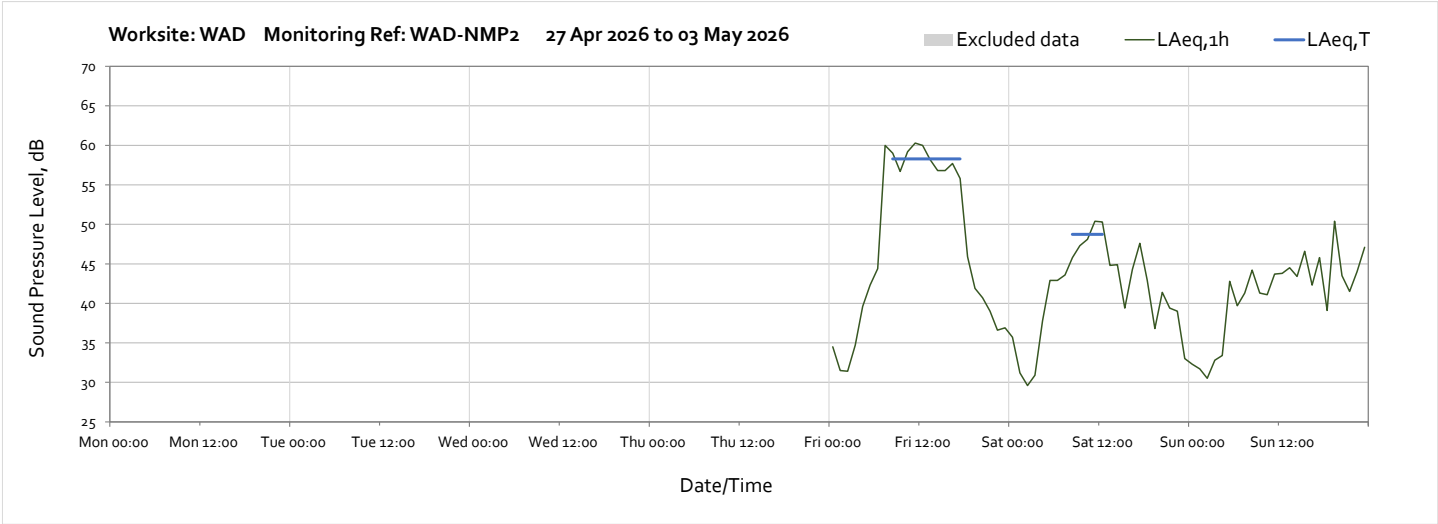


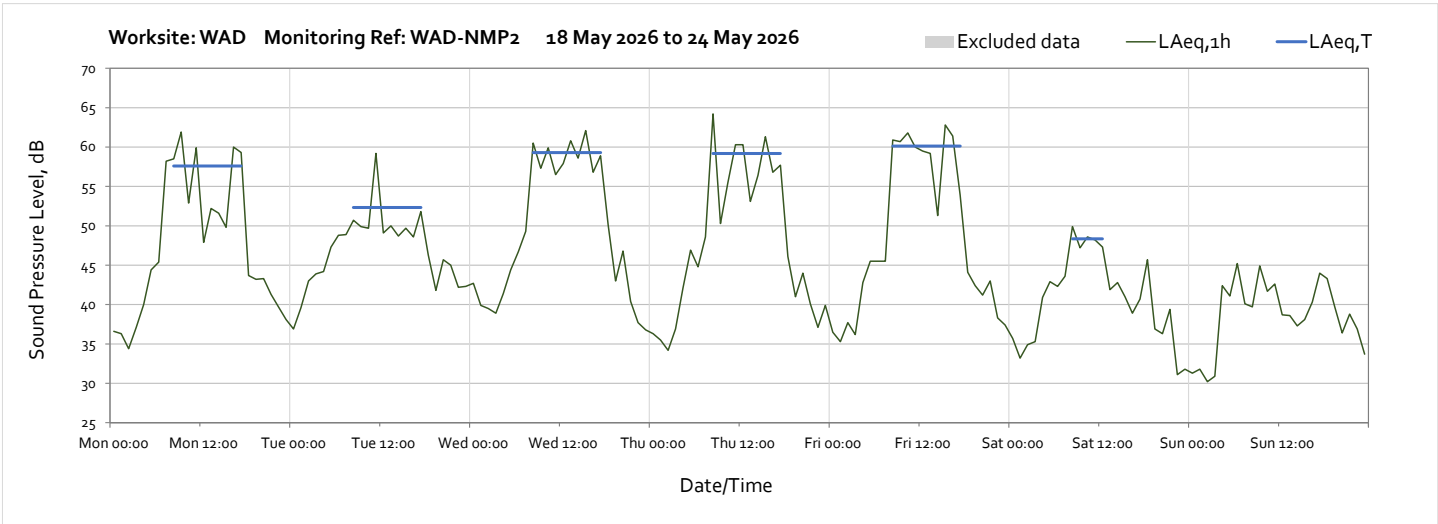
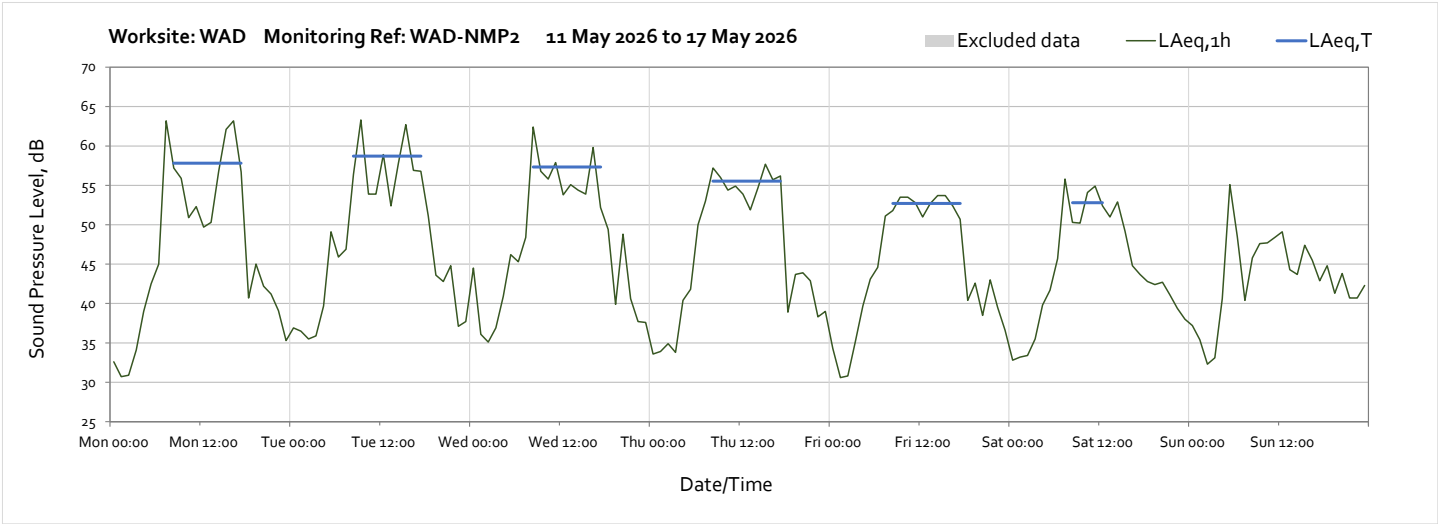
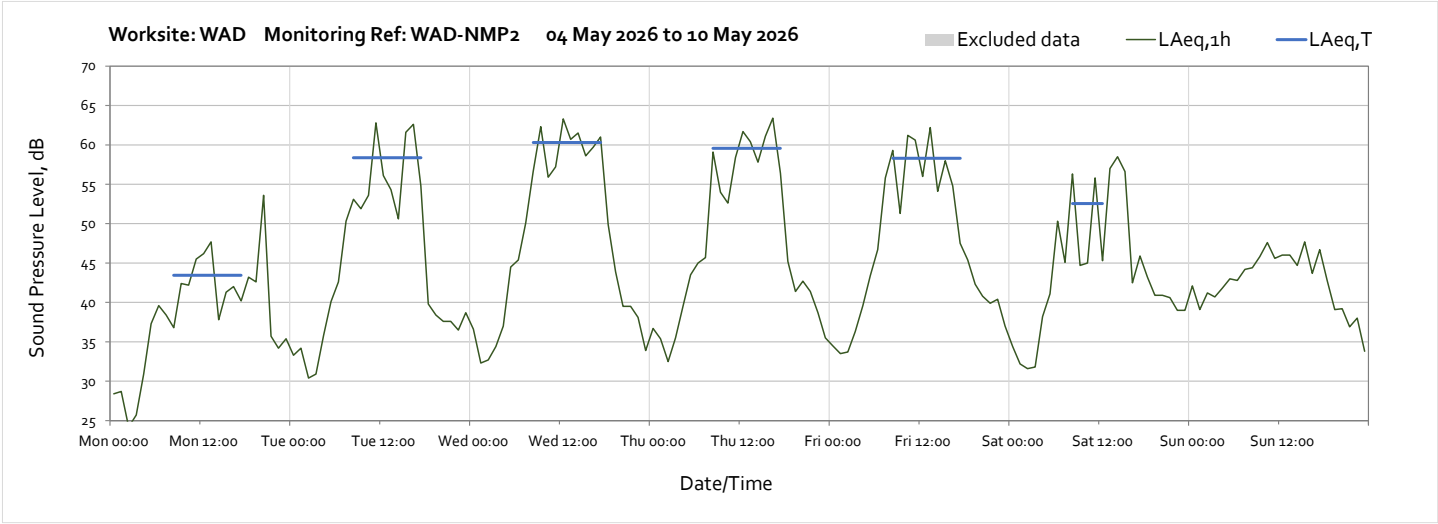
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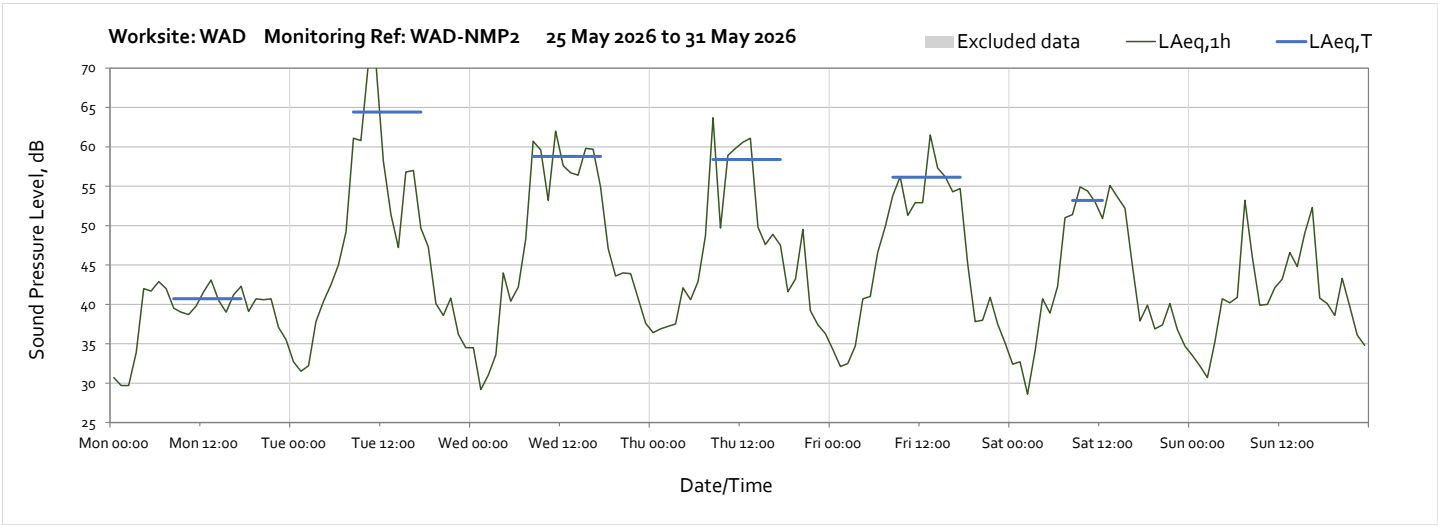




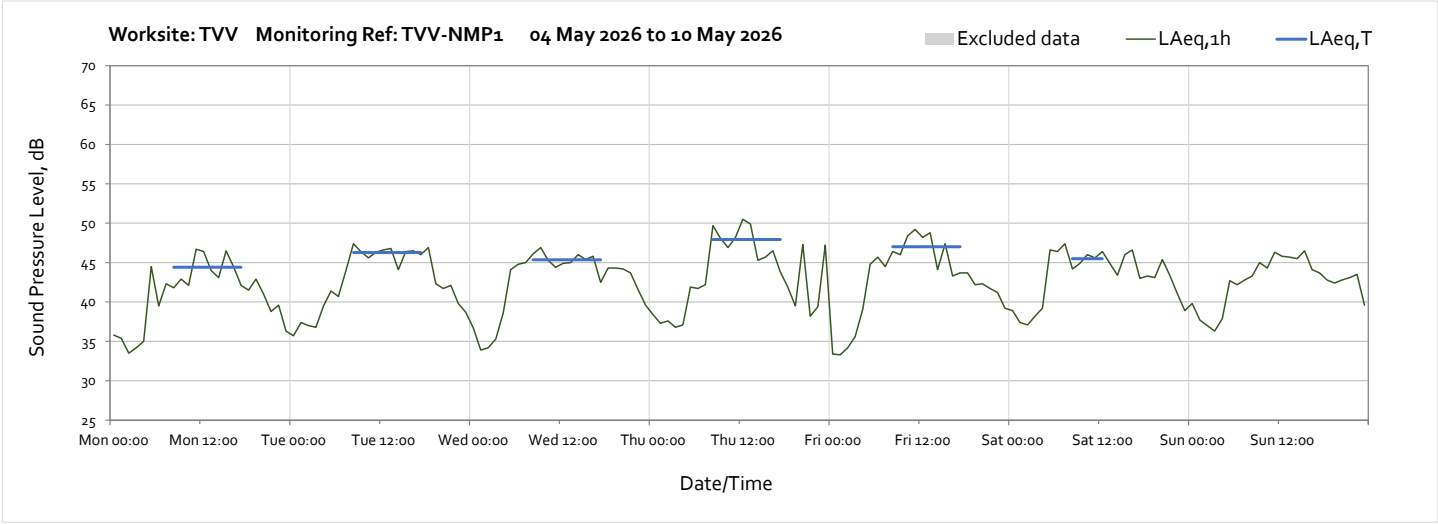
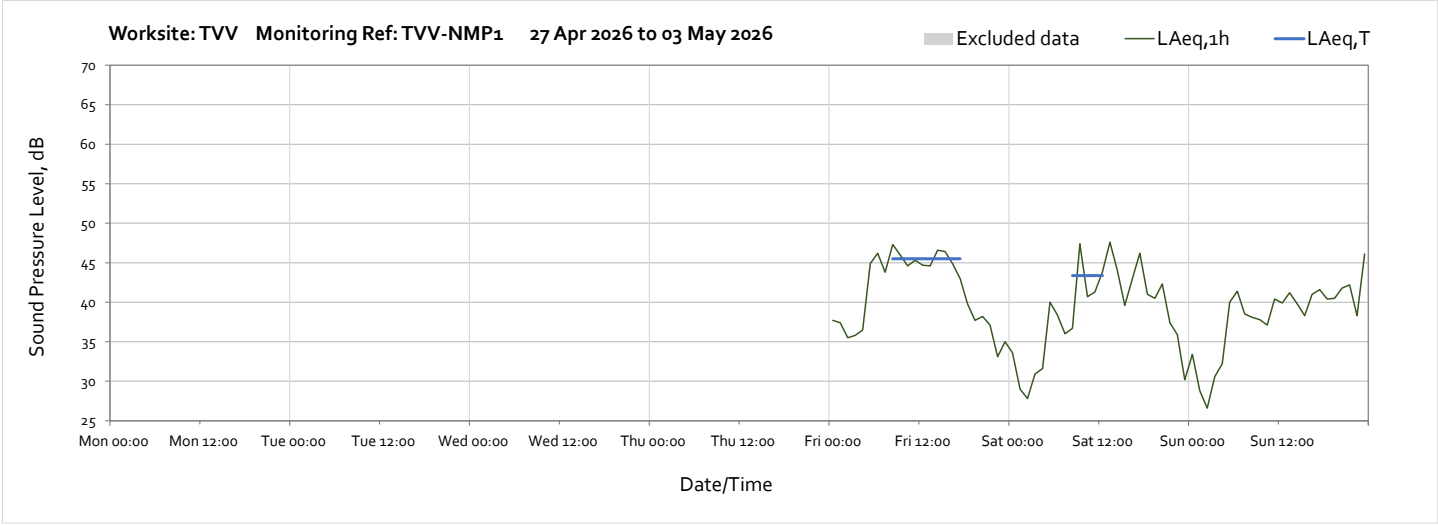
Worksite: WAD - Monitoring Ref: WAD-NMP2

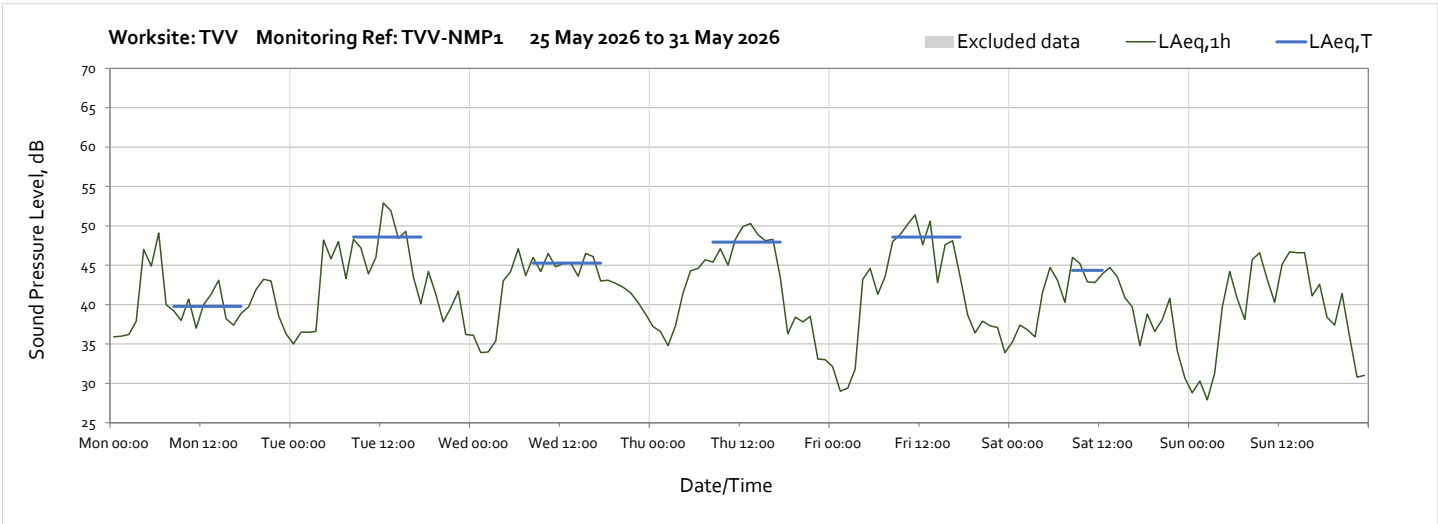
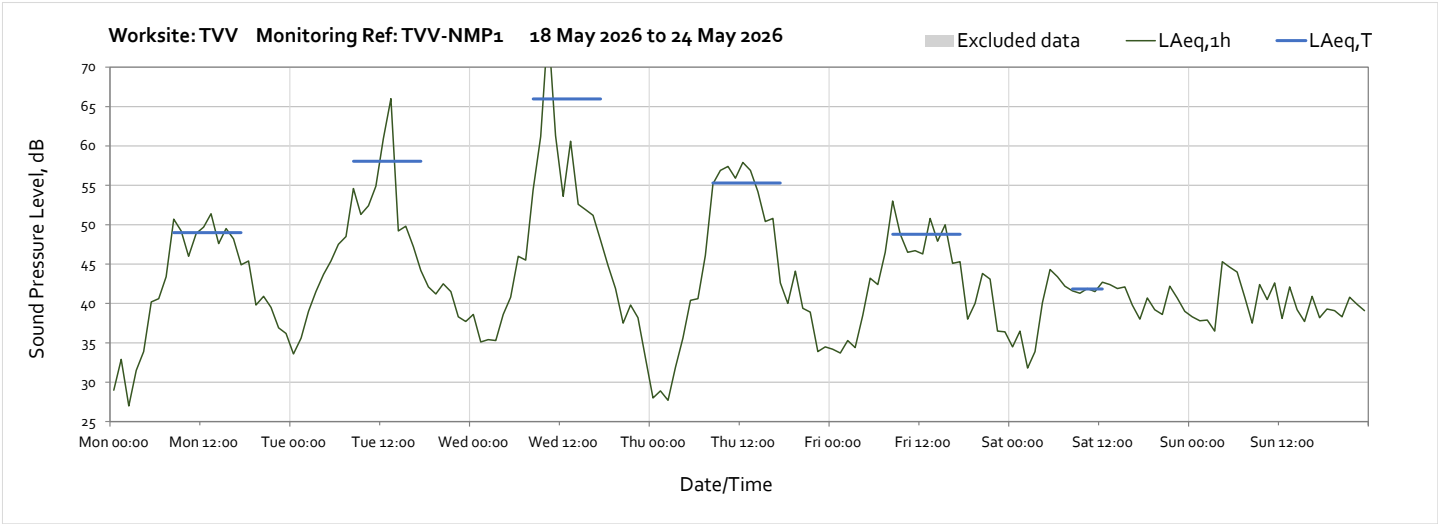
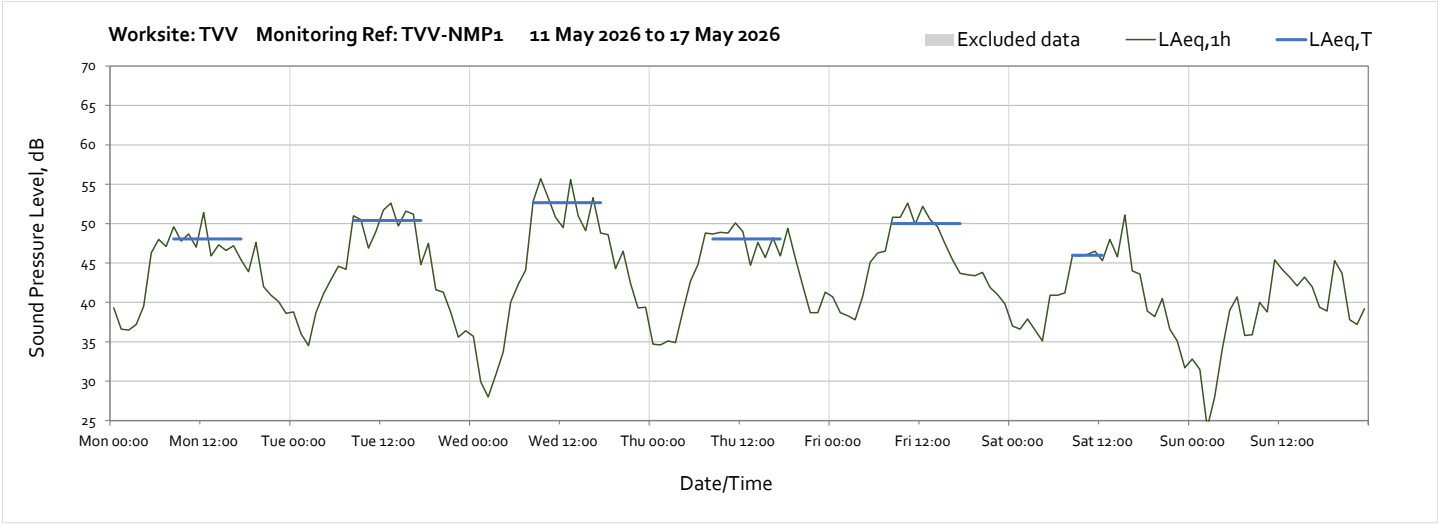




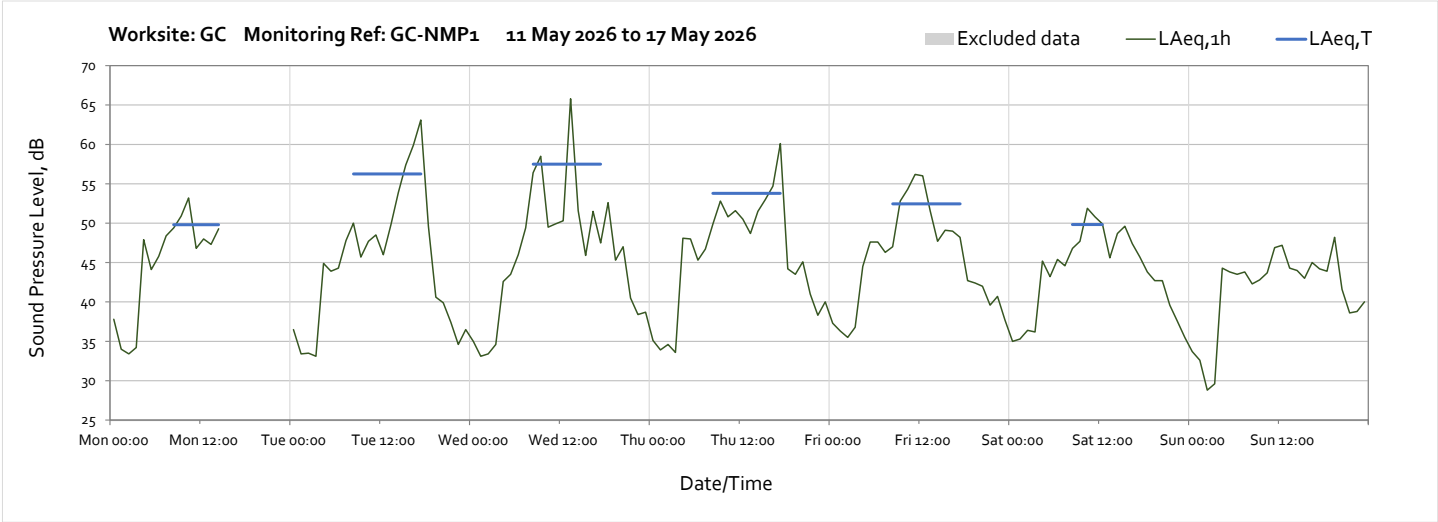
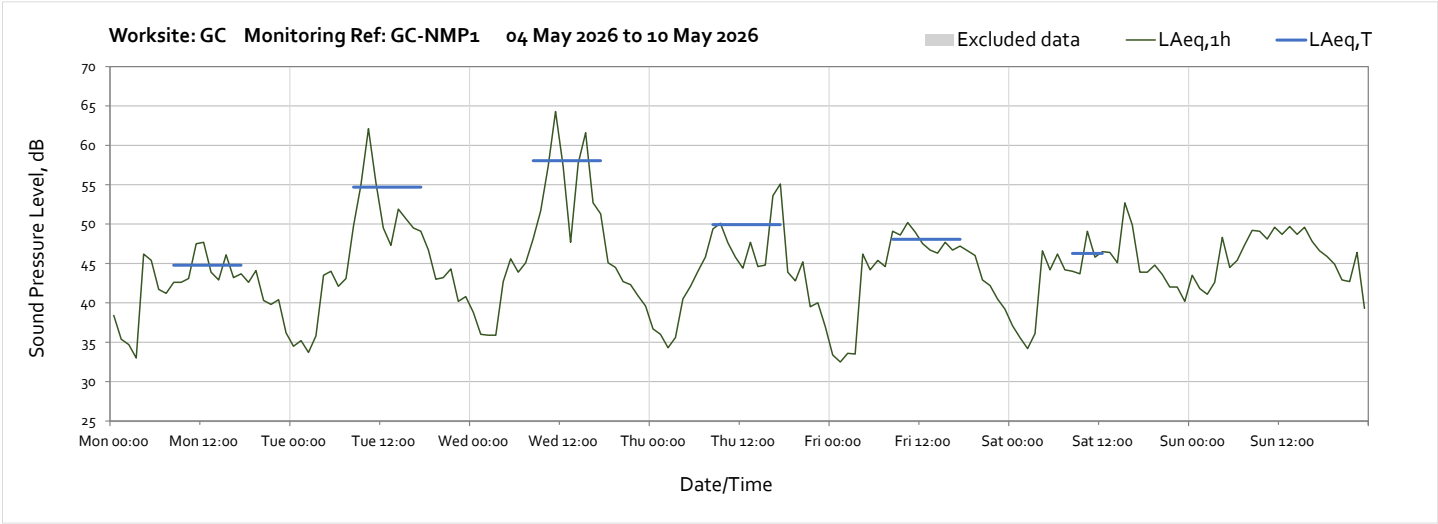
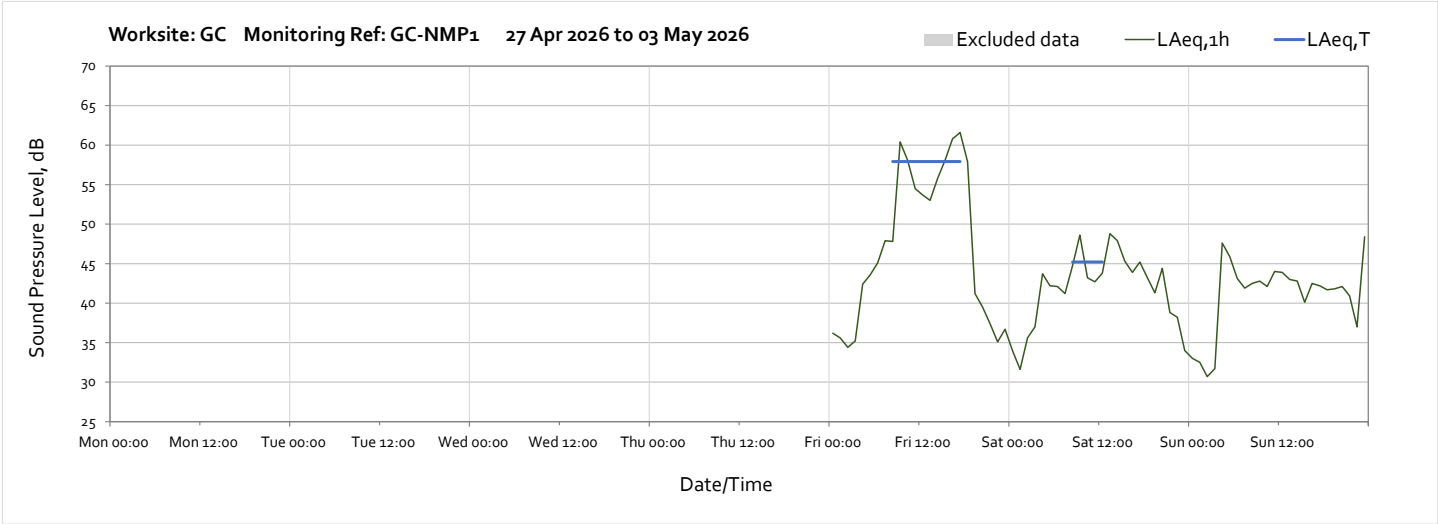


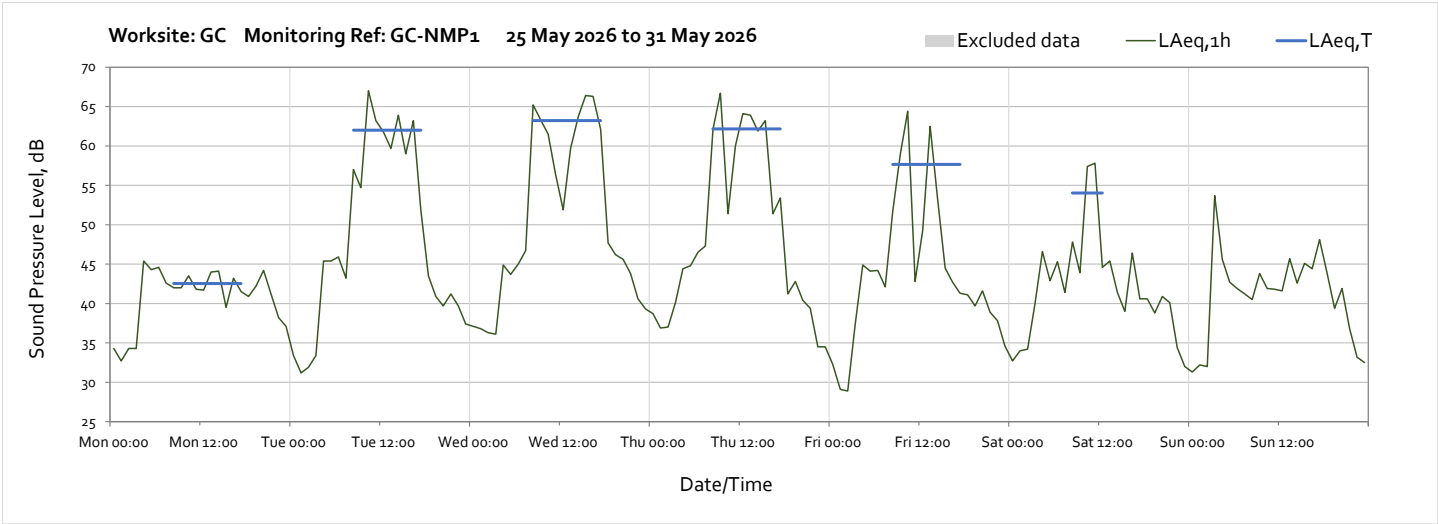
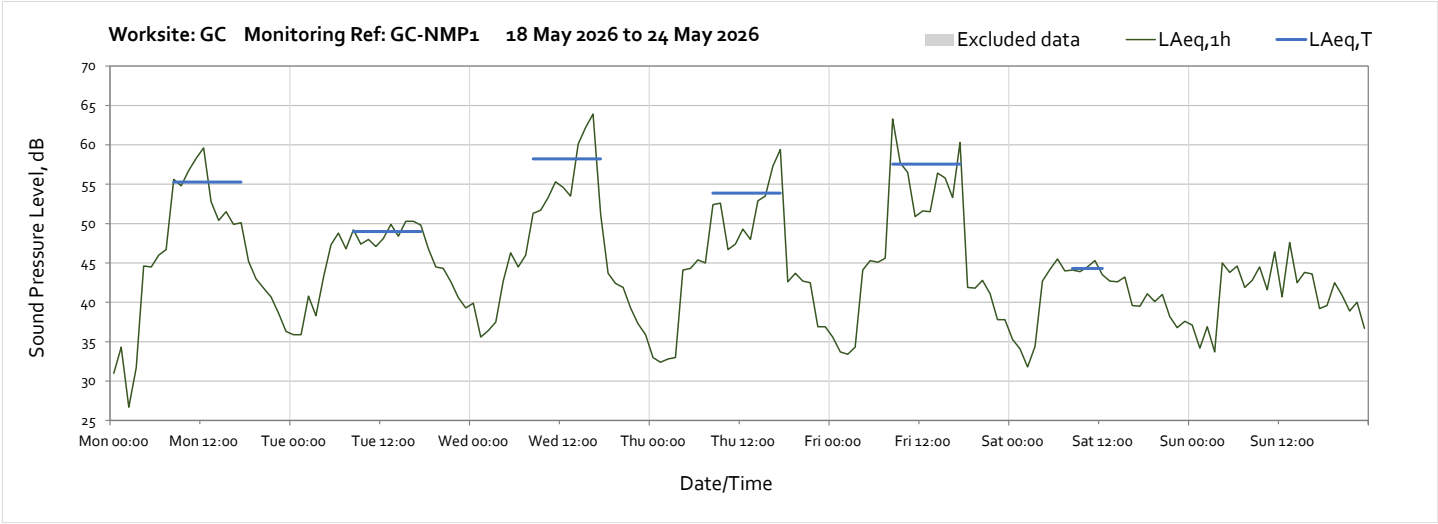
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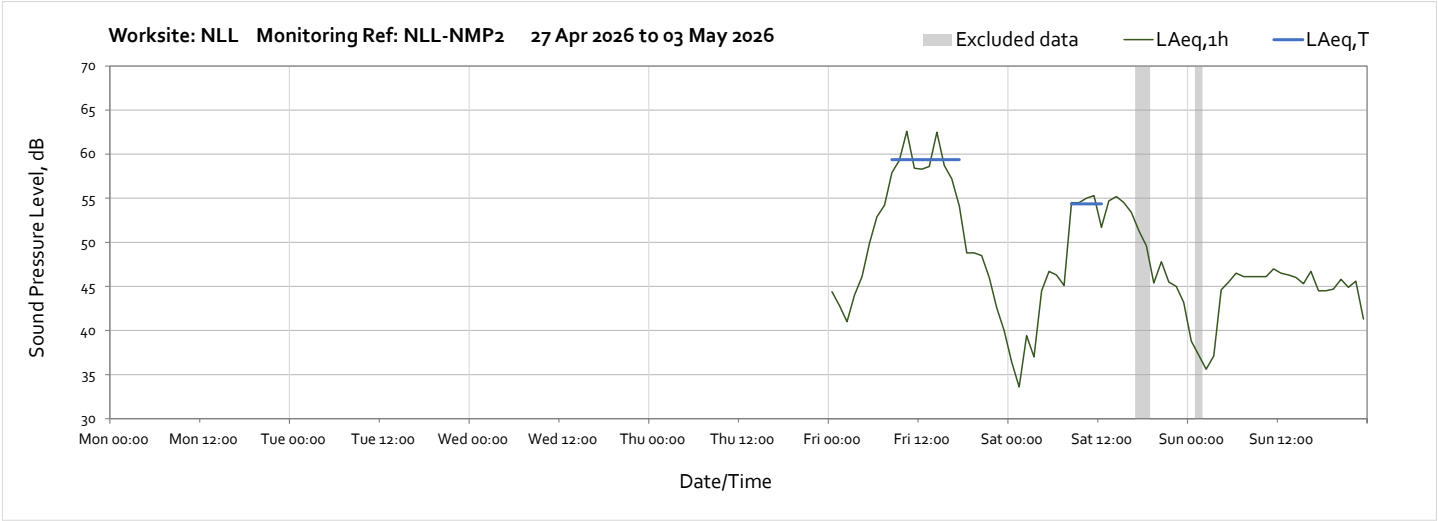


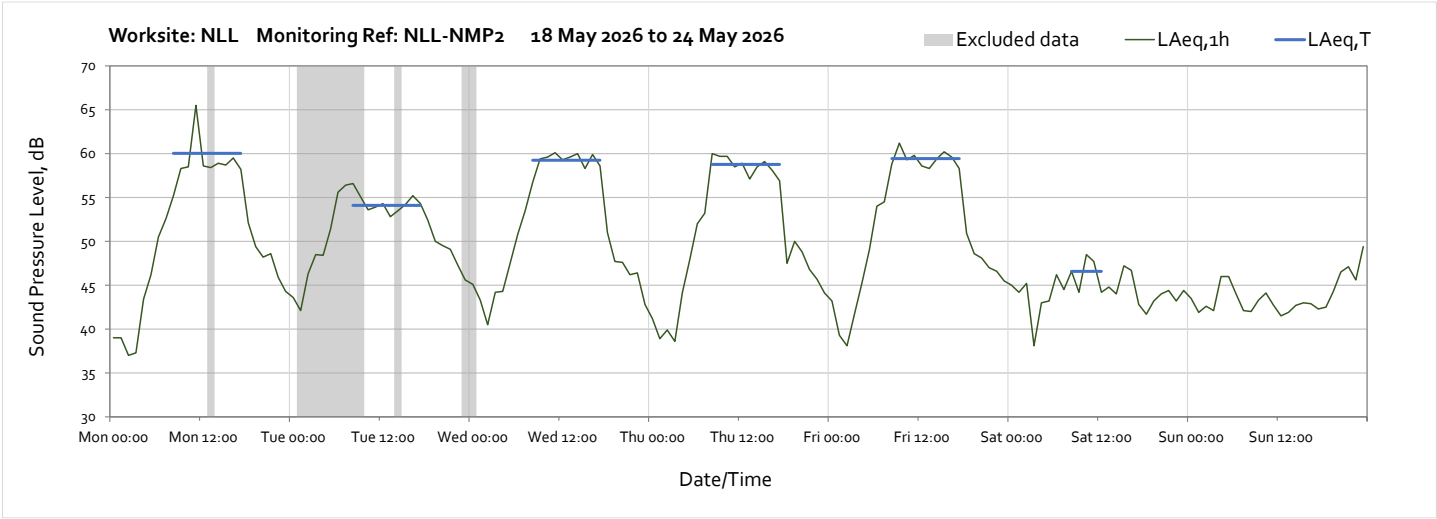
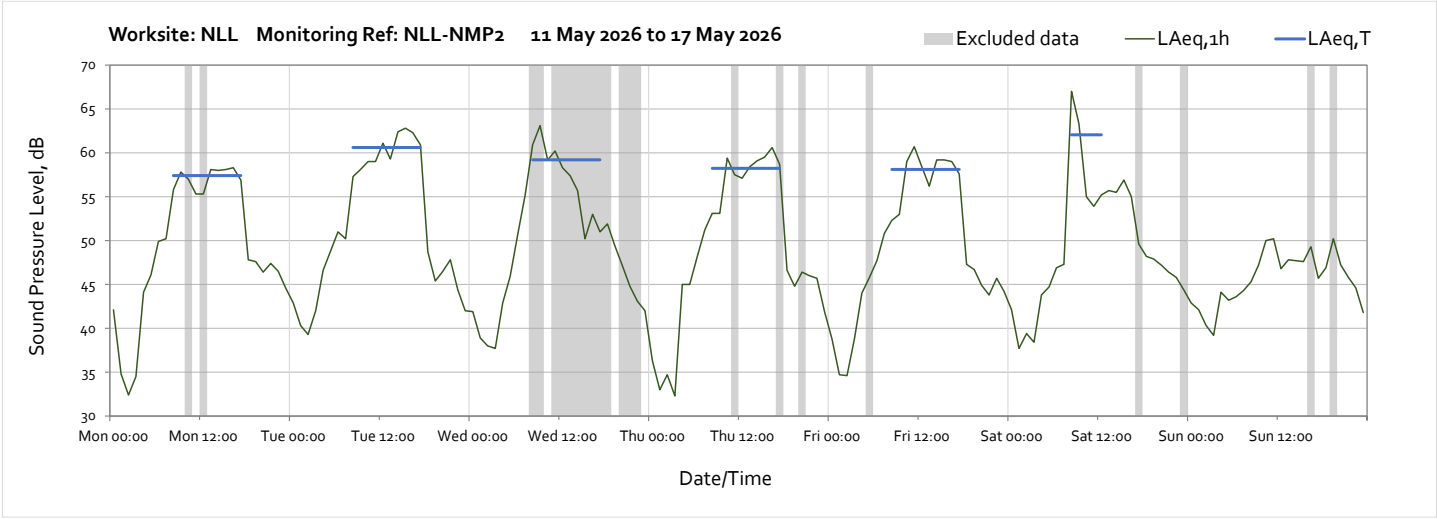
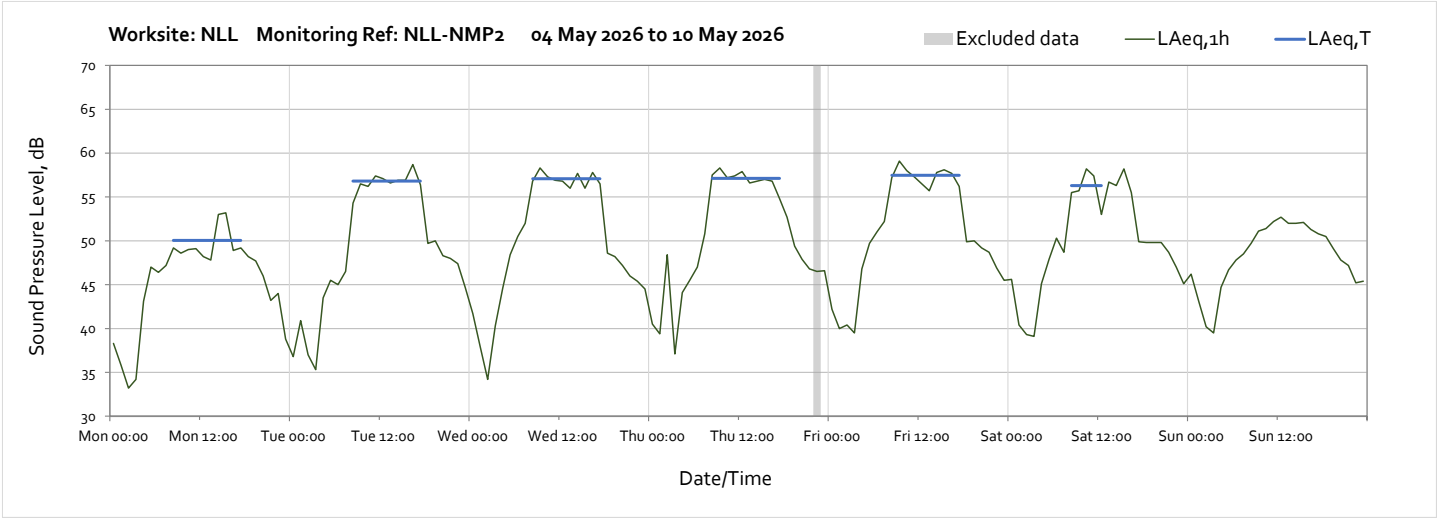
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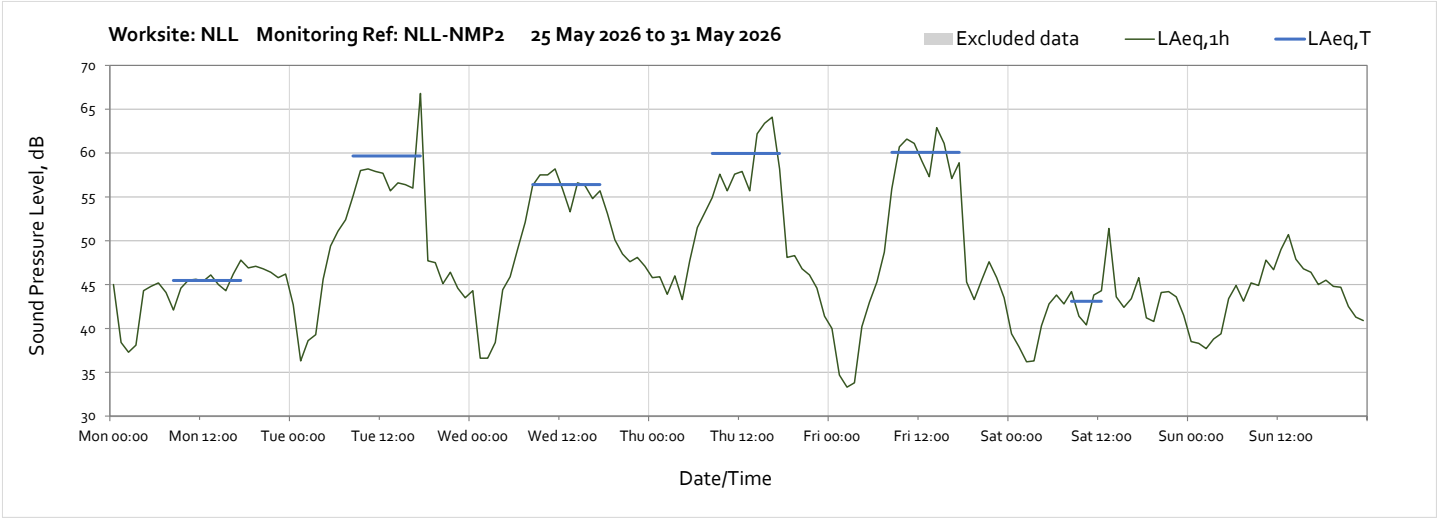




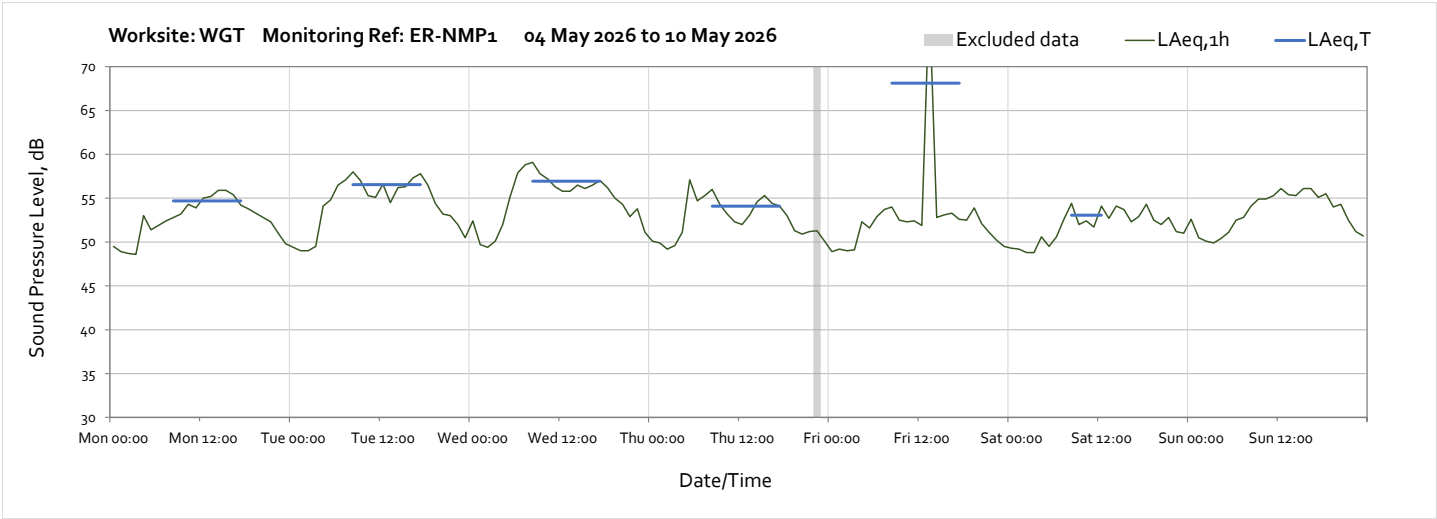
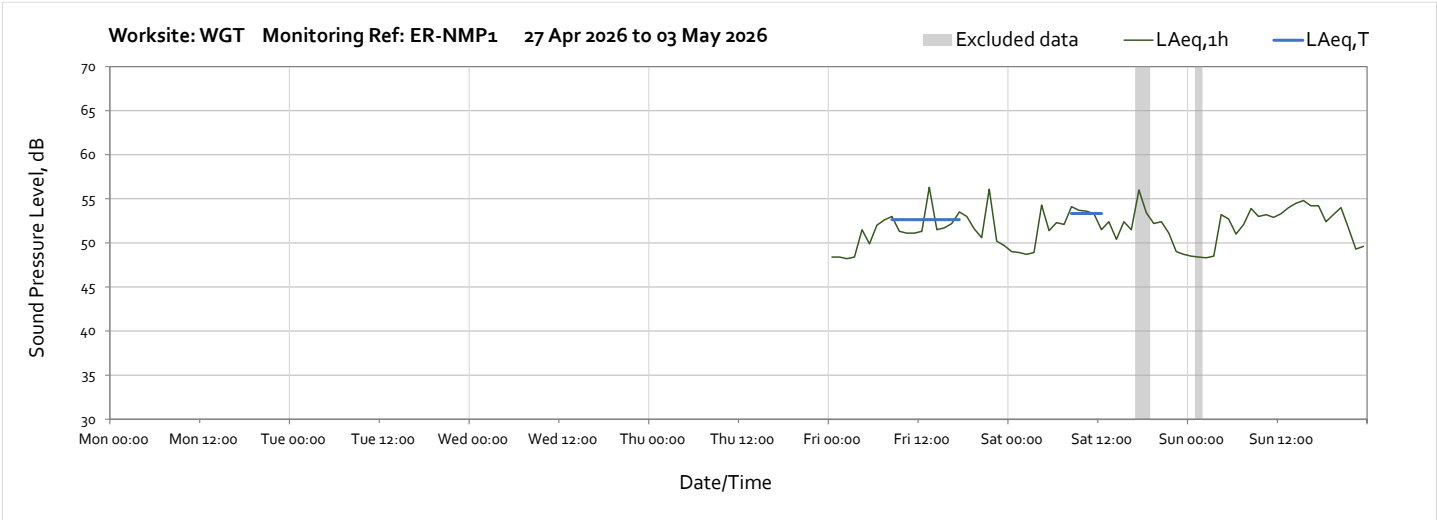
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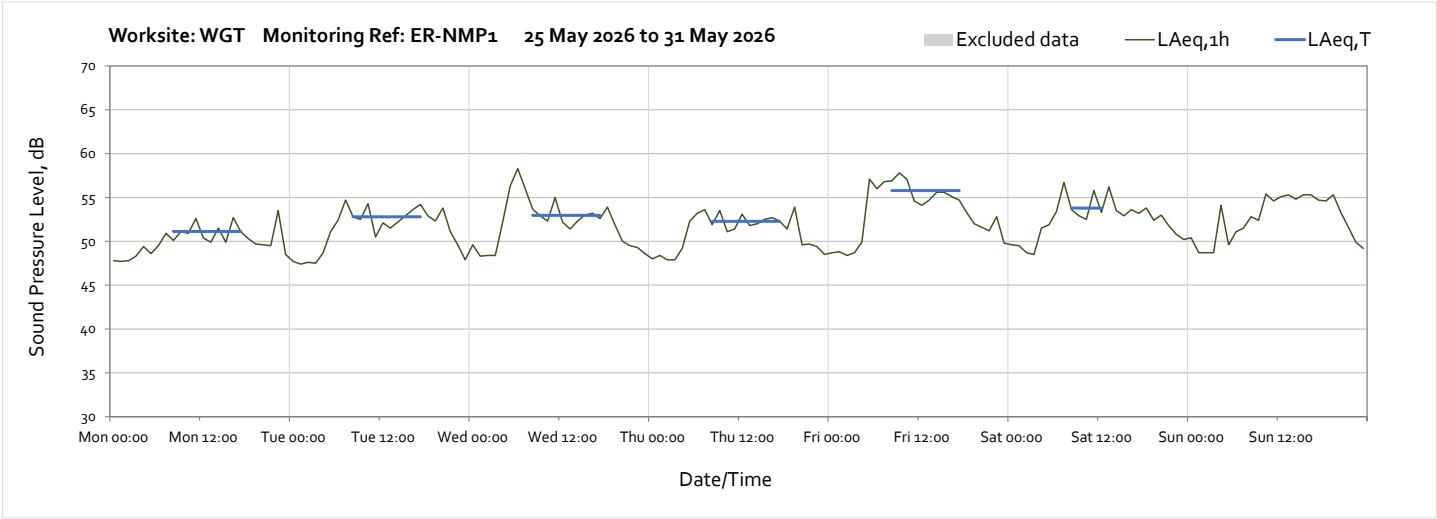
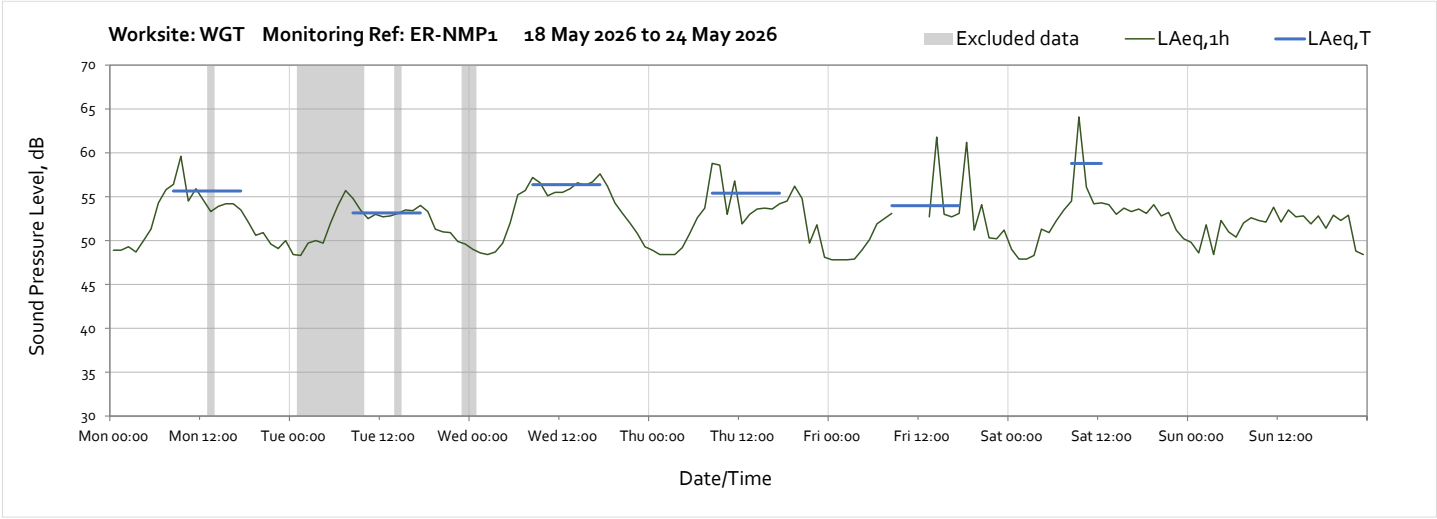
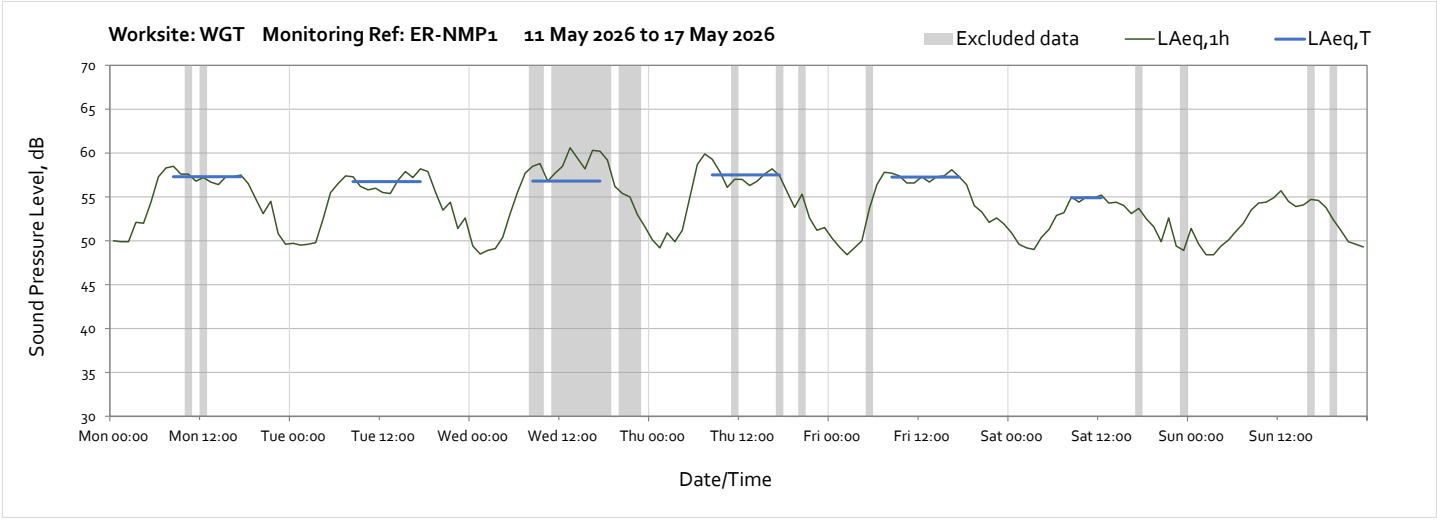




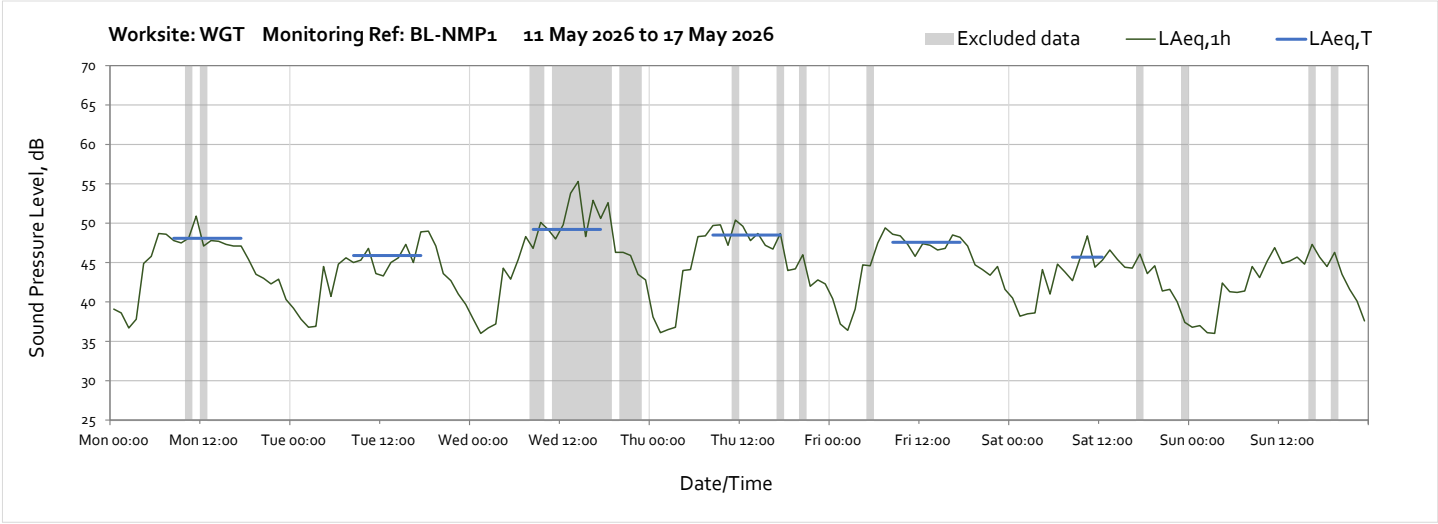
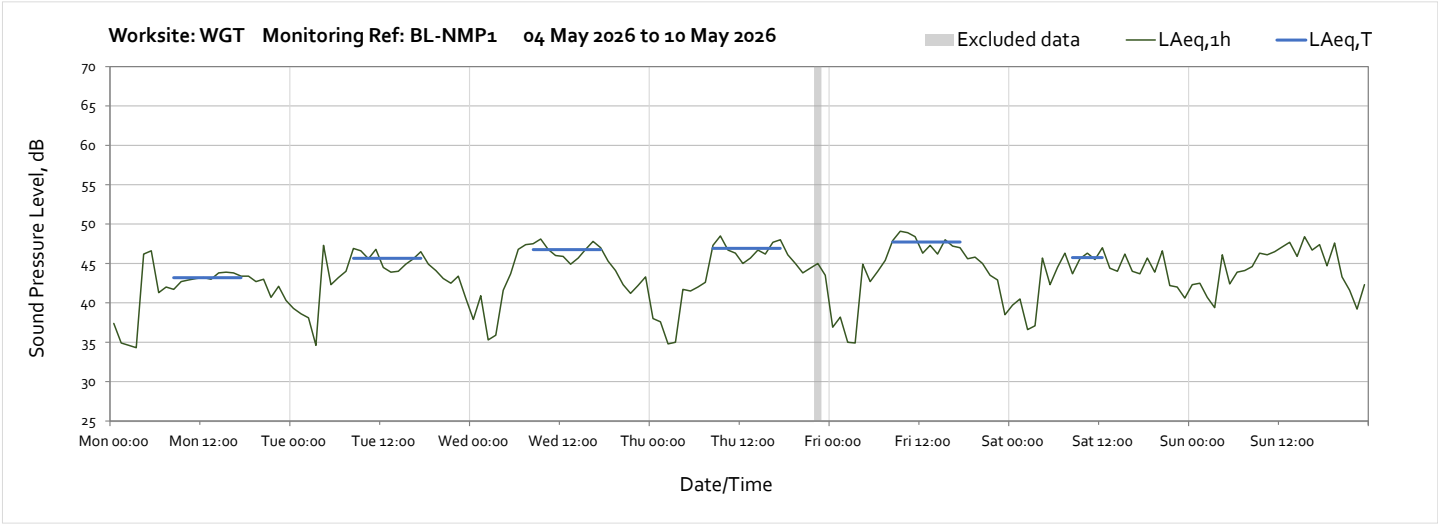
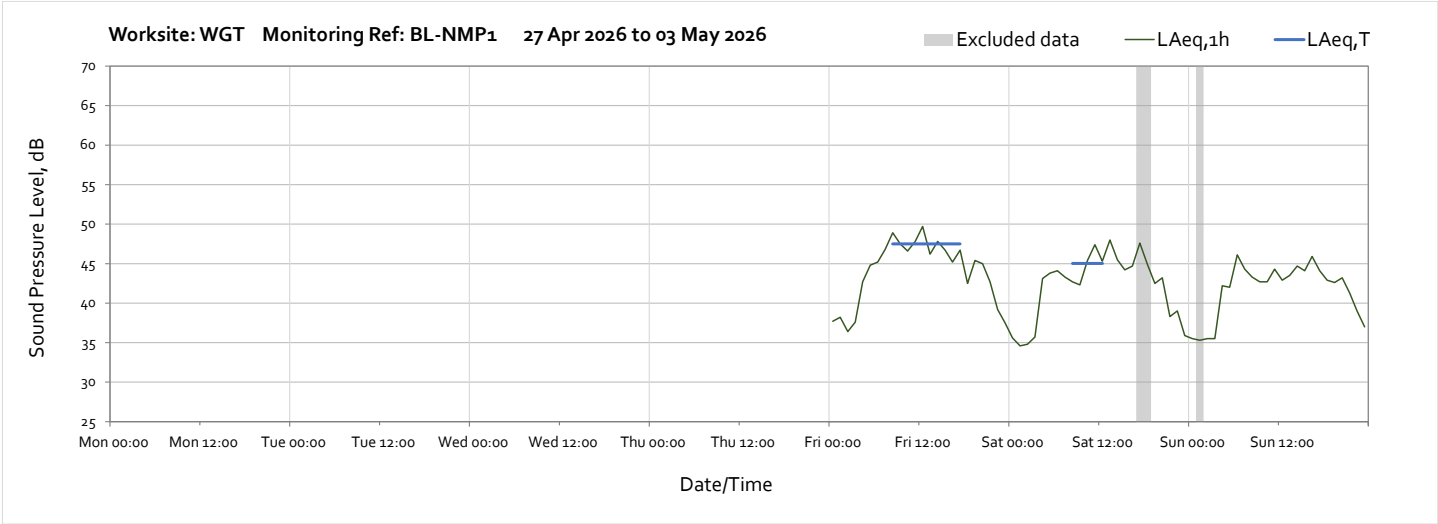


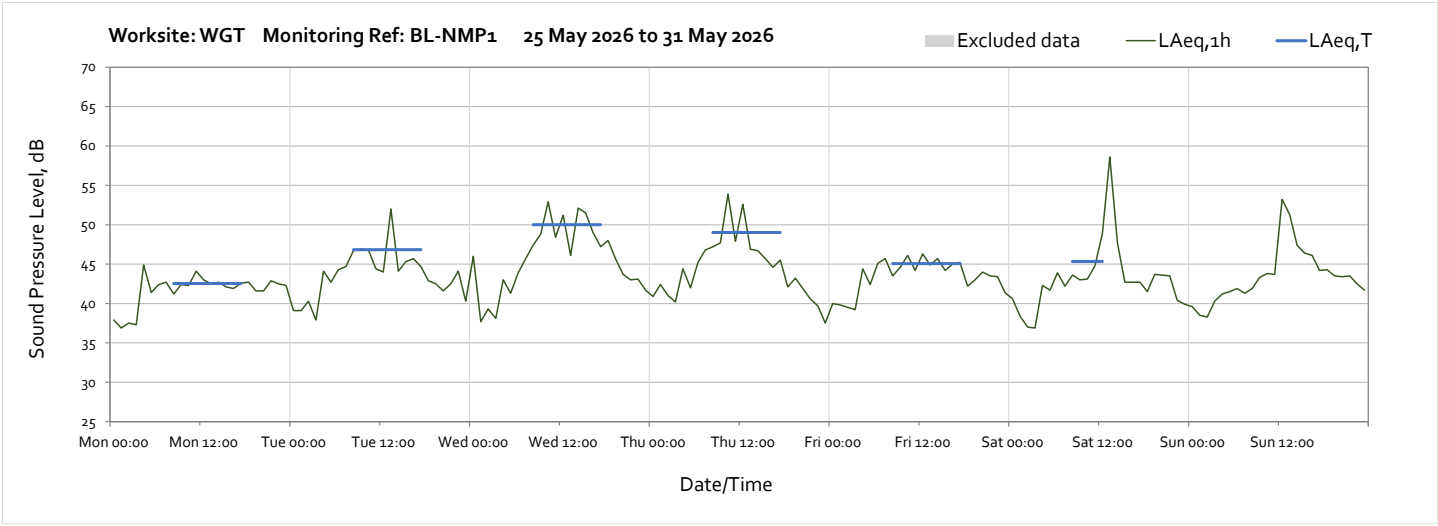
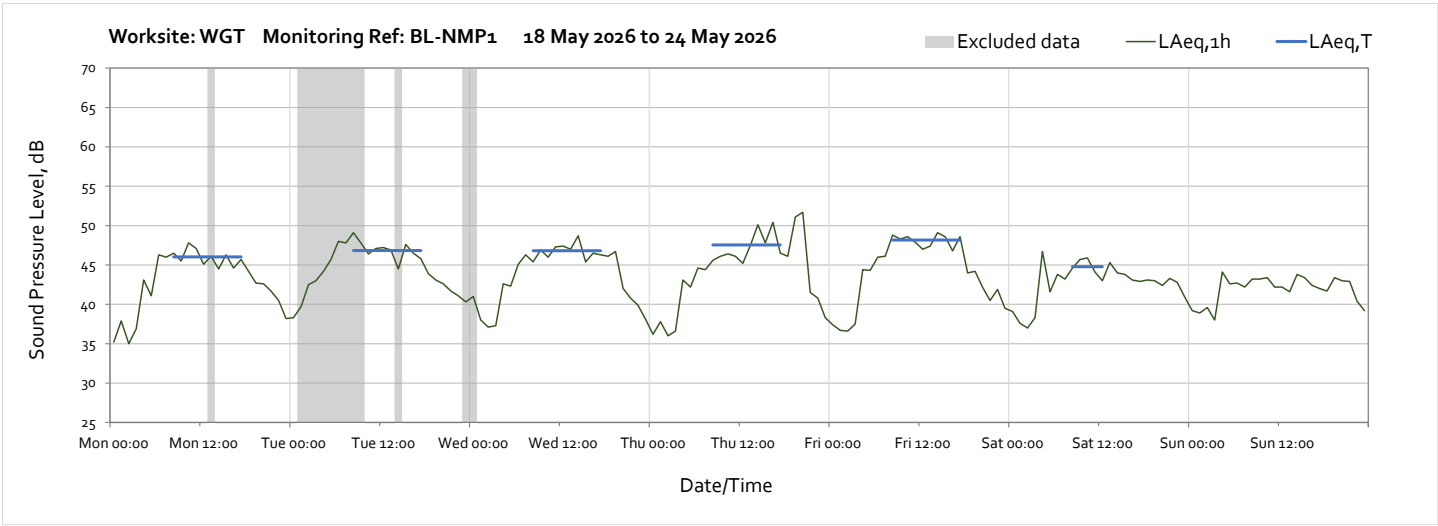
Worksite: WGT - Monitoring Ref: ER-NMP1



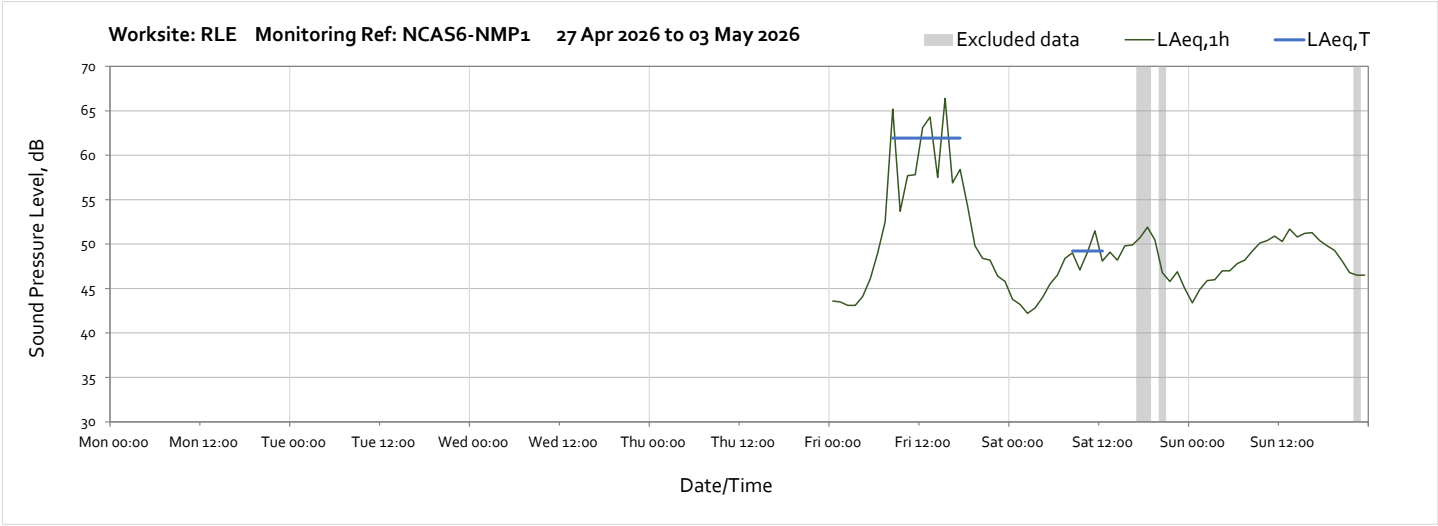


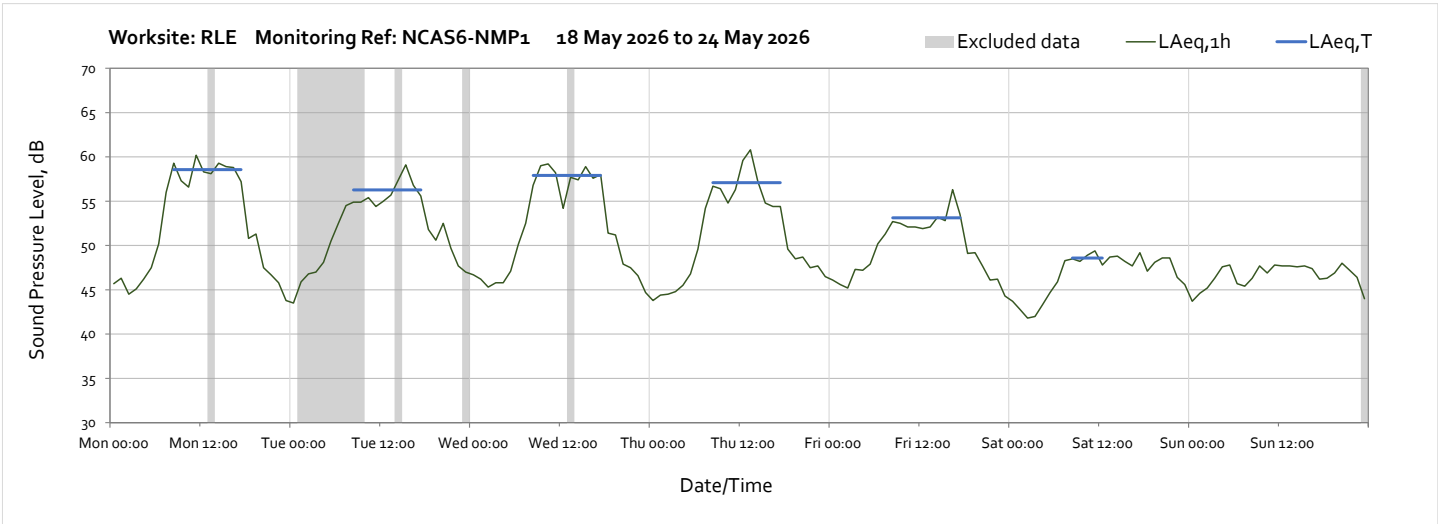
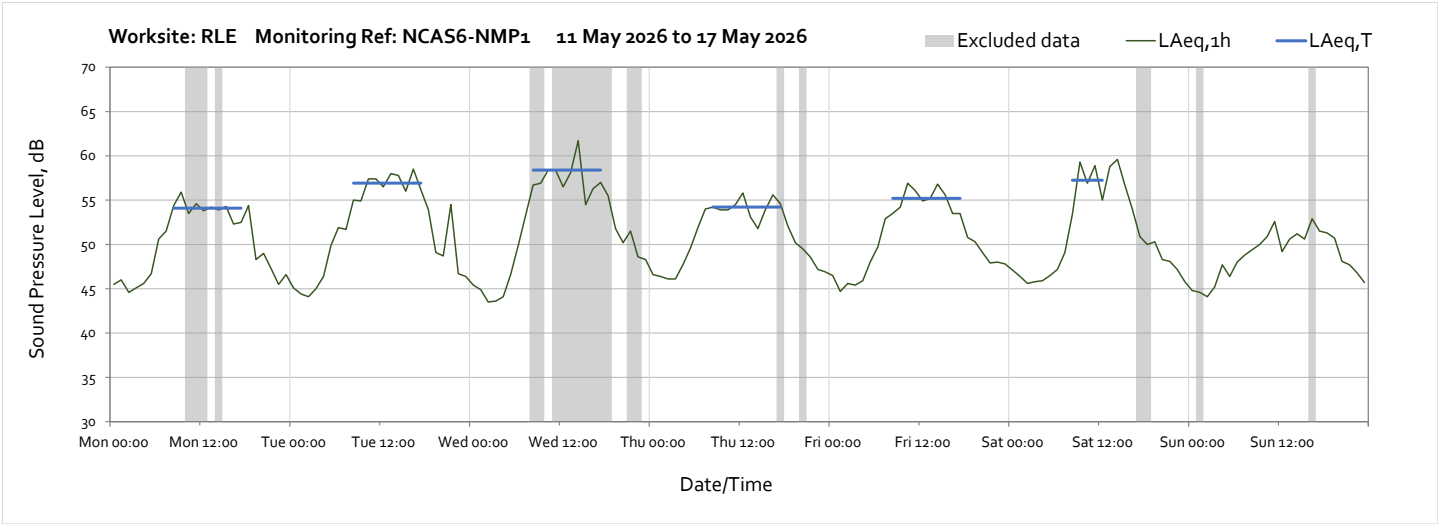
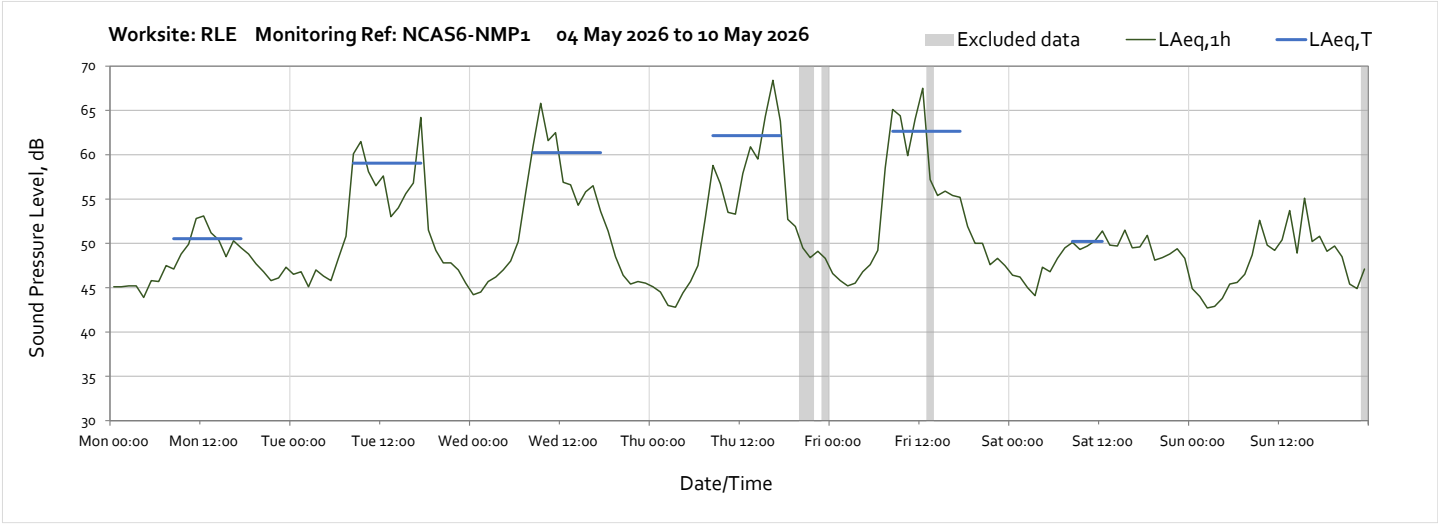
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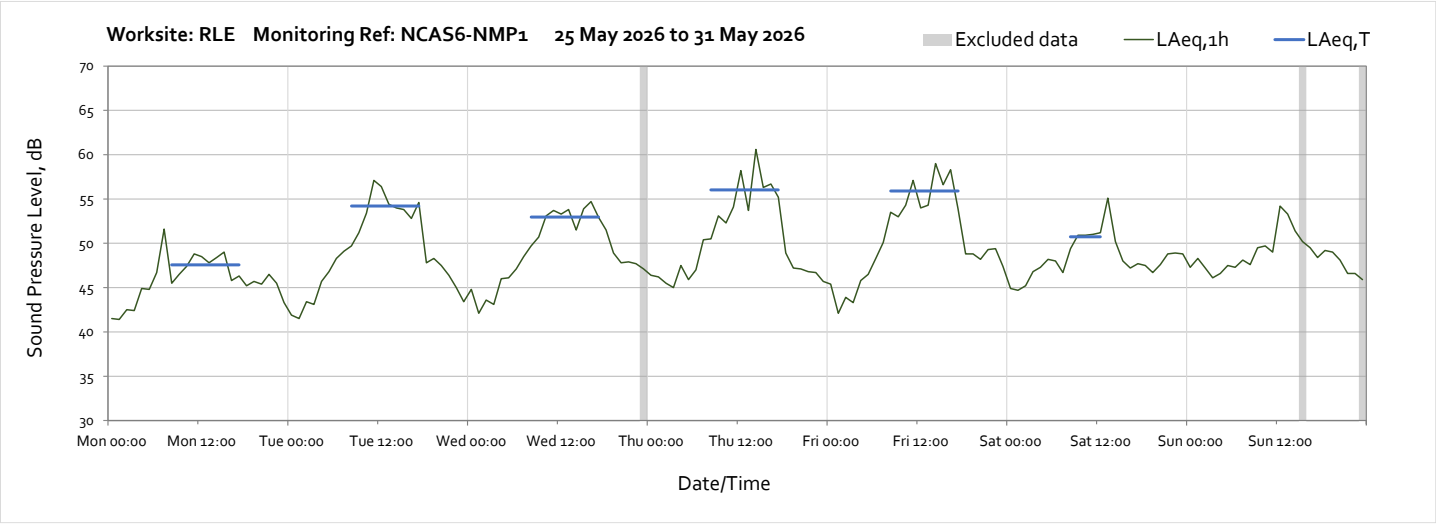




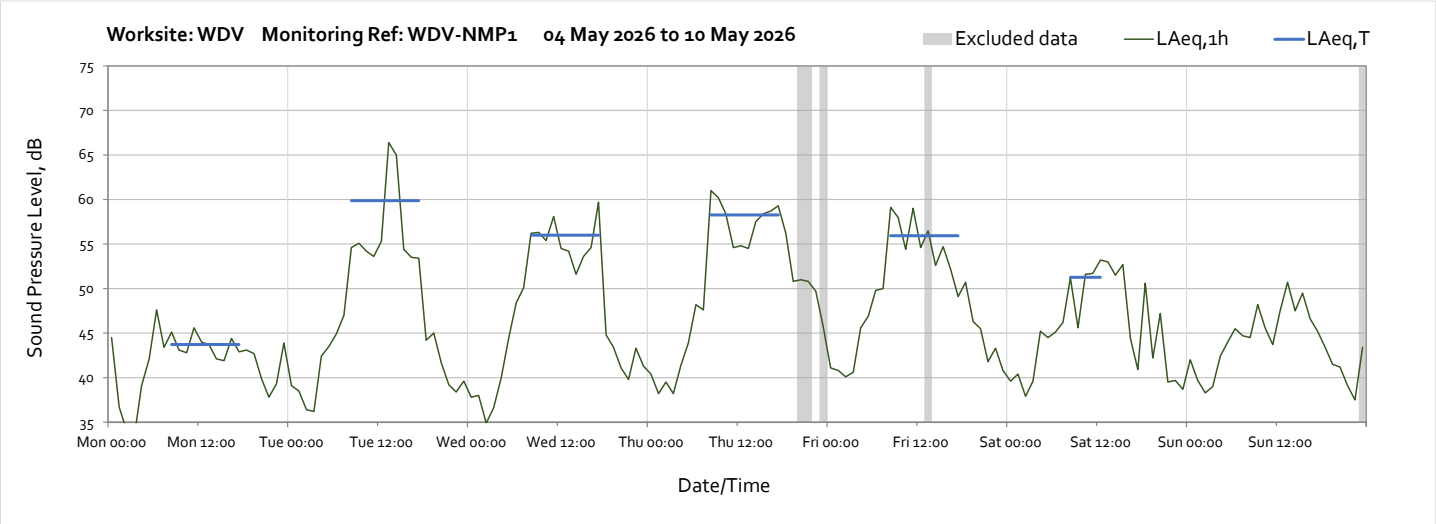
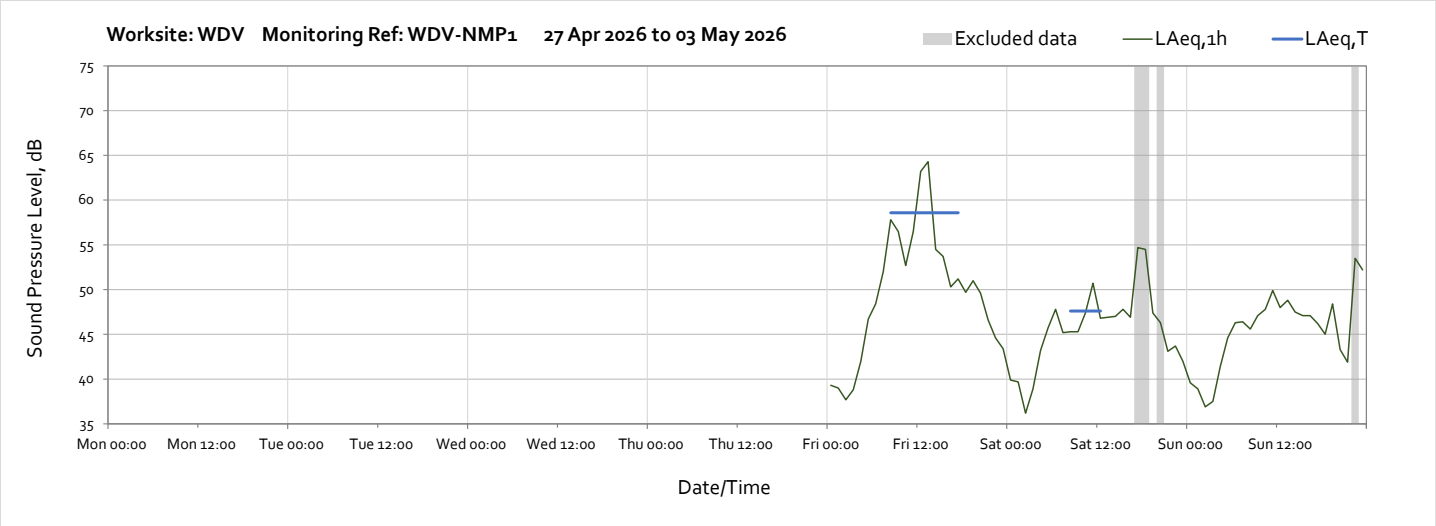
Worksite: RLE - Monitoring Ref: NCAS6-NMP1

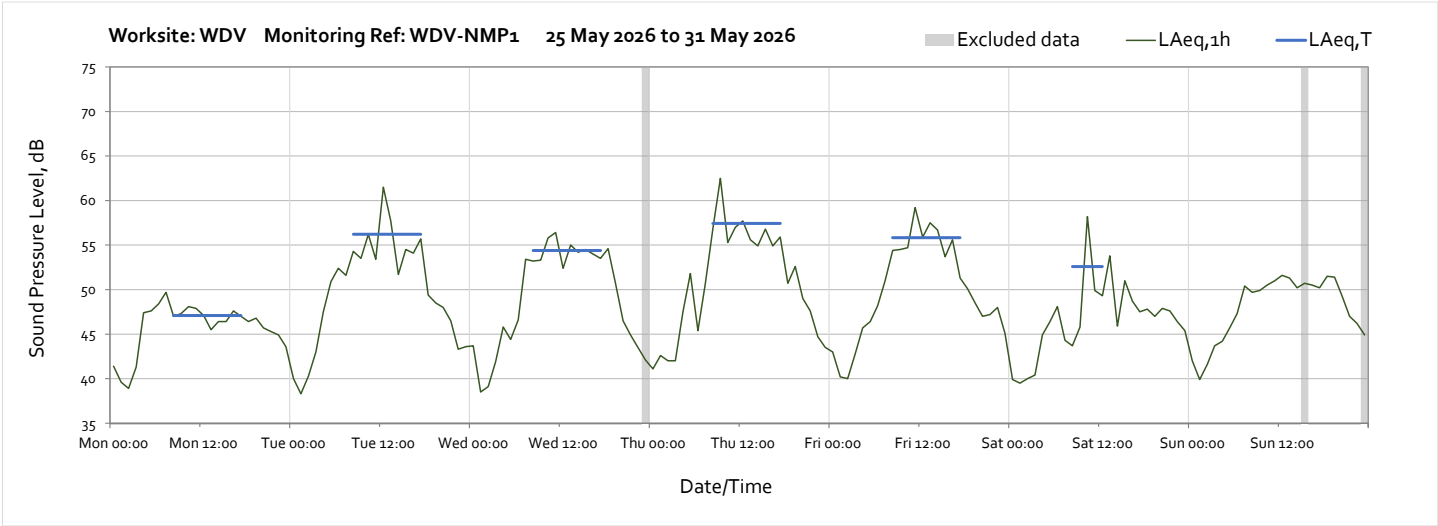
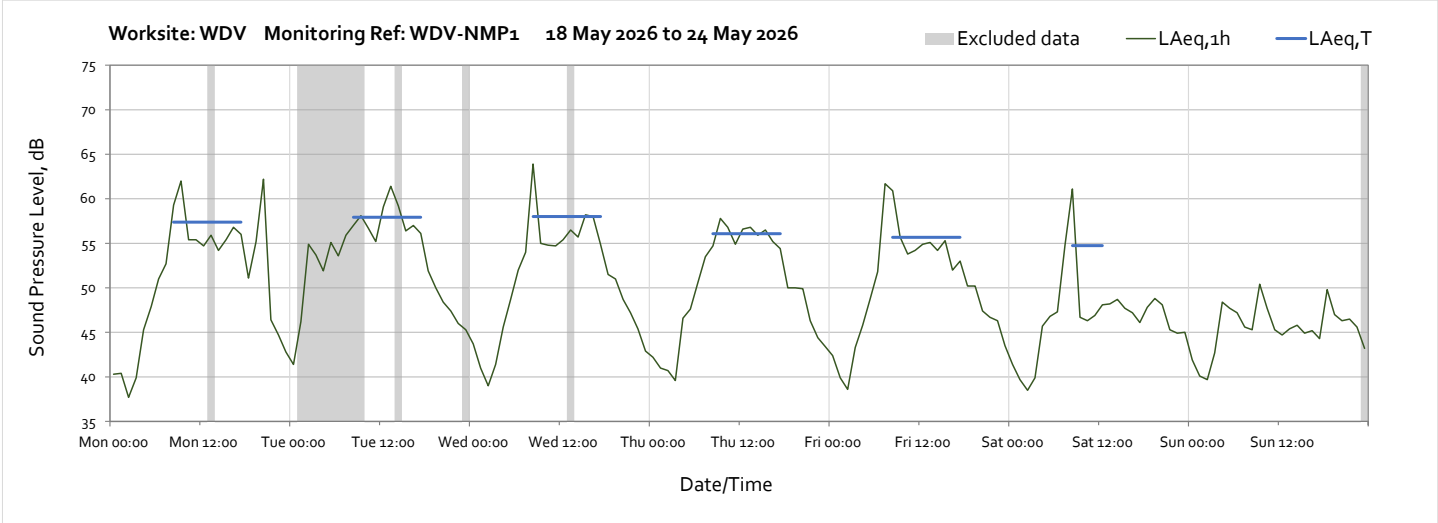
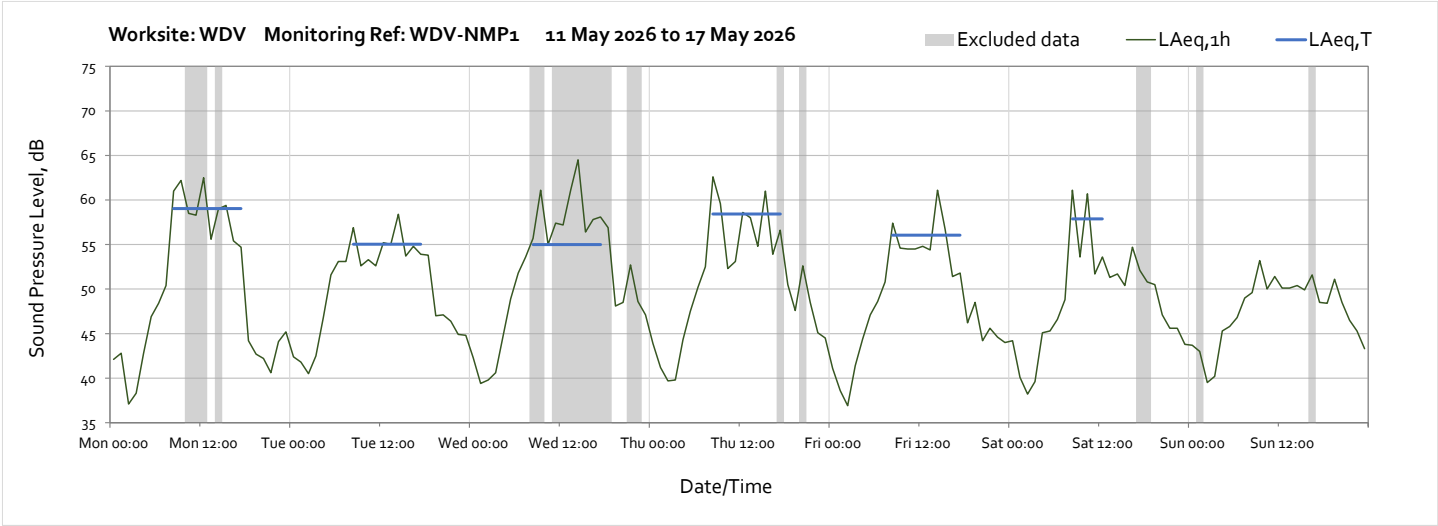




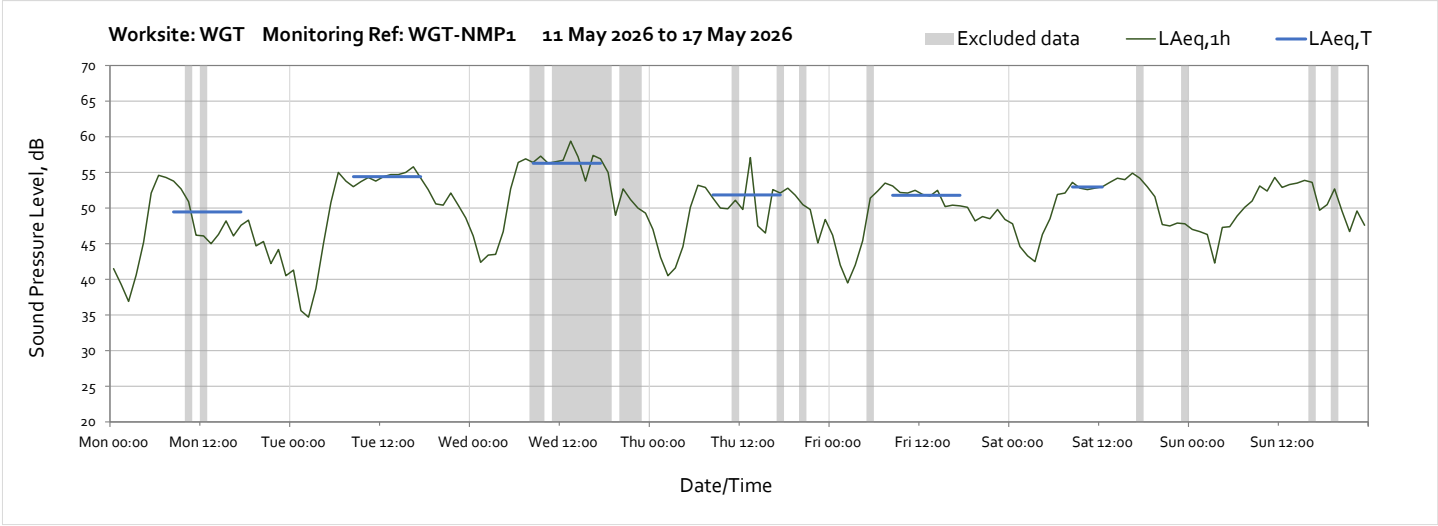
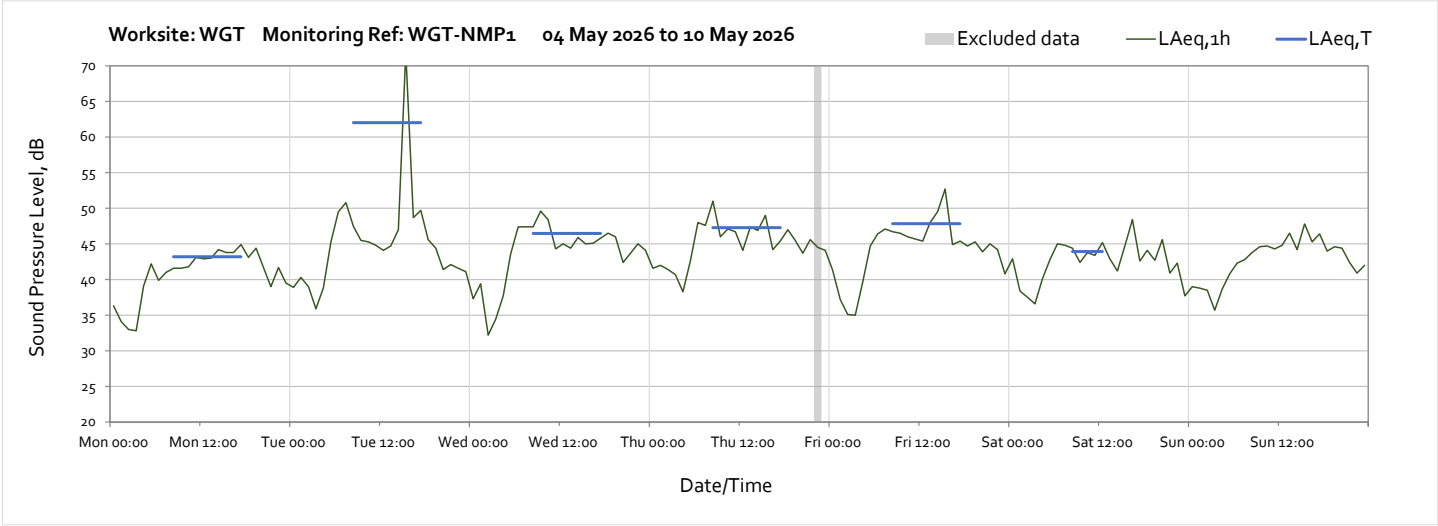
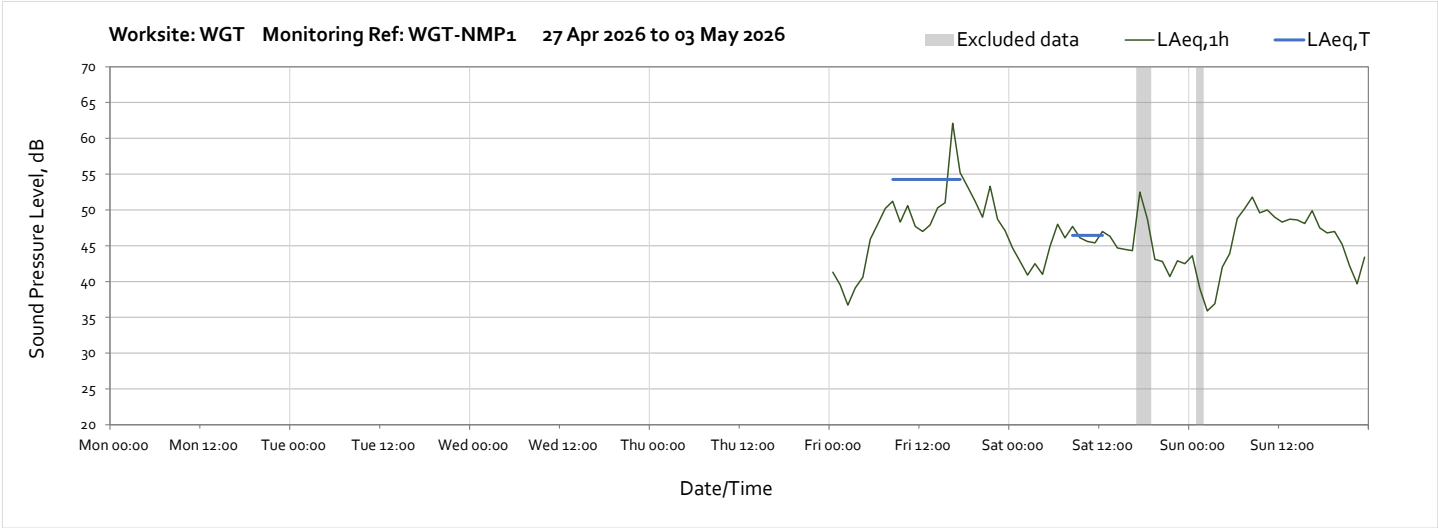


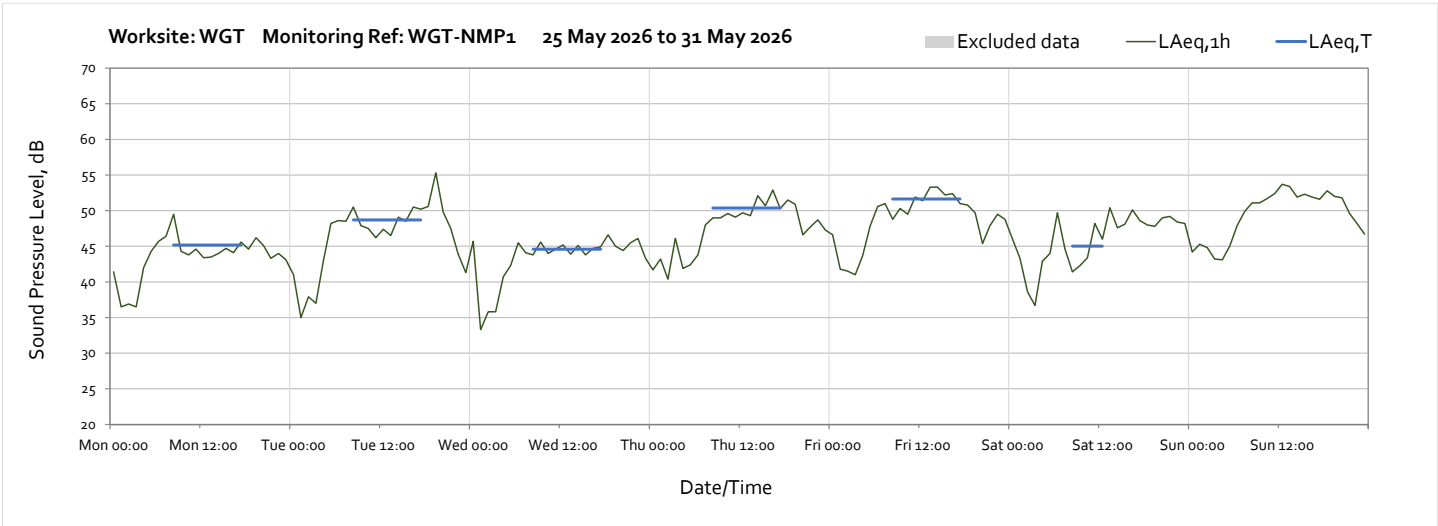
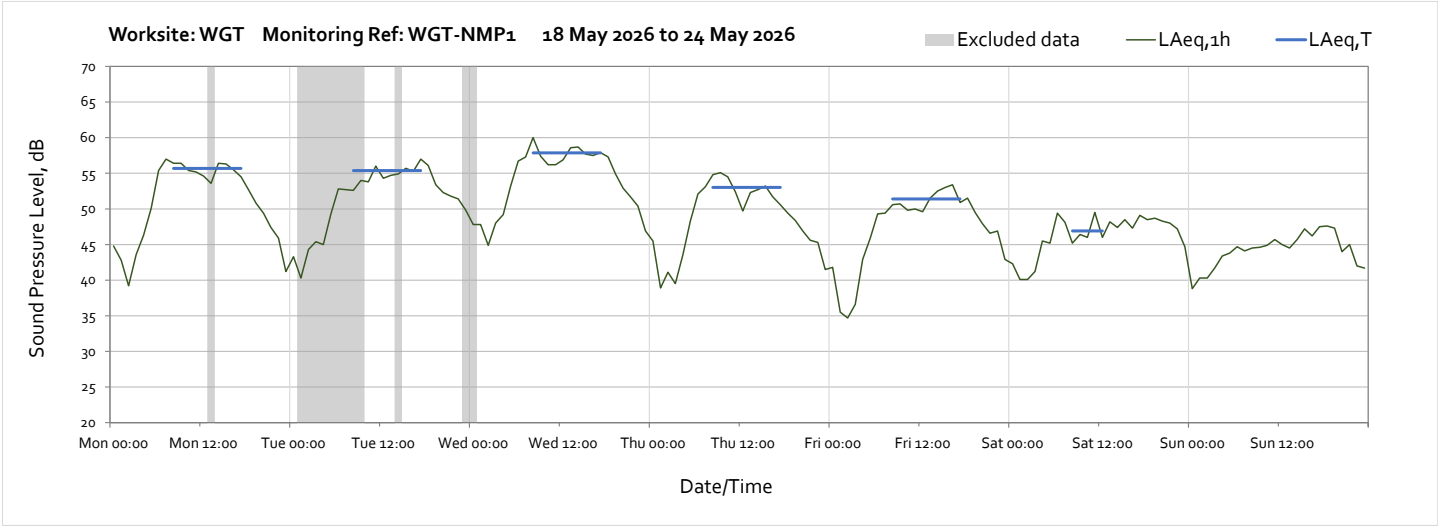
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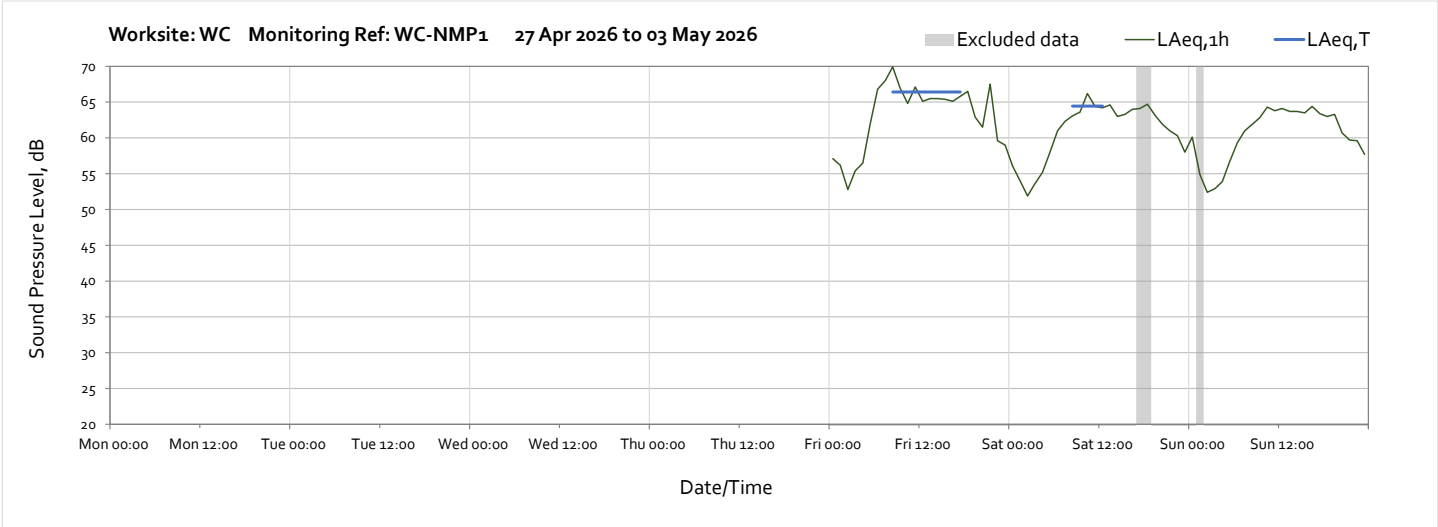


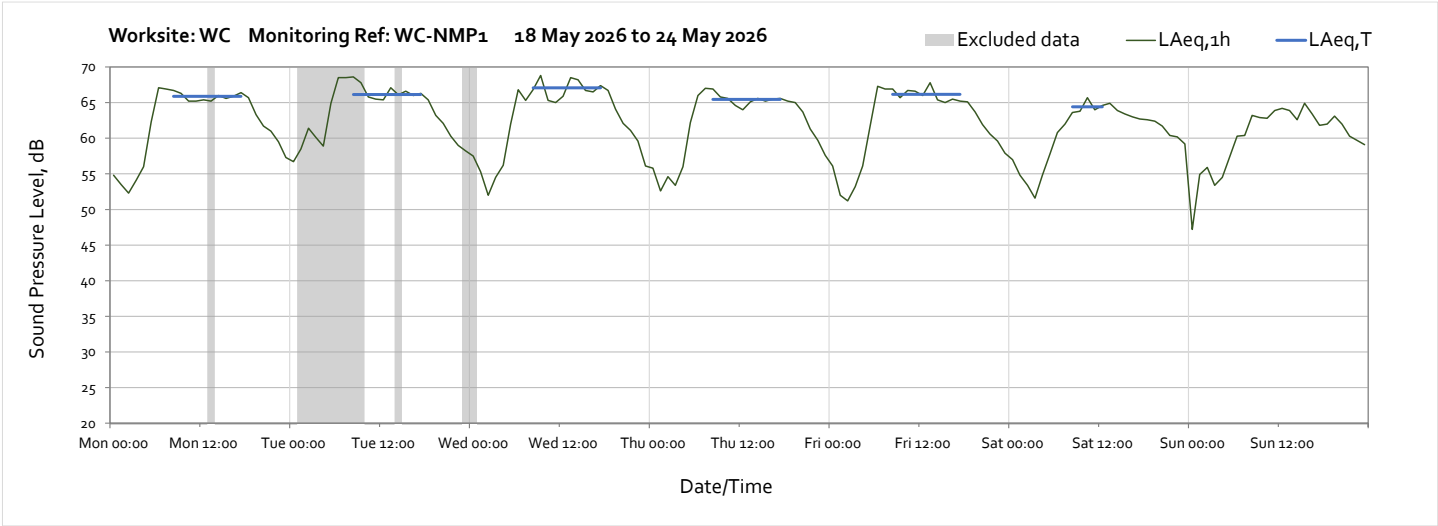
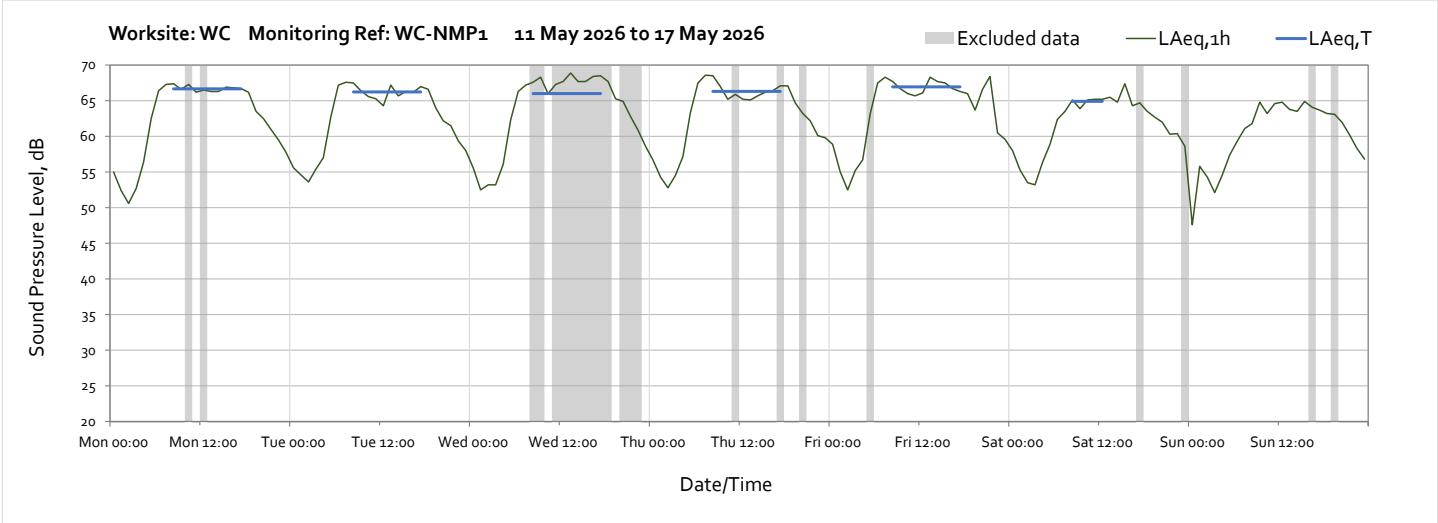
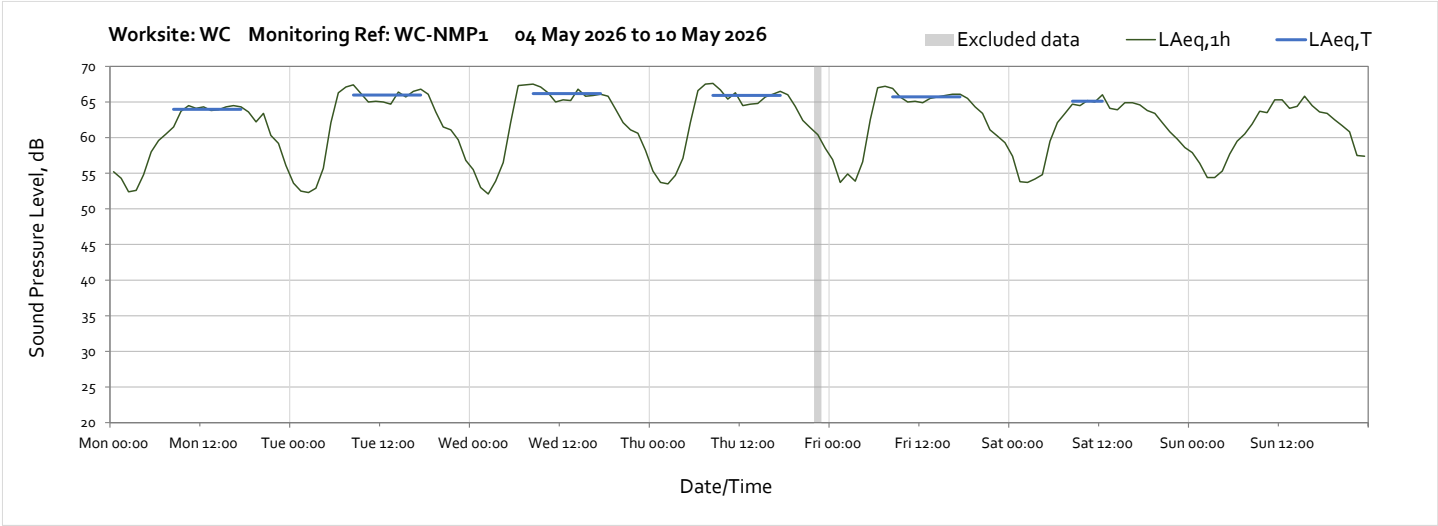
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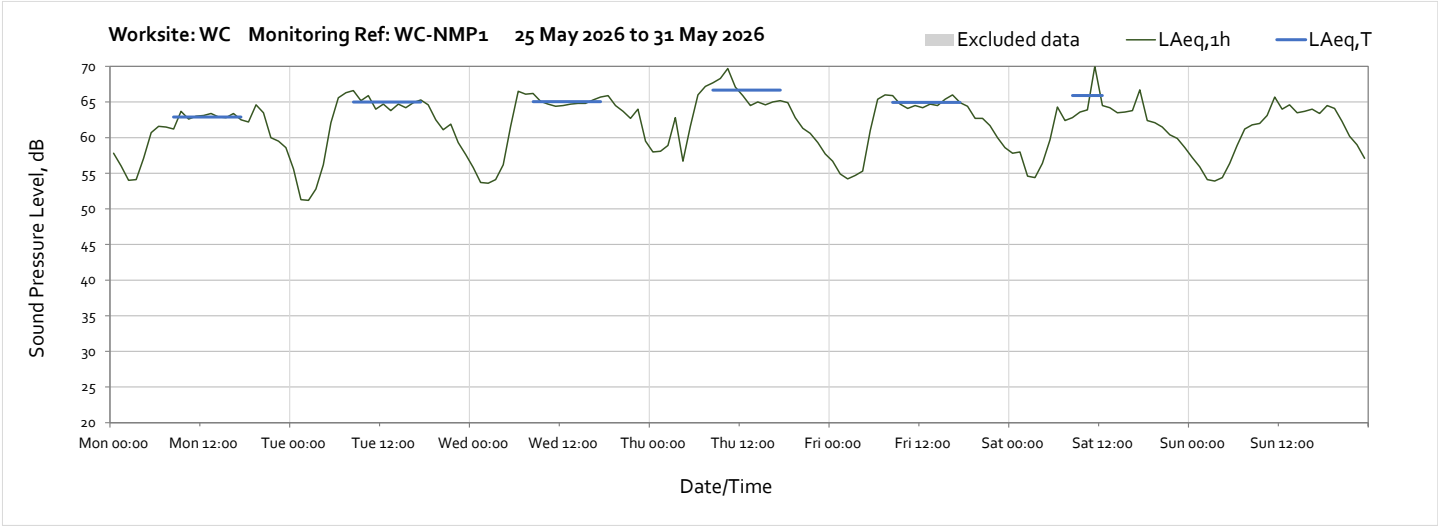




Worksite: WC - Monitoring Ref: WC-NMP1





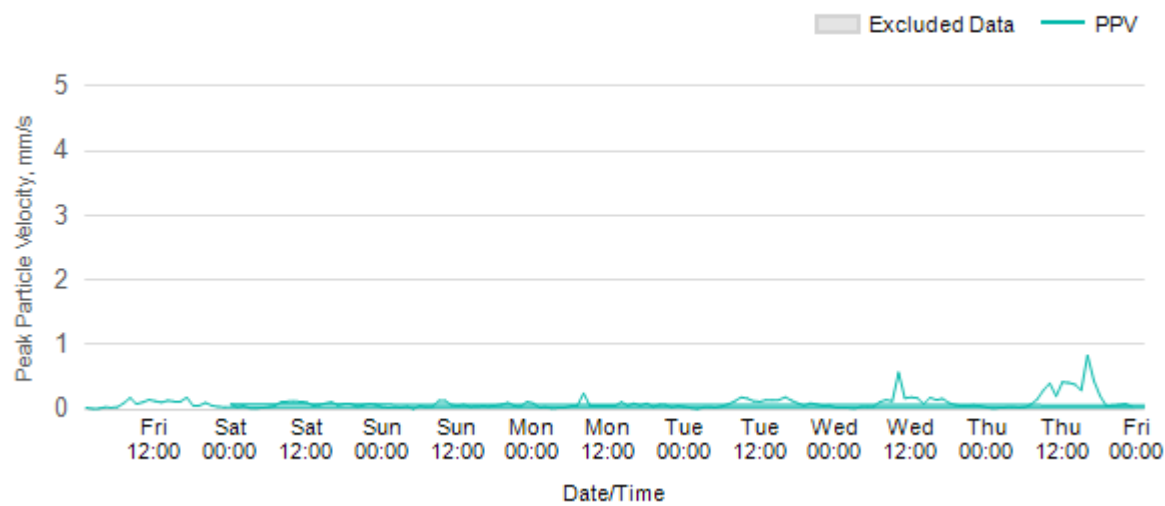


Vibration

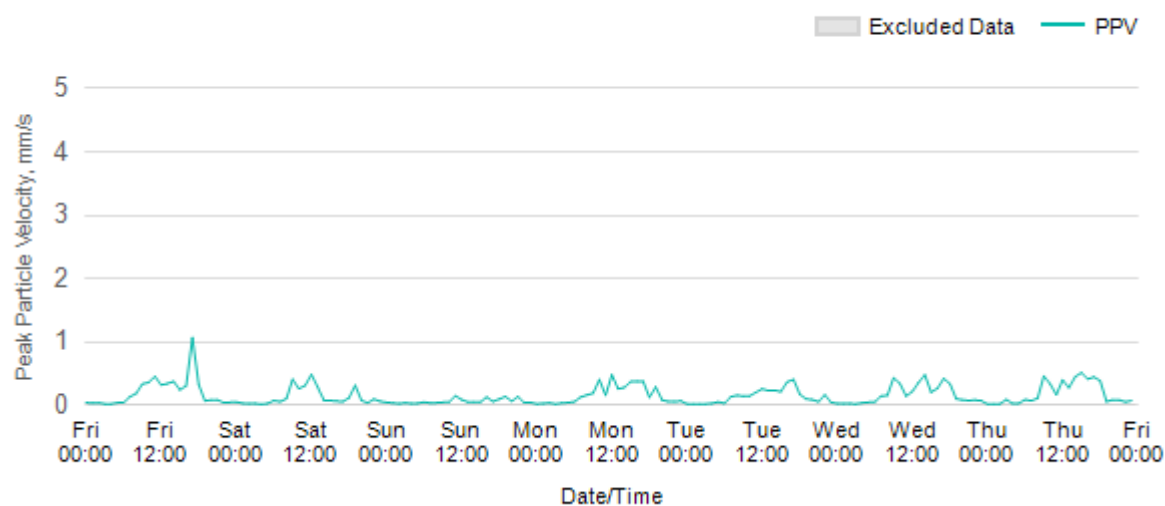
The following graphs show the hourly measured peak particle velocity PPV recorded during the monitoring period. The graphs show the resultant PPV due to vibration components on three orthogonal axis x, y and z. Where high values of PPV were caused by local interference with the vibration monitor, which 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: BRA - Monitoring Ref: BRA-Vib1

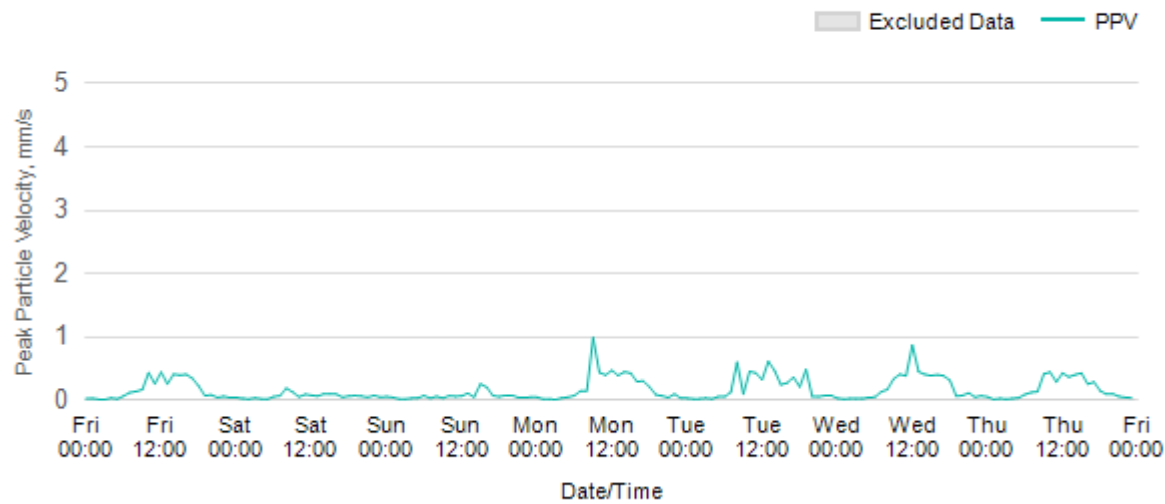
Worksite: BRA Monitoring Ref: BRA-Vib1 01 May 2026 to 07 May 2026



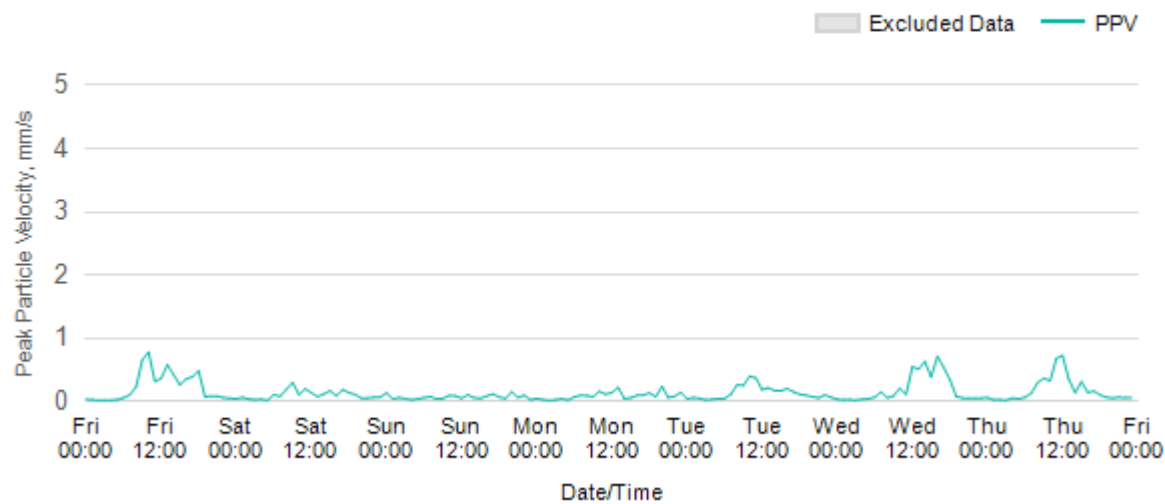
Worksite: BRA Monitoring Ref: BRA-Vib1 08 May 2026 to 14 May 2026



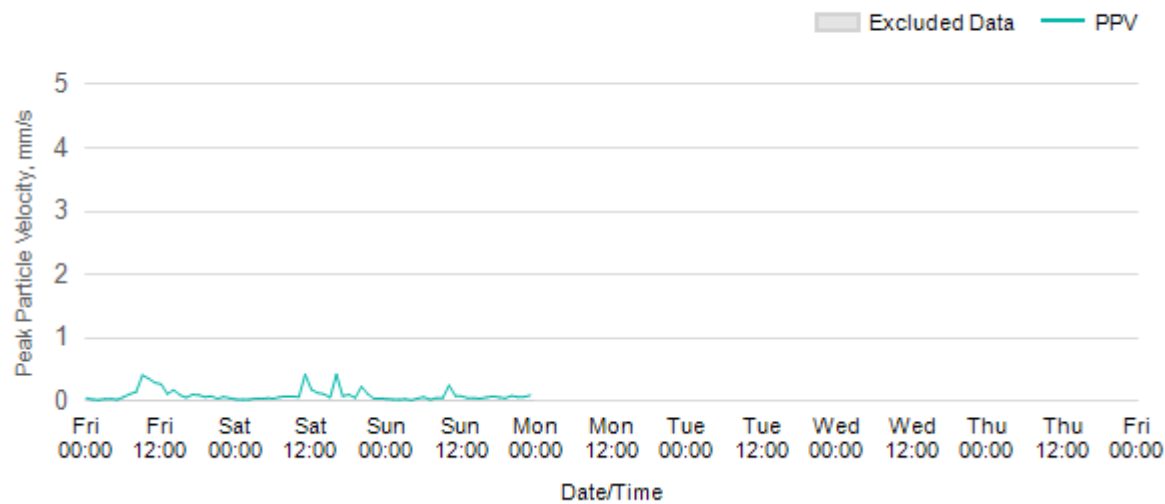
Worksite: BRA Monitoring Ref: BRA-Vib1 15 May 2026 to 21 May 2026



Worksite: BRA Monitoring Ref: BRA-Vib1 22 May 2026 to 28 June 2026

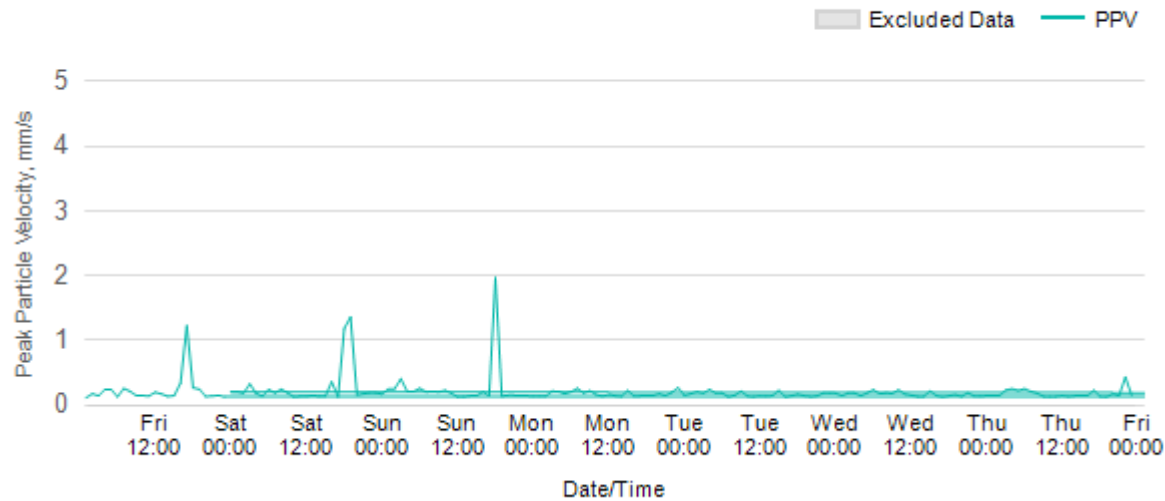


Worksite: BRA Monitoring Ref: BRA-Vib1 29 May 2026 to 4 June 2026

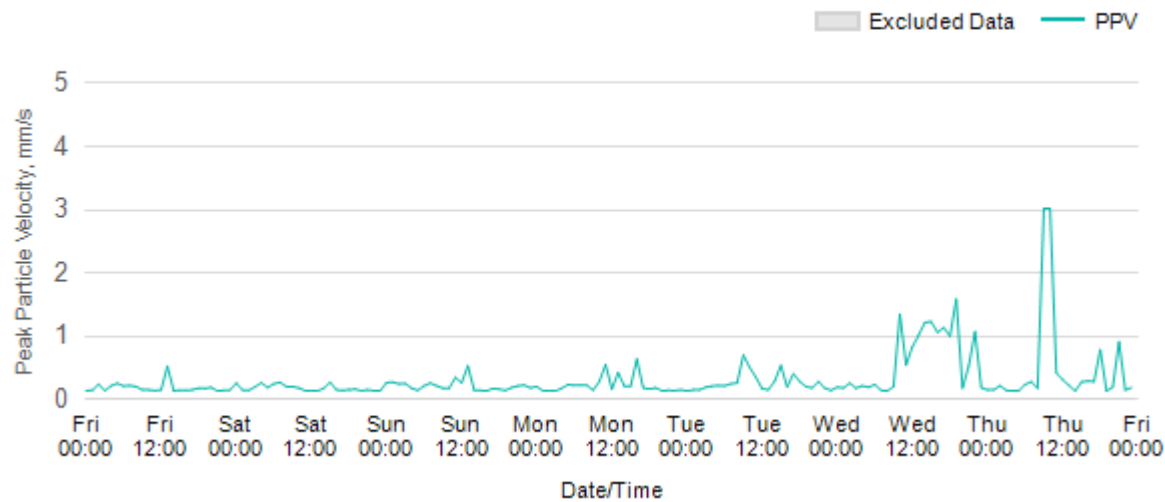


Worksite: ER - Monitoring Ref: ER-Vib1

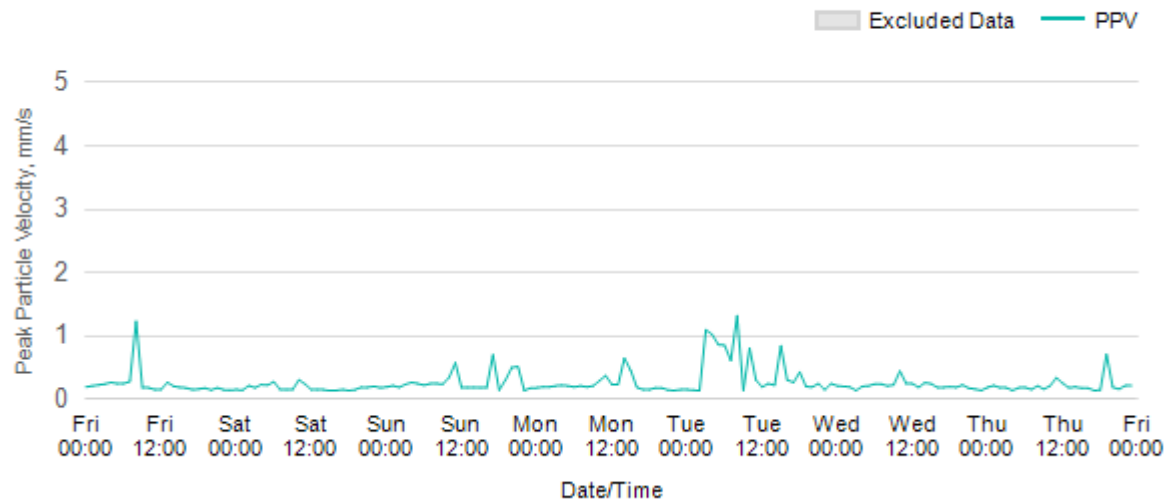
Worksite: ER Monitoring Ref: ER-Vib1 01 May 2026 to 07 May 2026



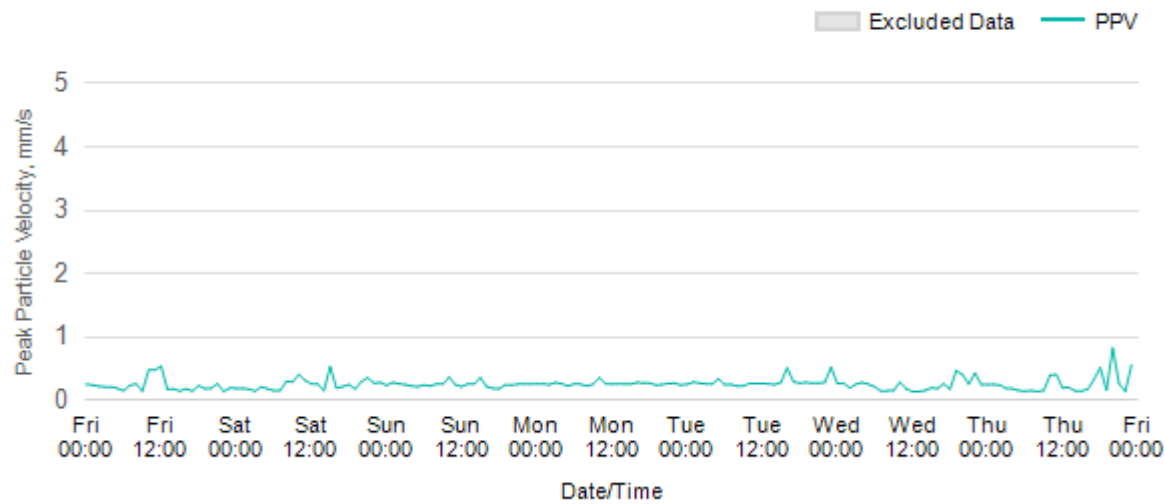
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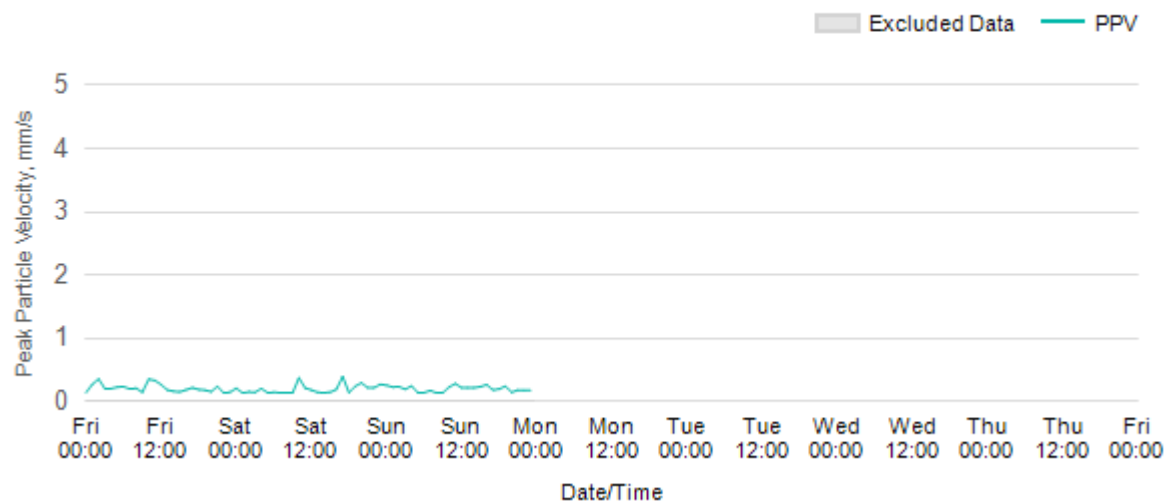
Worksite: ER Monitoring Ref: ER-Vib1 15 May 2026 to 21 May 2026



Worksite: ER Monitoring Ref: ER-Vib1 22 May 2026 to 28 June 2026

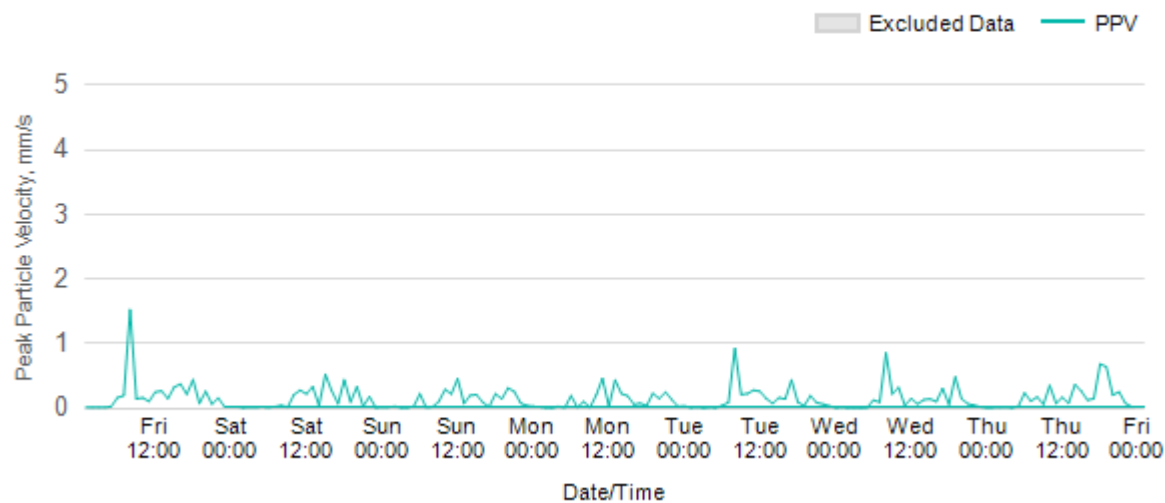


Worksite: ER Monitoring Ref: ER-Vib1 29 May 2026 to 4 June 2026

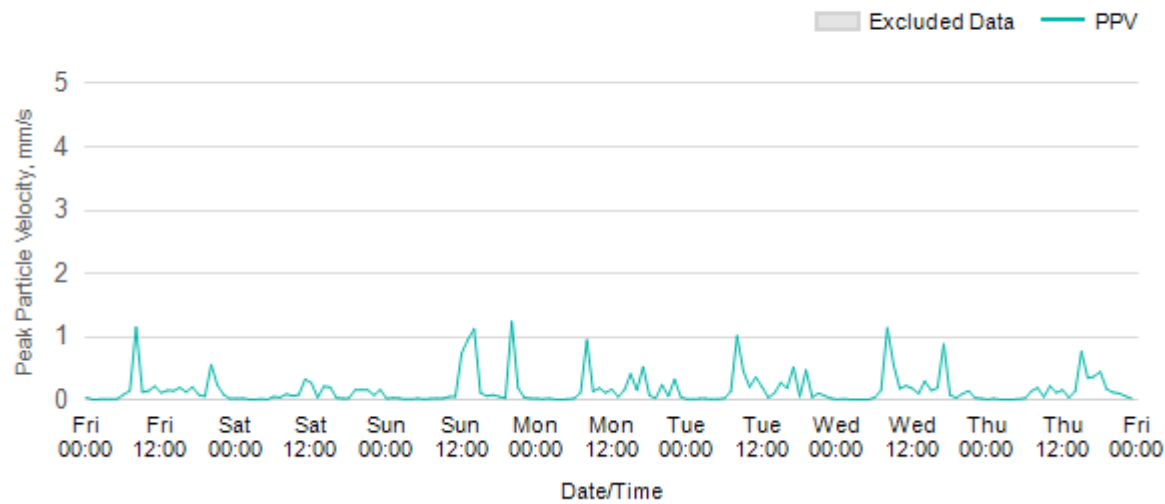


Worksite: PF - Monitoring Ref: PF-Vib1

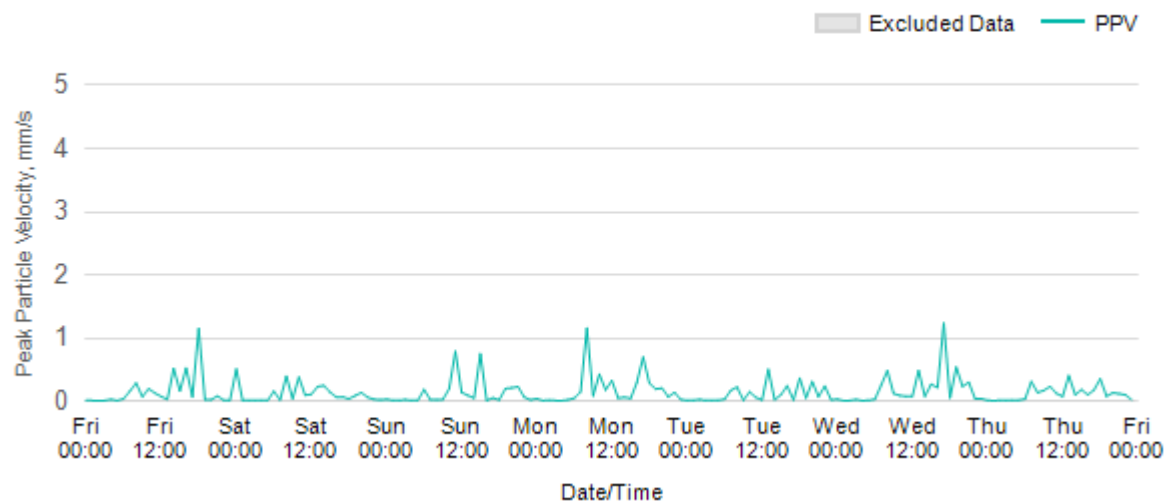
Worksite: PF Monitoring Ref: PF-Vib1 01 May 2026 to 07 May 2026



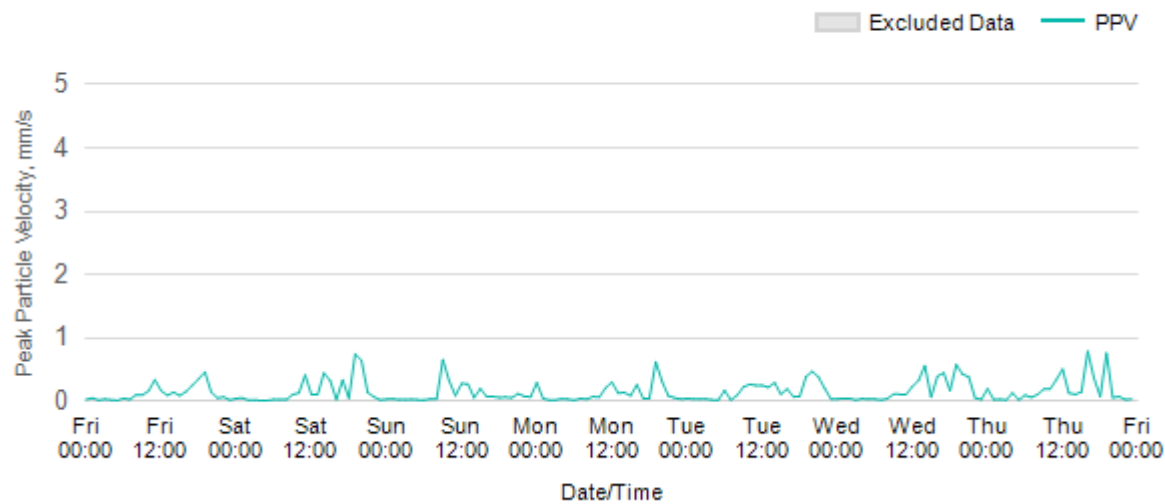
Worksite: PF Monitoring Ref: PF-Vib1 08 May 2026 to 14 May 2026



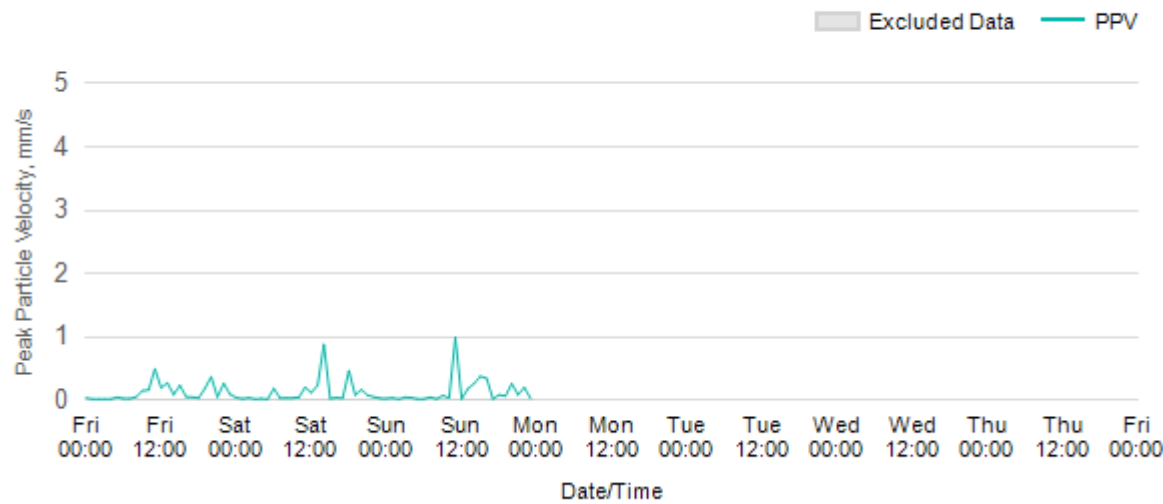
Worksite: PF Monitoring Ref: PF-Vib1 15 May 2026 to 21 May 2026



Worksite: PF Monitoring Ref: PF-Vib1 22 May 2026 to 28 June 2026

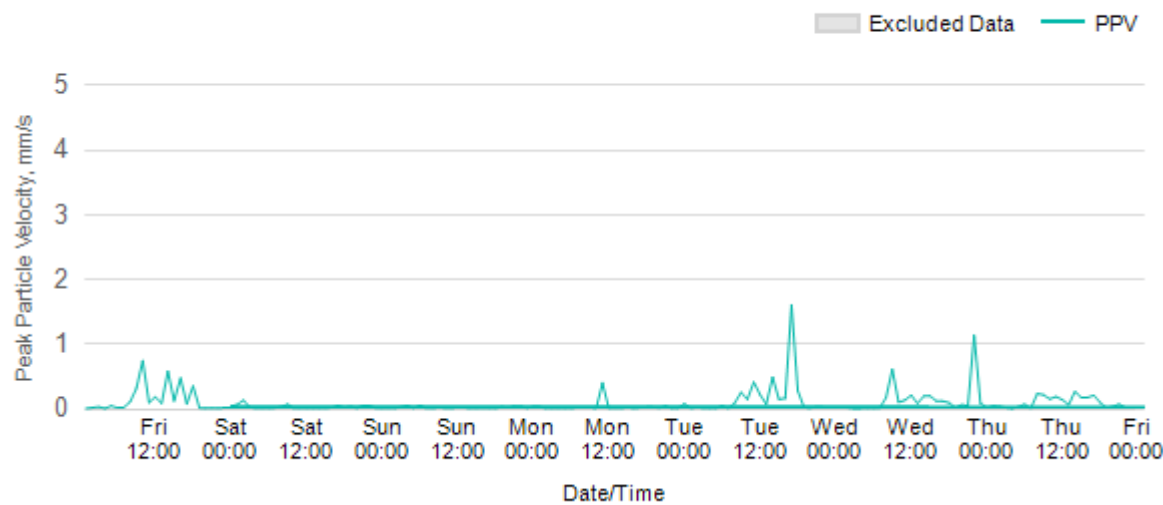


Worksite: PF Monitoring Ref: PF-Vib1 29 May 2026 to 4 June 2026

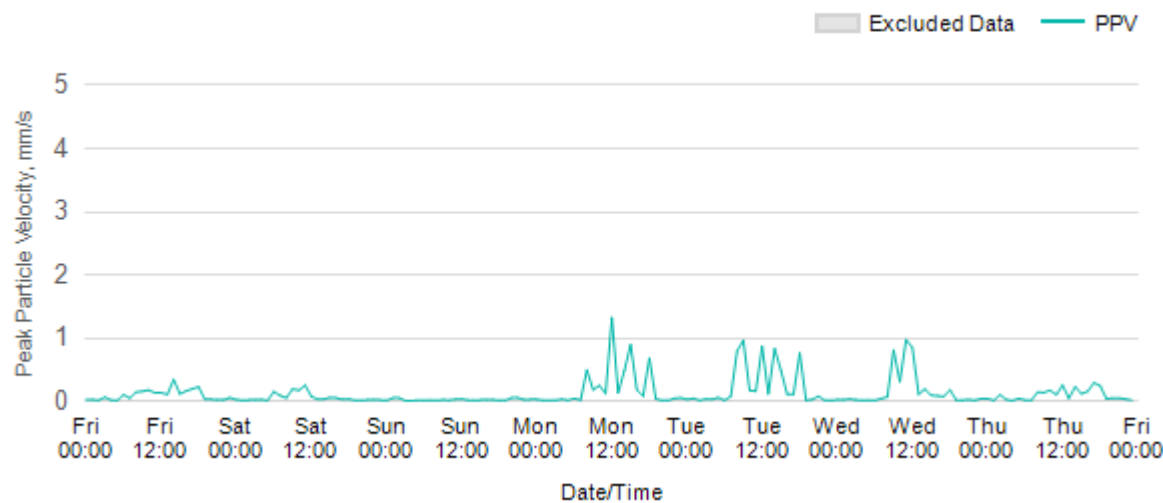


Worksite: SE - Monitoring Ref: SE-Vib1

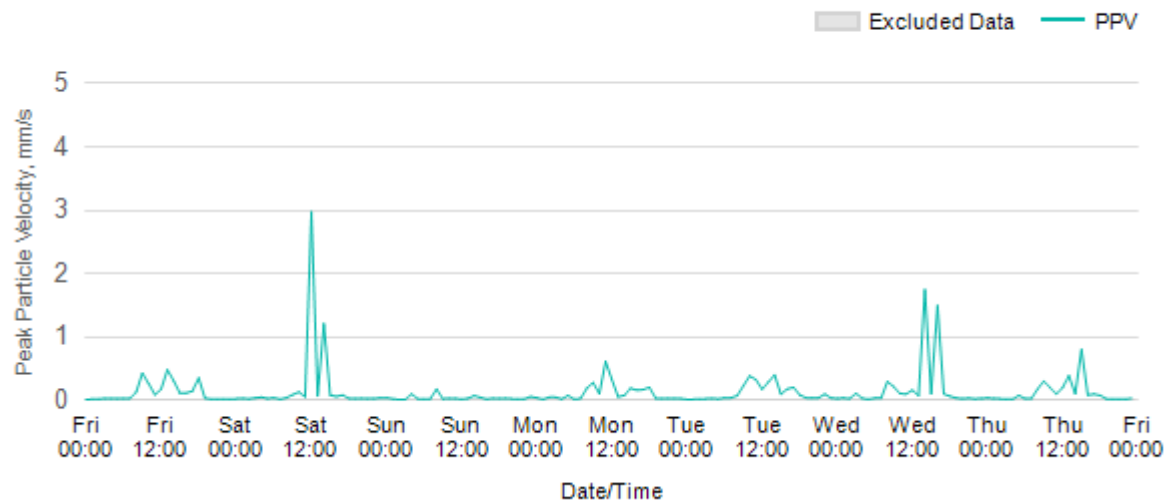
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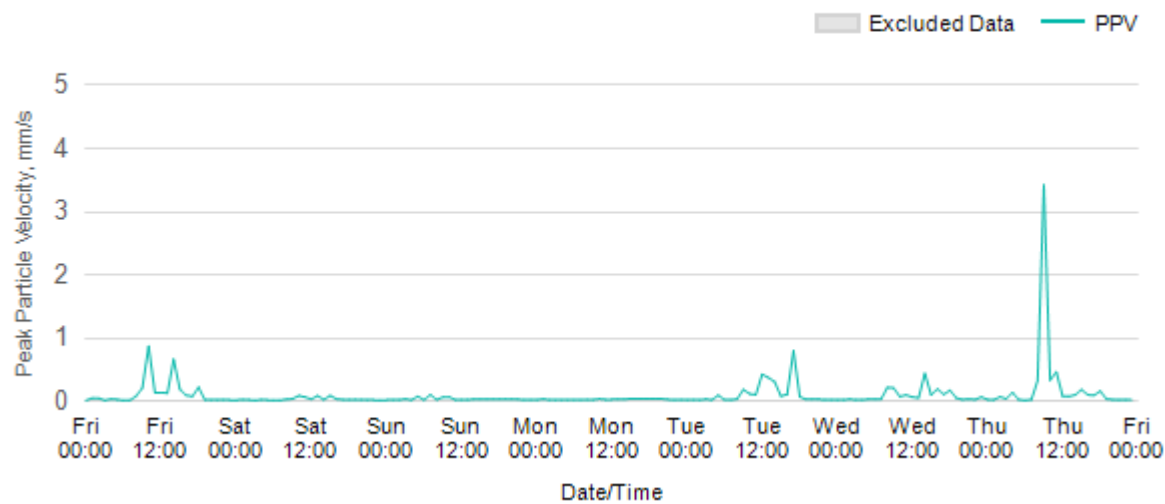
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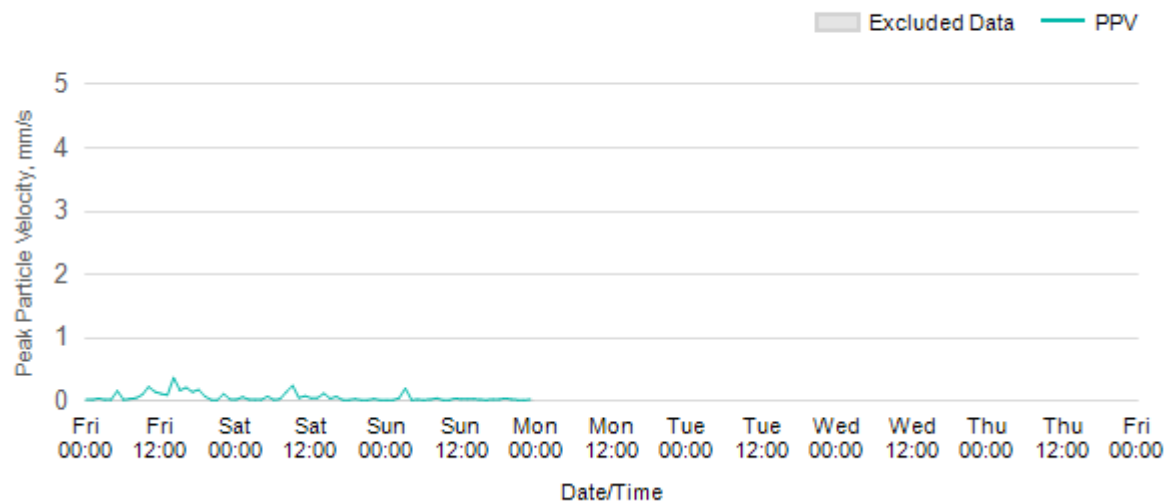
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Worksite: SE Monitoring Ref: SE-Vib1 22 May 2026 to 28 June 2026

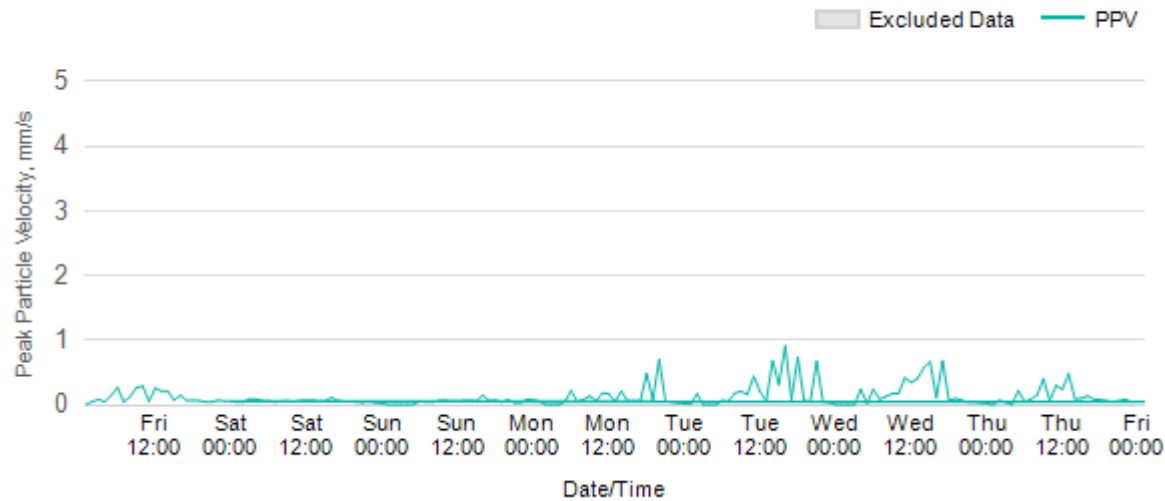


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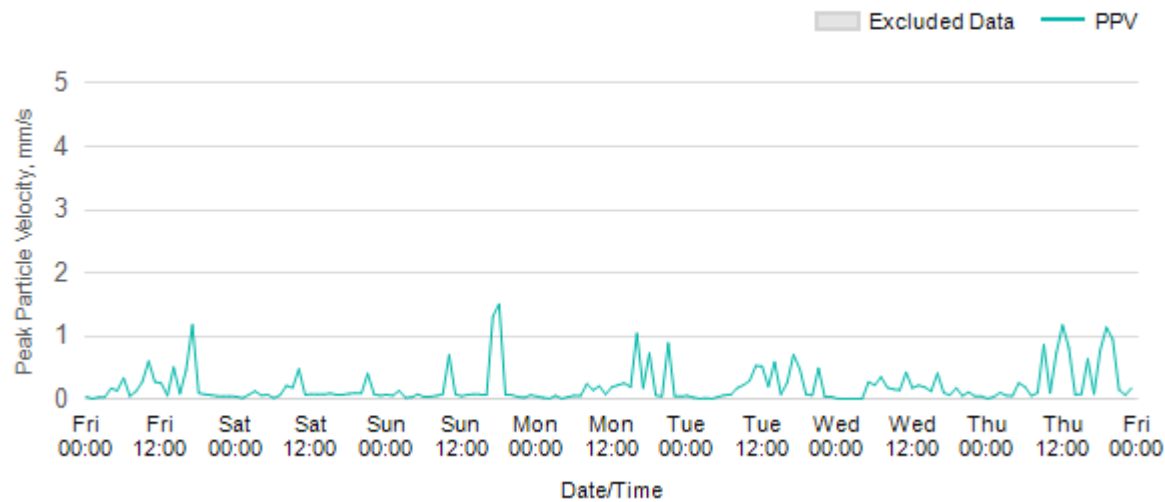


Worksite: SR - Monitoring Ref: SR-Vib1

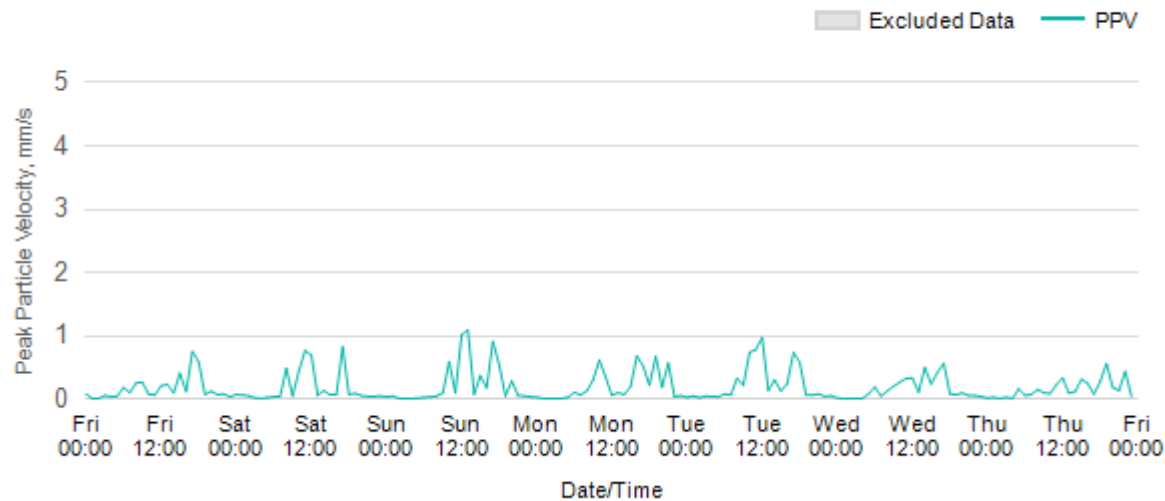
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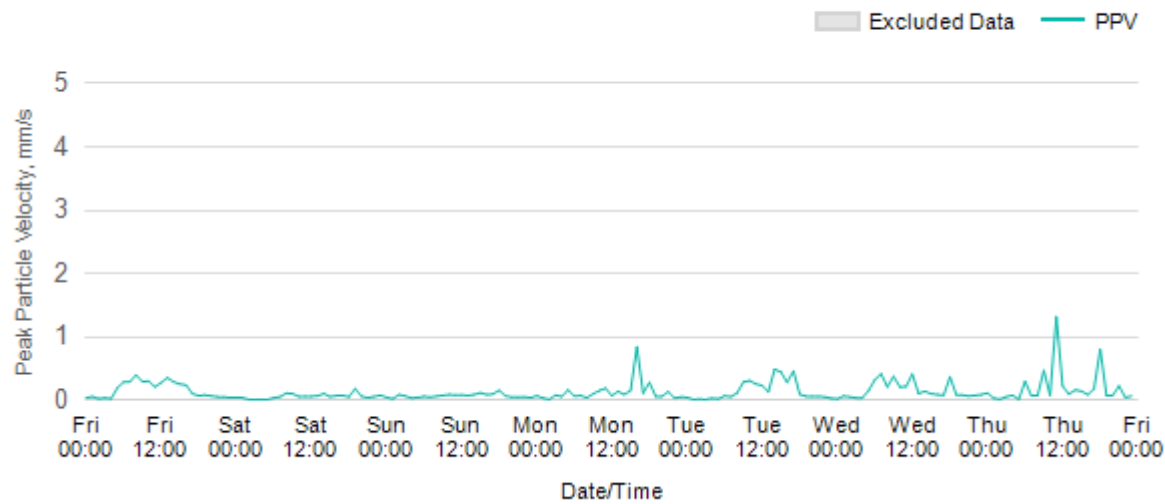
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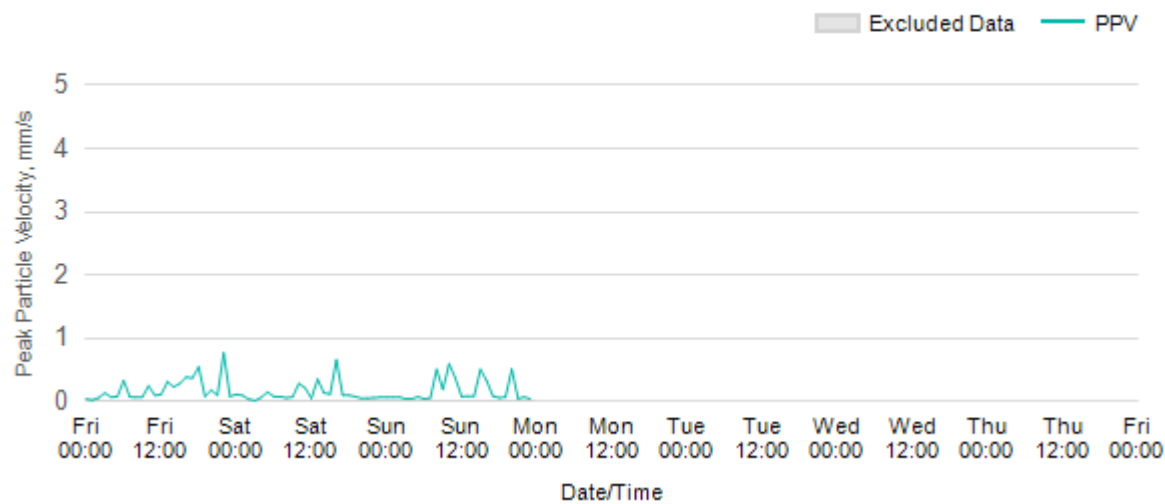
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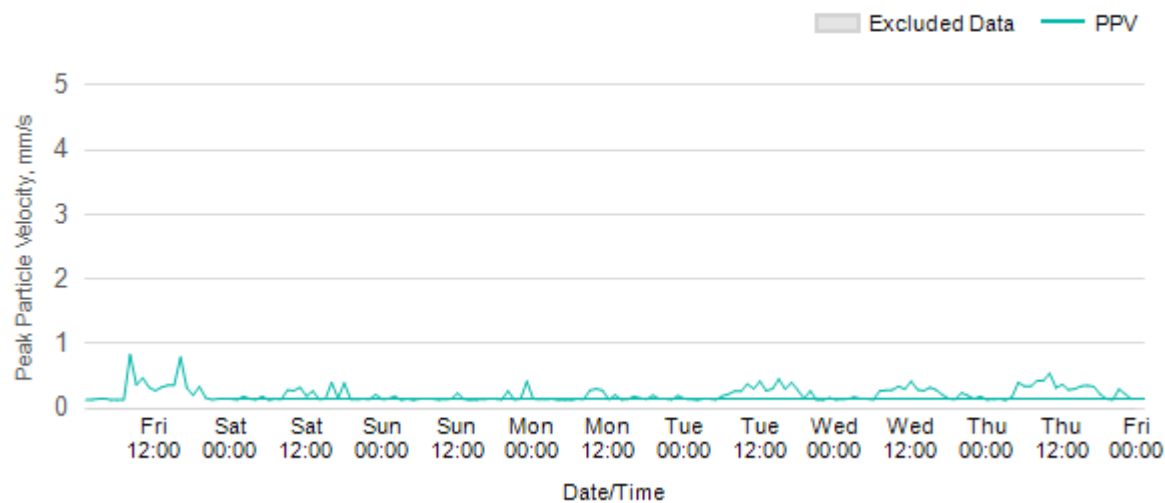


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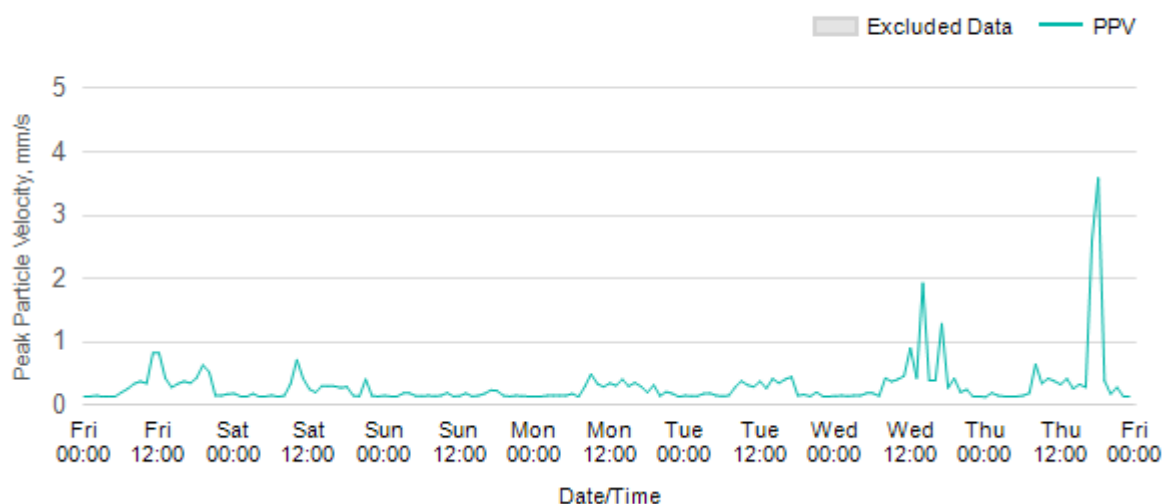


Worksite: WDL - Monitoring Ref: WDL-Vib1

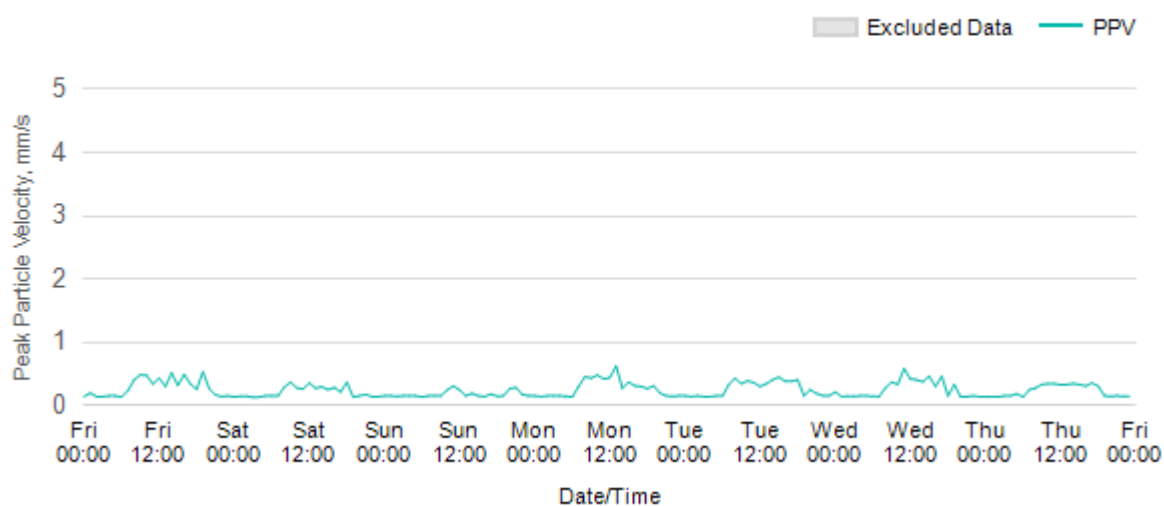
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Worksite: WDL Monitoring Ref: WDL-Vib1 15 May 2026 to 21 May 2026



Worksite: WDL Monitoring Ref: WDL-Vib1 22 May 2026 to 28 June 2026

