

Holloway Park, London

Construction Monitoring Report

Client: London Square
Ref: CM75-22405-R0
Date: 14 March 2024
Note by: Anthony Coraci, MSc DipIOA MIOA, Senior Acoustics Consultant

1. INTRODUCTION

1.1 This Technical Note sets out results of the construction monitoring being carried out at the above site between Monday 4th & Saturday 9th March 2024. The monitoring is being carried out in accordance with the methodology set out in the Cass Allen response (reference LR03-22405-R0 dated 27 October 2023) to a S60 warning letter issued to Downwell Demolition Ltd.

2. WEEKLYC ACTIVITIES

2.1 The following activities have been carried out onsite this week, in addition to the usual use of the Haul Road with site vehicles:

OHOB

- Creating a new haul road

Horizon

- Crushing crush to Type 1 (Phase 1 & Phase 2)
- Relocating crush from Phase 1 to Phase 2

Pure Logistic

- General site works
- Changing over fencing from walkways

Kesel

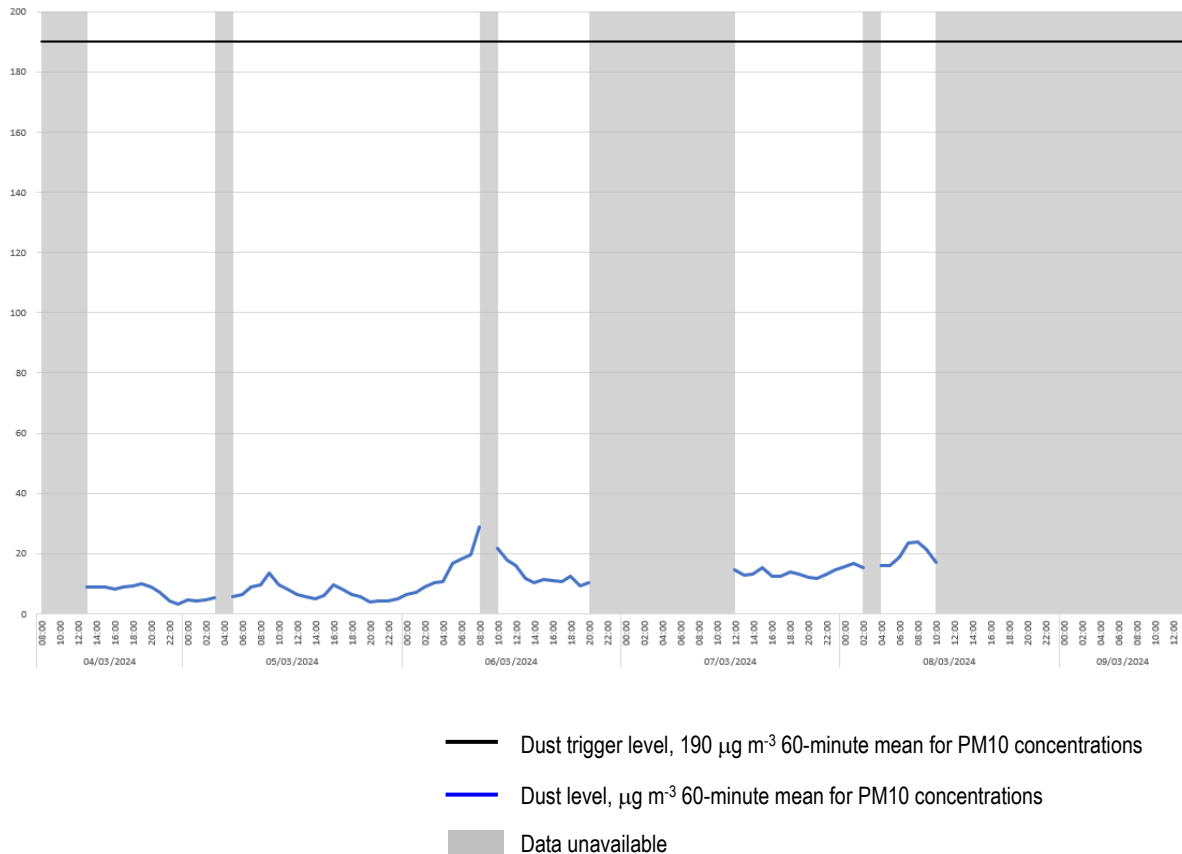
- Refurbishment of new welfare containers

3. MONITORING DATA

3.1 This section sets out a summary of the monitoring data that has been recorded onsite and provides a discussion of any exceedances and best practicable means incorporated by the site team if exceedances were believed to be construction related.

Dust Monitoring Results

Location 1



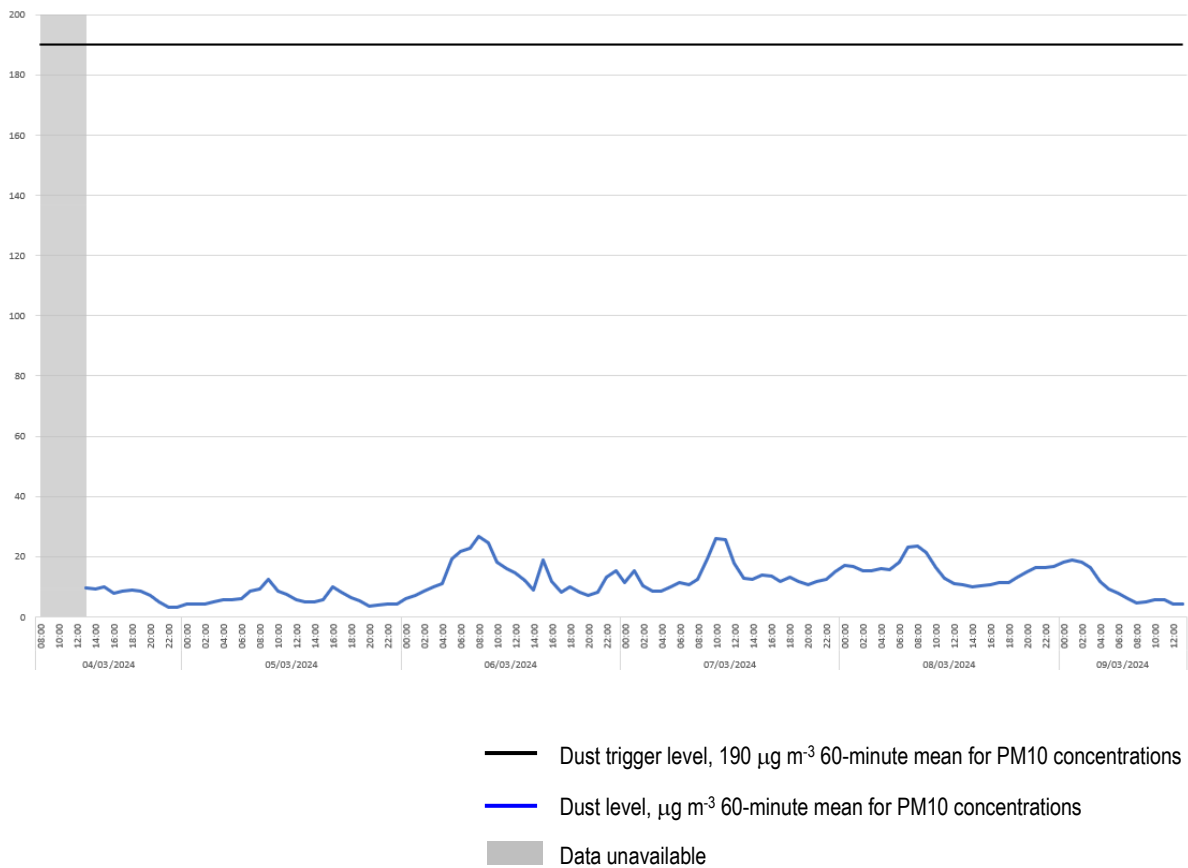
3.2 There was 58% data coverage at Location 1 for the monitoring period covered by this report. The monitor was offline between:

- 08:00 & 13:00 on Monday 4th March, due to drained battery;
- 08:00 & 10:00 on Wednesday 6th March, due to drained battery;
- 08:00 & 12:00 on Thursday 7th March, due to drained battery;

- 10:00 on Friday 8th March & 13:00 on Saturday 9th March, due to drained battery.

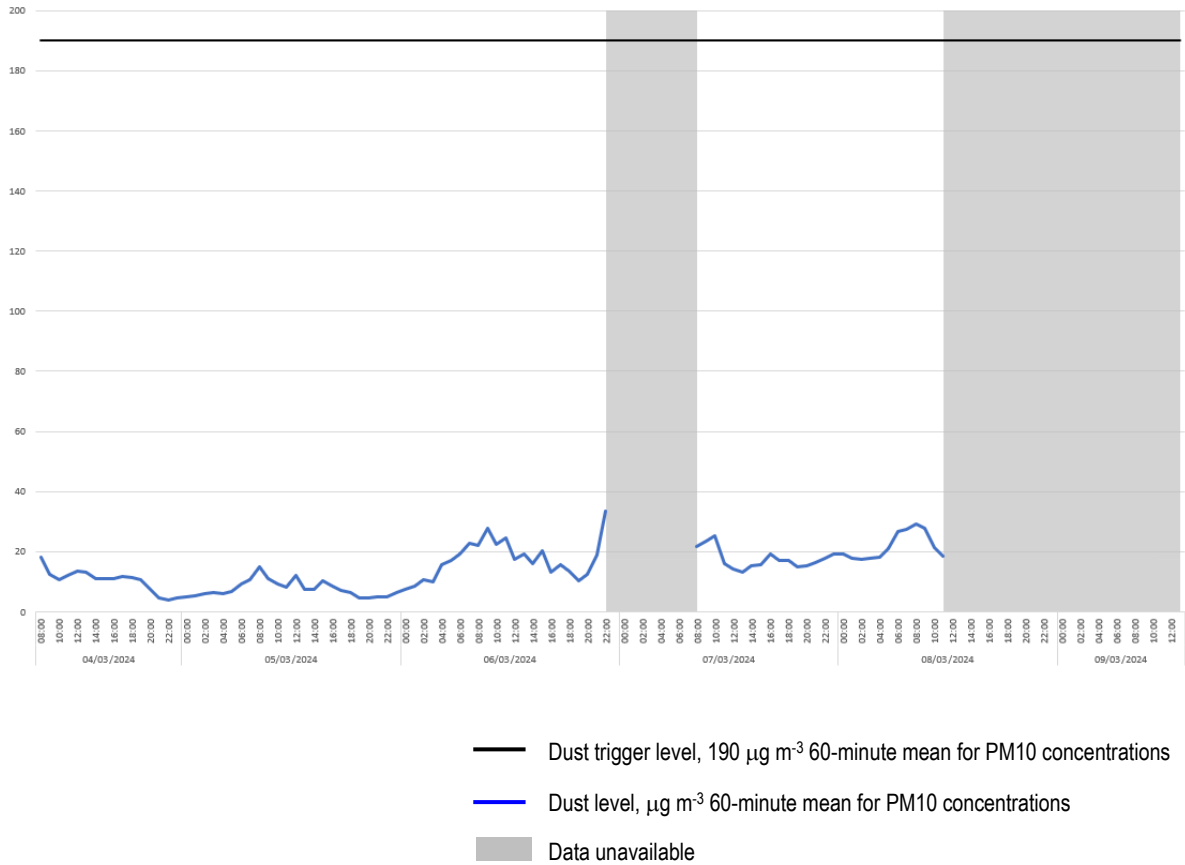
3.3 Cass Allen and London Square are intending to connect the monitors to site power as this becomes available at the monitoring locations. This will remove the reliance on battery power – it follows that there would consequently be far fewer interruptions in the data collection going forward. It is understood that this should become possible in the coming weeks – Cass Allen will provide further updates on this in due course. No exceedances of the project dust criteria of 190 micrograms per cubic meter were recorded during the monitoring period covered by this report.

Location 2



3.4 There was 91% data coverage at Location 2 during construction hours for the monitoring period covered by this report. The monitor was offline between 08:00 and 13:00 on Monday 4th March, before the battery change was completed. No exceedances of the project dust criteria of 190 micrograms per cubic meter were recorded during the monitoring period covered by this report.

Location 3



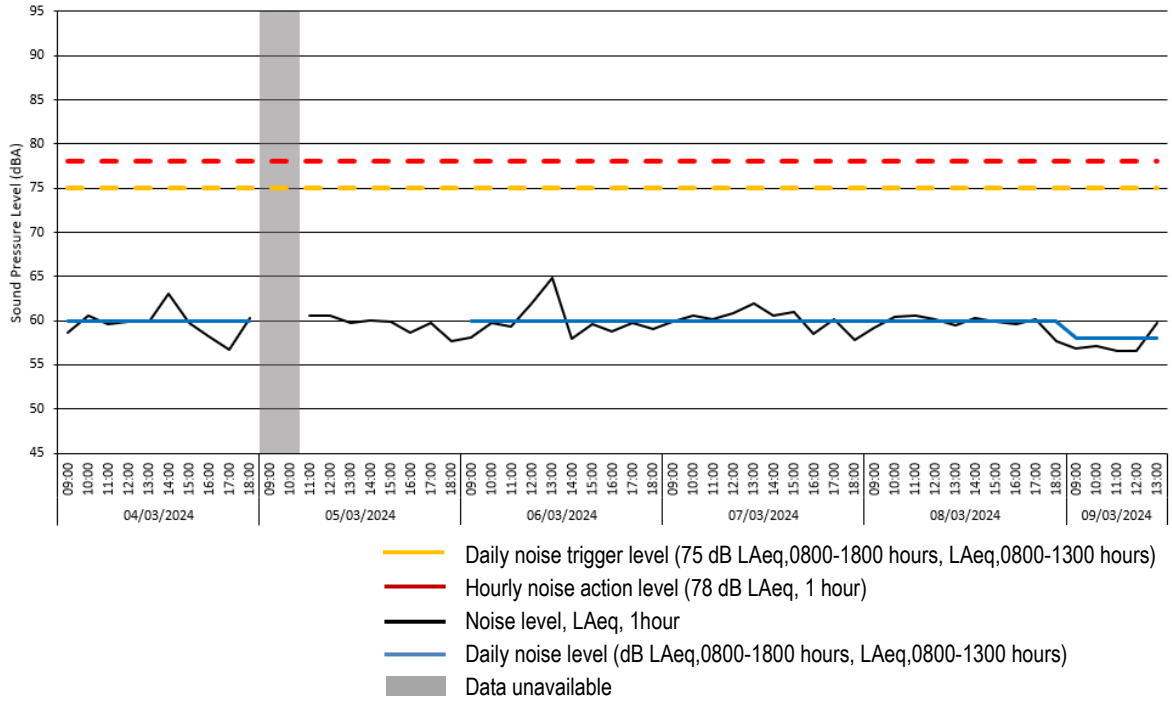
3.5 There was 78% data coverage at Location 3 during construction hours for the monitoring period covered by this report. The monitor was offline between 11:00 on Friday 8th and 13:00 on Saturday 9th March, before the battery change was completed. No exceedances of the project dust criteria of 190 micrograms per cubic meter were recorded during the monitoring period covered by this report.

Noise Monitoring Results

Location 1 – Raw Data

| # Broadband Results | Date [YYYY-MM-DD] | Time [hh:mm:ss] | LAeq(60min) [dB] | LAeq(7hr) [dB] | LAeq(10hr) [dB] | LAeq(5hr) [dB] |
|---------------------|----------------------|--------------------|---------------------|-------------------|--------------------|-------------------|
| | 2024-03-04 | 09:00:00 | 58.6 | -- | -- | -- |
| | 2024-03-04 | 10:00:00 | 60.5 | -- | -- | -- |
| | 2024-03-04 | 11:00:00 | 59.6 | -- | -- | -- |
| | 2024-03-04 | 12:00:00 | 59.9 | -- | -- | -- |
| | 2024-03-04 | 13:00:00 | 59.9 | -- | -- | -- |
| | 2024-03-04 | 14:00:00 | 63.1 | -- | -- | -- |
| | 2024-03-04 | 15:00:00 | 59.8 | -- | -- | -- |
| | 2024-03-04 | 16:00:00 | 58.2 | -- | -- | -- |
| | 2024-03-04 | 17:00:00 | 56.7 | -- | -- | -- |
| | 2024-03-04 | 18:00:00 | 60.3 | -- | 60.0 | -- |
| | 2024-03-05 | 11:00:00 | 60.5 | -- | -- | -- |
| | 2024-03-05 | 12:00:00 | 60.5 | -- | -- | -- |
| | 2024-03-05 | 13:00:00 | 59.7 | -- | -- | -- |
| | 2024-03-05 | 14:00:00 | 60.0 | -- | -- | -- |
| | 2024-03-05 | 15:00:00 | 59.9 | -- | -- | -- |
| | 2024-03-05 | 16:00:00 | 58.7 | -- | -- | -- |
| | 2024-03-05 | 17:00:00 | 59.8 | -- | -- | -- |
| | 2024-03-05 | 18:00:00 | 57.7 | -- | -- | -- |
| | 2024-03-06 | 09:00:00 | 58.1 | -- | -- | -- |
| | 2024-03-06 | 10:00:00 | 59.7 | -- | -- | -- |
| | 2024-03-06 | 11:00:00 | 59.3 | -- | -- | -- |
| | 2024-03-06 | 12:00:00 | 61.9 | -- | -- | -- |
| | 2024-03-06 | 13:00:00 | 64.8 | -- | -- | -- |
| | 2024-03-06 | 14:00:00 | 57.9 | -- | -- | -- |
| | 2024-03-06 | 15:00:00 | 59.6 | -- | -- | -- |
| | 2024-03-06 | 16:00:00 | 58.8 | -- | -- | -- |
| | 2024-03-06 | 17:00:00 | 59.7 | -- | -- | -- |
| | 2024-03-06 | 18:00:00 | 59.0 | -- | 60.4 | -- |
| | 2024-03-07 | 09:00:00 | 59.9 | -- | -- | -- |
| | 2024-03-07 | 10:00:00 | 60.6 | -- | -- | -- |
| | 2024-03-07 | 11:00:00 | 60.2 | -- | -- | -- |
| | 2024-03-07 | 12:00:00 | 60.8 | -- | -- | -- |
| | 2024-03-07 | 13:00:00 | 61.9 | -- | -- | -- |
| | 2024-03-07 | 14:00:00 | 60.6 | -- | -- | -- |
| | 2024-03-07 | 15:00:00 | 61.0 | -- | -- | -- |
| | 2024-03-07 | 16:00:00 | 58.5 | -- | -- | -- |
| | 2024-03-07 | 17:00:00 | 60.1 | -- | -- | -- |
| | 2024-03-07 | 18:00:00 | 57.8 | -- | 60.3 | -- |
| | 2024-03-08 | 09:00:00 | 59.2 | -- | -- | -- |
| | 2024-03-08 | 10:00:00 | 60.4 | -- | -- | -- |
| | 2024-03-08 | 11:00:00 | 60.5 | -- | -- | -- |
| | 2024-03-08 | 12:00:00 | 60.1 | -- | -- | -- |
| | 2024-03-08 | 13:00:00 | 59.4 | -- | -- | -- |
| | 2024-03-08 | 14:00:00 | 60.3 | -- | -- | -- |
| | 2024-03-08 | 15:00:00 | 59.9 | -- | -- | -- |
| | 2024-03-08 | 16:00:00 | 59.6 | -- | -- | -- |
| | 2024-03-08 | 17:00:00 | 60.2 | -- | -- | -- |
| | 2024-03-08 | 18:00:00 | 57.7 | -- | 59.8 | -- |
| | 2024-03-09 | 09:00:00 | 56.9 | -- | -- | -- |
| | 2024-03-09 | 10:00:00 | 57.1 | -- | -- | -- |
| | 2024-03-09 | 11:00:00 | 56.6 | -- | -- | -- |
| | 2024-03-09 | 12:00:00 | 56.6 | -- | -- | -- |
| | 2024-03-09 | 13:00:00 | 59.8 | -- | -- | 57.6 |

Location 1 – Time History Data



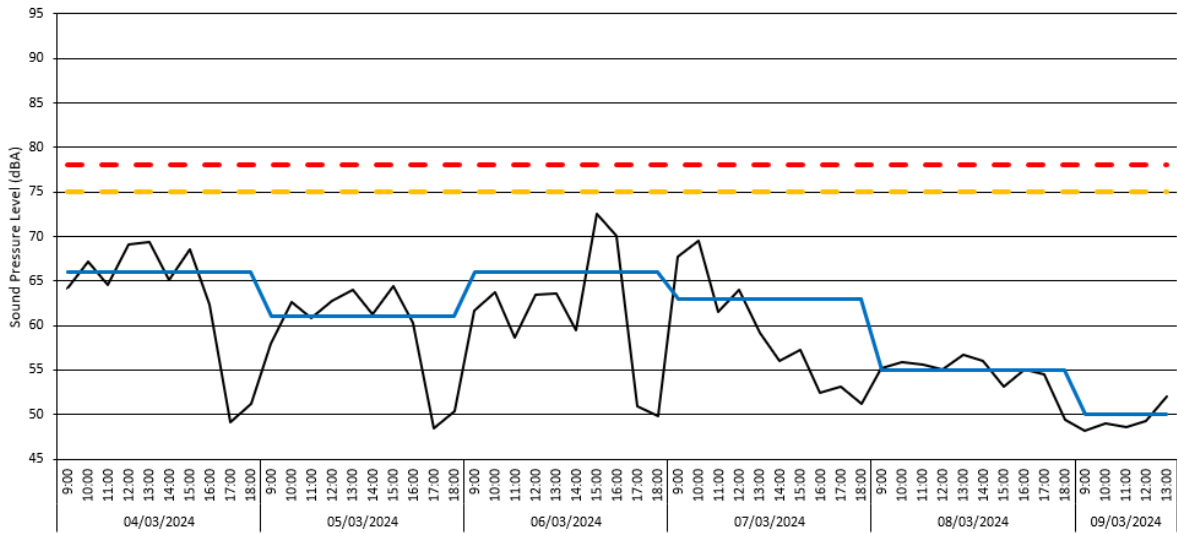
3.6 There was 96% data coverage at Location 1 for the monitoring period covered by this report. The monitor was offline between 09:00-10:00 on Tuesday 5th March due to a drained battery. No exceedances of the project hourly noise criteria of 78 dB LAeq nor the daily project noise limit of 75 dB LAeq (0800-1800 hours) were recorded during the monitoring period covered by this report.

Location 2 – Raw Data

Broadband Results

| Date [YYYY-MM-DD] | Time [hh:mm:ss] | LAeq(60min) [dB] | LAeq(10hr) [dB] | LAeq(5hr) [dB] |
|----------------------|--------------------|---------------------|--------------------|-------------------|
| 2024-03-04 | 09:00:00 | 64.2 | -- | -- |
| 2024-03-04 | 10:00:00 | 67.2 | -- | -- |
| 2024-03-04 | 11:00:00 | 64.6 | -- | -- |
| 2024-03-04 | 12:00:00 | 69.1 | -- | -- |
| 2024-03-04 | 13:00:00 | 69.4 | -- | -- |
| 2024-03-04 | 14:00:00 | 65.1 | -- | -- |
| 2024-03-04 | 15:00:00 | 68.6 | -- | -- |
| 2024-03-04 | 16:00:00 | 62.4 | -- | -- |
| 2024-03-04 | 17:00:00 | 49.2 | -- | -- |
| 2024-03-04 | 18:00:00 | 51.2 | 66.0 | -- |
| 2024-03-05 | 09:00:00 | 58.0 | -- | -- |
| 2024-03-05 | 10:00:00 | 62.6 | -- | -- |
| 2024-03-05 | 11:00:00 | 60.8 | -- | -- |
| 2024-03-05 | 12:00:00 | 62.8 | -- | -- |
| 2024-03-05 | 13:00:00 | 64.0 | -- | -- |
| 2024-03-05 | 14:00:00 | 61.3 | -- | -- |
| 2024-03-05 | 15:00:00 | 64.4 | -- | -- |
| 2024-03-05 | 16:00:00 | 60.3 | -- | -- |
| 2024-03-05 | 17:00:00 | 48.4 | -- | -- |
| 2024-03-05 | 18:00:00 | 50.4 | 61.3 | -- |
| 2024-03-06 | 09:00:00 | 61.7 | -- | -- |
| 2024-03-06 | 10:00:00 | 63.7 | -- | -- |
| 2024-03-06 | 11:00:00 | 58.7 | -- | -- |
| 2024-03-06 | 12:00:00 | 63.5 | -- | -- |
| 2024-03-06 | 13:00:00 | 63.6 | -- | -- |
| 2024-03-06 | 14:00:00 | 59.4 | -- | -- |
| 2024-03-06 | 15:00:00 | 72.5 | -- | -- |
| 2024-03-06 | 16:00:00 | 70.1 | -- | -- |
| 2024-03-06 | 17:00:00 | 50.9 | -- | -- |
| 2024-03-06 | 18:00:00 | 49.8 | 65.8 | -- |
| 2024-03-07 | 09:00:00 | 67.7 | -- | -- |
| 2024-03-07 | 10:00:00 | 69.5 | -- | -- |
| 2024-03-07 | 11:00:00 | 61.6 | -- | -- |
| 2024-03-07 | 12:00:00 | 64.0 | -- | -- |
| 2024-03-07 | 13:00:00 | 59.2 | -- | -- |
| 2024-03-07 | 14:00:00 | 56.0 | -- | -- |
| 2024-03-07 | 15:00:00 | 57.3 | -- | -- |
| 2024-03-07 | 16:00:00 | 52.5 | -- | -- |
| 2024-03-07 | 17:00:00 | 53.2 | -- | -- |
| 2024-03-07 | 18:00:00 | 51.2 | 63.2 | -- |
| 2024-03-08 | 09:00:00 | 55.2 | -- | -- |
| 2024-03-08 | 10:00:00 | 55.9 | -- | -- |
| 2024-03-08 | 11:00:00 | 55.6 | -- | -- |
| 2024-03-08 | 12:00:00 | 55.0 | -- | -- |
| 2024-03-08 | 13:00:00 | 56.7 | -- | -- |
| 2024-03-08 | 14:00:00 | 56.0 | -- | -- |
| 2024-03-08 | 15:00:00 | 53.2 | -- | -- |
| 2024-03-08 | 16:00:00 | 55.1 | -- | -- |
| 2024-03-08 | 17:00:00 | 54.5 | -- | -- |
| 2024-03-08 | 18:00:00 | 49.4 | 55.0 | -- |
| 2024-03-09 | 09:00:00 | 48.2 | -- | -- |
| 2024-03-09 | 10:00:00 | 49.0 | -- | -- |
| 2024-03-09 | 11:00:00 | 48.6 | -- | -- |
| 2024-03-09 | 12:00:00 | 49.3 | -- | -- |
| 2024-03-09 | 13:00:00 | 52.0 | -- | 49.6 |

Location 2 – Time History Data



- Daily noise trigger level (75 dB LAeq,0800-1800 hours, LAeq,0800-1300 hours)
- - - Hourly noise action level (78 dB LAeq, 1 hour)
- Noise level, LAeq, 1hour
- Daily noise level (dB LAeq,0800-1800 hours, LAeq,0800-1300 hours)
- Data unavailable

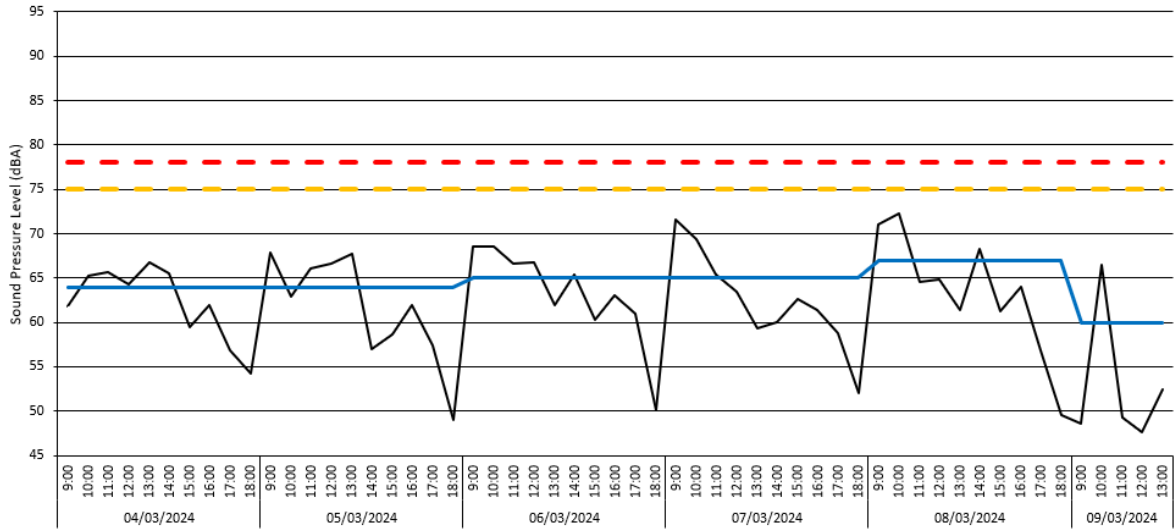
3.7 There was 100% data coverage at Location 2 for the monitoring period covered by this report. No exceedances of the project hourly noise criteria of 78 dB LAeq nor the daily project noise limit of 75 dB LAeq (0800-1800 hours) were recorded during the monitoring period covered by this report.

Location 3 – Raw Data

Broadband Results

| Date [YYYY-MM-DD] | Time [hh:mm:ss] | LAeq(60min) [dB] | LAeq(10hr) [dB] | LAeq(5hr) [dB] |
|----------------------|--------------------|---------------------|--------------------|-------------------|
| 2024-03-04 | 09:00:00 | 61.8 | -- | -- |
| 2024-03-04 | 10:00:00 | 65.2 | -- | -- |
| 2024-03-04 | 11:00:00 | 65.6 | -- | -- |
| 2024-03-04 | 12:00:00 | 64.3 | -- | -- |
| 2024-03-04 | 13:00:00 | 66.7 | -- | -- |
| 2024-03-04 | 14:00:00 | 65.5 | -- | -- |
| 2024-03-04 | 15:00:00 | 59.4 | -- | -- |
| 2024-03-04 | 16:00:00 | 62.0 | -- | -- |
| 2024-03-04 | 17:00:00 | 56.8 | -- | -- |
| 2024-03-04 | 18:00:00 | 54.2 | 63.5 | -- |
| 2024-03-05 | 09:00:00 | 67.9 | -- | -- |
| 2024-03-05 | 10:00:00 | 62.9 | -- | -- |
| 2024-03-05 | 11:00:00 | 66.1 | -- | -- |
| 2024-03-05 | 12:00:00 | 66.6 | -- | -- |
| 2024-03-05 | 13:00:00 | 67.7 | -- | -- |
| 2024-03-05 | 14:00:00 | 57.0 | -- | -- |
| 2024-03-05 | 15:00:00 | 58.7 | -- | -- |
| 2024-03-05 | 16:00:00 | 62.0 | -- | -- |
| 2024-03-05 | 17:00:00 | 57.4 | -- | -- |
| 2024-03-05 | 18:00:00 | 49.0 | 64.2 | -- |
| 2024-03-06 | 09:00:00 | 68.6 | -- | -- |
| 2024-03-06 | 10:00:00 | 68.6 | -- | -- |
| 2024-03-06 | 11:00:00 | 66.6 | -- | -- |
| 2024-03-06 | 12:00:00 | 66.7 | -- | -- |
| 2024-03-06 | 13:00:00 | 62.0 | -- | -- |
| 2024-03-06 | 14:00:00 | 65.4 | -- | -- |
| 2024-03-06 | 15:00:00 | 60.3 | -- | -- |
| 2024-03-06 | 16:00:00 | 63.0 | -- | -- |
| 2024-03-06 | 17:00:00 | 61.0 | -- | -- |
| 2024-03-06 | 18:00:00 | 50.1 | 65.2 | -- |
| 2024-03-07 | 09:00:00 | 71.6 | -- | -- |
| 2024-03-07 | 10:00:00 | 69.4 | -- | -- |
| 2024-03-07 | 11:00:00 | 65.4 | -- | -- |
| 2024-03-07 | 12:00:00 | 63.4 | -- | -- |
| 2024-03-07 | 13:00:00 | 59.3 | -- | -- |
| 2024-03-07 | 14:00:00 | 60.0 | -- | -- |
| 2024-03-07 | 15:00:00 | 62.6 | -- | -- |
| 2024-03-07 | 16:00:00 | 61.4 | -- | -- |
| 2024-03-07 | 17:00:00 | 58.8 | -- | -- |
| 2024-03-07 | 18:00:00 | 52.1 | 65.4 | -- |
| 2024-03-08 | 09:00:00 | 71.1 | -- | -- |
| 2024-03-08 | 10:00:00 | 72.3 | -- | -- |
| 2024-03-08 | 11:00:00 | 64.5 | -- | -- |
| 2024-03-08 | 12:00:00 | 64.9 | -- | -- |
| 2024-03-08 | 13:00:00 | 61.4 | -- | -- |
| 2024-03-08 | 14:00:00 | 68.3 | -- | -- |
| 2024-03-08 | 15:00:00 | 61.3 | -- | -- |
| 2024-03-08 | 16:00:00 | 64.0 | -- | -- |
| 2024-03-08 | 17:00:00 | 56.8 | -- | -- |
| 2024-03-08 | 18:00:00 | 49.6 | 66.9 | -- |
| 2024-03-09 | 09:00:00 | 48.6 | -- | -- |
| 2024-03-09 | 10:00:00 | 66.5 | -- | -- |
| 2024-03-09 | 11:00:00 | 49.3 | -- | -- |
| 2024-03-09 | 12:00:00 | 47.6 | -- | -- |
| 2024-03-09 | 13:00:00 | 52.4 | -- | 59.8 |

Location 3 – Time-history graph



- Daily noise trigger level (75 dB LAeq, 0800-1800 hours, LAeq, 0800-1300 hours)
- - - Hourly noise action level (78 dB LAeq, 1 hour)
- Noise level, LAeq, 1 hour
- Daily noise level (dB LAeq, 0800-1800 hours, LAeq, 0800-1300 hours)
- Data unavailable

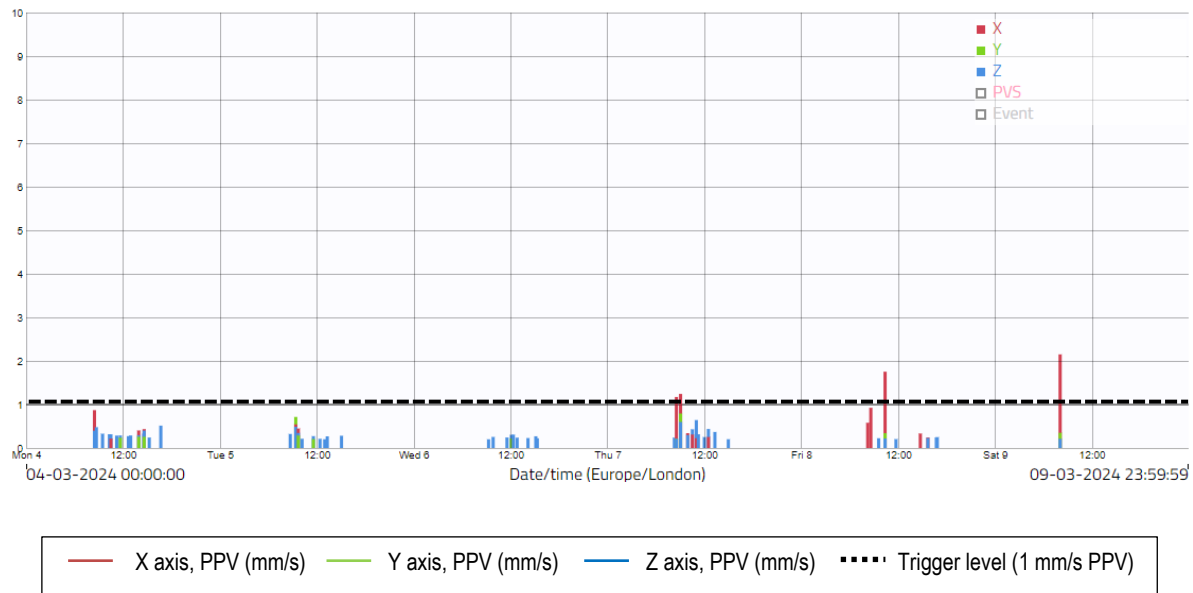
3.8 There was 100% data coverage at Location 3 for the monitoring period covered by this report. No exceedances of the project hourly noise criteria of 78 dB LAeq nor the daily project noise limit of 75 dB LAeq (0800-1800 hours) were recorded during the monitoring period covered by this report.

Vibration Monitoring Results

Location 1 – Raw data

| Measuring point: | Period: | Order | Value | Date | Time |
|-------------------|--------------------------|-------|-------|------------|-------|
| Holloway - L1 | 04/03/2024 to 09/03/2024 | 1 | 2.18 | 09/03/2024 | 08:05 |
| | | 2 | 1.78 | 08/03/2024 | 10:24 |
| Criteria mm/s PVS | Exceedances | 3 | 1.32 | 07/03/2024 | 09:04 |
| 1.0 | 4 | 4 | 1.19 | 07/03/2024 | 08:33 |
| | | 5 | 0.93 | 08/03/2024 | 08:38 |
| | | 6 | 0.88 | 04/03/2024 | 08:28 |
| | | 7 | 0.80 | 05/03/2024 | 09:24 |
| | | 8 | 0.65 | 07/03/2024 | 11:01 |
| | | 9 | 0.60 | 08/03/2024 | 08:15 |
| | | 10 | 0.59 | 07/03/2024 | 11:00 |

Location 1 – Time-history graph

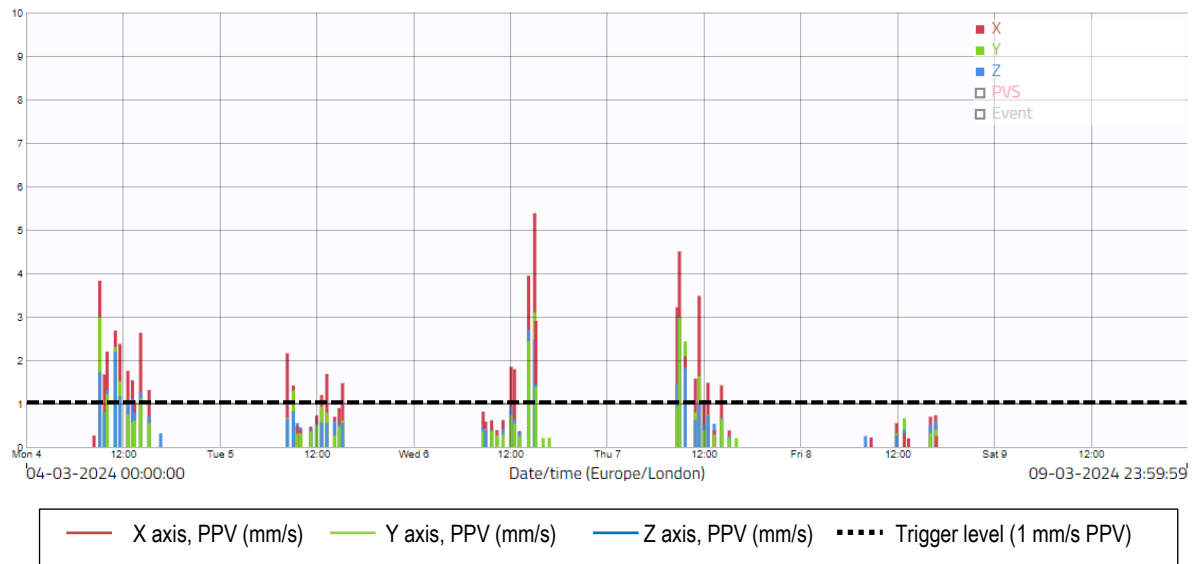


3.9 There was 100% data coverage at Location 1 for the monitoring period covered by this report. There were four exceedances of the project vibration trigger level of 1 mm/s PPV as shown in the raw data and graph above. The highest recorded vibration level was 2.18 mm/s, which occurred at 08:05 on Saturday 9th March. It is worth noting from the raw data above that the exceedances are sporadic and are likely to have been caused by individual, short-lived events, rather than continuous activity at this location. This will continue to be monitored. The exceedances are believed to be due to non-construction related activities. In this location, it is likely that the residents opened and closing the main door to the residential building will cause occasional vibration spikes, given that the monitor is located on the same facade as the doors.

Location 2 – Raw data

| Measuring point: | Period: | Order | Value | Date | Time | Order | Value | Date | Time | Order | Value | Date | Time |
|-------------------|--------------------------|-------|-------|------------|-------|-------|-------|------------|-------|-------|-------|------------|-------|
| Holloway - L2 | 04/03/2024 to 09/03/2024 | 1 | 5.41 | 06/03/2024 | 15:03 | 31 | 2.68 | 06/03/2024 | 15:00 | 61 | 2.05 | 07/03/2024 | 08:42 |
| | | 2 | 5.28 | 07/03/2024 | 09:00 | 32 | 2.66 | 07/03/2024 | 09:38 | 62 | 2.04 | 07/03/2024 | 11:29 |
| Criteria mm/s PVS | Exceedances | 3 | 5.16 | 06/03/2024 | 14:59 | 33 | 2.66 | 07/03/2024 | 09:05 | 63 | 2.01 | 04/03/2024 | 12:37 |
| 1.0 | 253 | 4 | 5.04 | 06/03/2024 | 15:02 | 34 | 2.64 | 07/03/2024 | 11:25 | 64 | 1.98 | 06/03/2024 | 14:58 |
| | | 5 | 4.82 | 07/03/2024 | 08:59 | 35 | 2.62 | 07/03/2024 | 11:26 | 65 | 1.92 | 04/03/2024 | 08:51 |
| | | 6 | 4.61 | 04/03/2024 | 09:08 | 36 | 2.60 | 06/03/2024 | 14:48 | 66 | 1.91 | 07/03/2024 | 08:38 |
| | | 7 | 4.23 | 06/03/2024 | 14:18 | 37 | 2.59 | 06/03/2024 | 14:55 | 67 | 1.90 | 06/03/2024 | 14:15 |
| | | 8 | 4.20 | 06/03/2024 | 14:21 | 38 | 2.57 | 06/03/2024 | 14:47 | 68 | 1.90 | 06/03/2024 | 14:22 |
| | | 9 | 4.14 | 07/03/2024 | 09:13 | 39 | 2.53 | 04/03/2024 | 11:38 | 69 | 1.89 | 06/03/2024 | 14:25 |
| | | 10 | 4.00 | 06/03/2024 | 15:01 | 40 | 2.49 | 06/03/2024 | 14:31 | 70 | 1.87 | 06/03/2024 | 12:08 |
| | | 11 | 3.94 | 07/03/2024 | 09:12 | 41 | 2.42 | 06/03/2024 | 15:05 | 71 | 1.87 | 06/03/2024 | 14:13 |
| | | 12 | 3.78 | 04/03/2024 | 11:04 | 42 | 2.39 | 06/03/2024 | 15:18 | 72 | 1.86 | 06/03/2024 | 14:51 |
| | | 13 | 3.54 | 07/03/2024 | 11:27 | 43 | 2.34 | 06/03/2024 | 14:20 | 73 | 1.86 | 04/03/2024 | 14:13 |
| | | 14 | 3.53 | 06/03/2024 | 14:30 | 44 | 2.31 | 07/03/2024 | 09:31 | 74 | 1.84 | 07/03/2024 | 08:54 |
| | | 15 | 3.50 | 07/03/2024 | 09:14 | 45 | 2.29 | 04/03/2024 | 10:03 | 75 | 1.84 | 07/03/2024 | 08:23 |
| | | 16 | 3.43 | 06/03/2024 | 14:56 | 46 | 2.29 | 07/03/2024 | 09:07 | 76 | 1.84 | 06/03/2024 | 11:56 |
| | | 17 | 3.43 | 07/03/2024 | 08:58 | 47 | 2.28 | 06/03/2024 | 15:06 | 77 | 1.83 | 04/03/2024 | 14:19 |
| | | 18 | 3.31 | 06/03/2024 | 14:57 | 48 | 2.28 | 06/03/2024 | 15:08 | 78 | 1.82 | 04/03/2024 | 14:17 |
| | | 19 | 3.30 | 06/03/2024 | 14:45 | 49 | 2.26 | 04/03/2024 | 08:48 | 79 | 1.82 | 07/03/2024 | 08:52 |
| | | 20 | 3.22 | 07/03/2024 | 08:43 | 50 | 2.21 | 04/03/2024 | 11:39 | 80 | 1.80 | 06/03/2024 | 12:33 |
| | | 21 | 3.17 | 07/03/2024 | 08:55 | 51 | 2.20 | 06/03/2024 | 14:50 | 81 | 1.78 | 05/03/2024 | 09:08 |
| | | 22 | 3.06 | 06/03/2024 | 15:12 | 52 | 2.19 | 05/03/2024 | 08:23 | 82 | 1.76 | 06/03/2024 | 15:11 |
| | | 23 | 3.06 | 06/03/2024 | 14:46 | 53 | 2.18 | 07/03/2024 | 09:46 | 83 | 1.76 | 07/03/2024 | 09:25 |
| | | 24 | 2.93 | 06/03/2024 | 14:29 | 54 | 2.17 | 07/03/2024 | 09:47 | 84 | 1.76 | 04/03/2024 | 13:11 |
| | | 25 | 2.87 | 06/03/2024 | 14:49 | 55 | 2.17 | 06/03/2024 | 15:07 | 85 | 1.76 | 07/03/2024 | 11:06 |
| | | 26 | 2.86 | 04/03/2024 | 14:12 | 56 | 2.16 | 06/03/2024 | 14:17 | 86 | 1.75 | 04/03/2024 | 09:43 |
| | | 27 | 2.84 | 07/03/2024 | 09:43 | 57 | 2.16 | 06/03/2024 | 14:53 | 87 | 1.74 | 07/03/2024 | 11:04 |
| | | 28 | 2.80 | 06/03/2024 | 14:54 | 58 | 2.15 | 07/03/2024 | 11:28 | 88 | 1.70 | 07/03/2024 | 09:03 |
| | | 29 | 2.76 | 07/03/2024 | 09:06 | 59 | 2.10 | 06/03/2024 | 15:04 | 89 | 1.70 | 07/03/2024 | 09:02 |
| | | 30 | 2.74 | 06/03/2024 | 14:52 | 60 | 2.09 | 04/03/2024 | 10:14 | 90 | 1.70 | 07/03/2024 | 11:03 |

Location 2 – Time-history graph

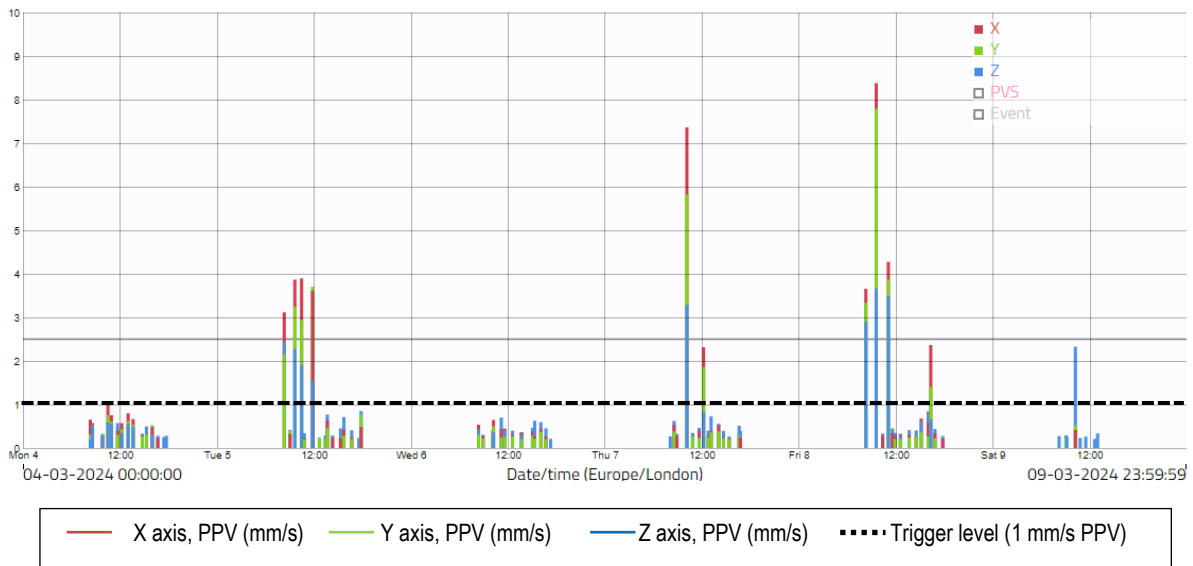


3.10 There was 100% data coverage at Location 2 for the monitoring period covered by this report. There were 253 exceedances of the project vibration trigger level of 1.0 mm/s PPV, which are shown in the raw data and graph above. The highest recorded vibration level was 5.41 mm/s, which occurred at 15:03 on Wednesday 6th March. It is understood that the majority of exceedances were likely to have been caused onsite vehicles moving material within the vicinity of the monitor. This was confirmed by the site team, via emails to Cass Allen, over the course of the week. In addition, it is our understanding that one of the residents behind the monitoring location has some form of workshop with power tools at the rear of their garden. Any operation of these tools could also generate vibration alerts.

Location 3 – Raw data

| Measuring point: | Period: | Order | Value | Date | Time | Order | Value | Date | Time | Order | Value | Date | Time |
|-------------------|--------------------------|-------|-------|------------|-------|-------|-------|------------|-------|-------|-------|------------|-------|
| Holloway - L3 | 04/03/2024 to 09/03/2024 | 1 | 11.14 | 08/03/2024 | 09:36 | 31 | 1.79 | 08/03/2024 | 09:29 | 61 | 0.86 | 08/03/2024 | 08:23 |
| | | 2 | 9.37 | 07/03/2024 | 10:10 | 32 | 1.67 | 08/03/2024 | 16:12 | 62 | 0.85 | 07/03/2024 | 09:51 |
| | | 3 | 7.49 | 08/03/2024 | 09:02 | 33 | 1.66 | 07/03/2024 | 10:11 | 63 | 0.85 | 05/03/2024 | 10:32 |
| Criteria mm/s PVS | Exceedances | 4 | 5.14 | 08/03/2024 | 11:06 | 34 | 1.61 | 08/03/2024 | 08:37 | 64 | 0.84 | 05/03/2024 | 13:40 |
| 1.0 | 53 | 5 | 4.90 | 08/03/2024 | 08:19 | 35 | 1.44 | 08/03/2024 | 08:53 | 65 | 0.84 | 08/03/2024 | 15:10 |
| | | 6 | 4.82 | 08/03/2024 | 09:28 | 36 | 1.43 | 05/03/2024 | 10:28 | 66 | 0.82 | 05/03/2024 | 11:49 |
| | | 7 | 4.67 | 05/03/2024 | 10:29 | 37 | 1.42 | 08/03/2024 | 11:07 | 67 | 0.80 | 04/03/2024 | 11:14 |
| | | 8 | 4.55 | 05/03/2024 | 09:39 | 38 | 1.36 | 08/03/2024 | 08:50 | 68 | 0.79 | 04/03/2024 | 13:38 |
| | | 9 | 4.53 | 05/03/2024 | 11:50 | 39 | 1.32 | 05/03/2024 | 09:19 | 69 | 0.78 | 06/03/2024 | 10:14 |
| | | 10 | 4.37 | 08/03/2024 | 08:24 | 40 | 1.32 | 05/03/2024 | 11:48 | 70 | 0.77 | 07/03/2024 | 13:10 |
| | | 11 | 3.69 | 05/03/2024 | 08:20 | 41 | 1.31 | 08/03/2024 | 08:40 | 71 | 0.74 | 05/03/2024 | 10:38 |
| | | 12 | 3.39 | 08/03/2024 | 09:26 | 42 | 1.29 | 08/03/2024 | 08:57 | 72 | 0.74 | 08/03/2024 | 08:33 |
| | | 13 | 3.26 | 07/03/2024 | 09:49 | 43 | 1.28 | 08/03/2024 | 08:52 | 73 | 0.74 | 08/03/2024 | 08:56 |
| | | 14 | 3.00 | 08/03/2024 | 09:00 | 44 | 1.26 | 04/03/2024 | 10:31 | 74 | 0.73 | 07/03/2024 | 14:06 |
| | | 15 | 2.90 | 08/03/2024 | 09:27 | 45 | 1.19 | 05/03/2024 | 08:19 | 75 | 0.73 | 04/03/2024 | 13:39 |
| | | 16 | 2.86 | 07/03/2024 | 12:14 | 46 | 1.14 | 08/03/2024 | 08:18 | 76 | 0.72 | 05/03/2024 | 15:43 |
| | | 17 | 2.81 | 08/03/2024 | 08:39 | 47 | 1.12 | 05/03/2024 | 08:22 | 77 | 0.72 | 07/03/2024 | 12:03 |
| | | 18 | 2.76 | 08/03/2024 | 16:21 | 48 | 1.11 | 08/03/2024 | 08:46 | 78 | 0.71 | 08/03/2024 | 08:16 |
| | | 19 | 2.75 | 05/03/2024 | 09:40 | 49 | 1.10 | 07/03/2024 | 09:48 | 79 | 0.71 | 06/03/2024 | 11:12 |
| | | 20 | 2.55 | 07/03/2024 | 10:07 | 50 | 1.04 | 04/03/2024 | 10:57 | 80 | 0.70 | 05/03/2024 | 10:39 |
| | | 21 | 2.38 | 05/03/2024 | 08:21 | 51 | 1.03 | 08/03/2024 | 09:24 | 81 | 0.70 | 07/03/2024 | 12:02 |
| | | 22 | 2.36 | 09/03/2024 | 10:15 | 52 | 1.00 | 05/03/2024 | 17:51 | 82 | 0.70 | 08/03/2024 | 09:23 |
| | | 23 | 2.32 | 08/03/2024 | 09:37 | 53 | 1.00 | 04/03/2024 | 13:01 | 83 | 0.69 | 04/03/2024 | 12:46 |
| | | 24 | 2.31 | 07/03/2024 | 09:59 | 54 | 0.97 | 07/03/2024 | 09:54 | 84 | 0.69 | 04/03/2024 | 12:14 |
| | | 25 | 2.16 | 05/03/2024 | 09:59 | 55 | 0.96 | 05/03/2024 | 10:33 | 85 | 0.68 | 08/03/2024 | 08:59 |
| | | 26 | 2.13 | 08/03/2024 | 08:48 | 56 | 0.95 | 05/03/2024 | 09:26 | 86 | 0.68 | 08/03/2024 | 08:35 |
| | | 27 | 2.09 | 05/03/2024 | 09:41 | 57 | 0.90 | 08/03/2024 | 09:01 | 87 | 0.67 | 08/03/2024 | 08:51 |
| | | 28 | 2.02 | 05/03/2024 | 11:47 | 58 | 0.89 | 07/03/2024 | 10:00 | 88 | 0.67 | 07/03/2024 | 14:05 |
| | | 29 | 1.87 | 08/03/2024 | 08:36 | 59 | 0.89 | 07/03/2024 | 09:56 | 89 | 0.67 | 04/03/2024 | 10:28 |
| | | 30 | 1.86 | 07/03/2024 | 09:58 | 60 | 0.86 | 08/03/2024 | 16:02 | 90 | 0.67 | 04/03/2024 | 08:20 |

Location 3 – Time-history graph



3.11 There was 100% data coverage at Location 3 for the monitoring period covered by this report. There were 53 exceedances of the project vibration trigger level of 1.0 mm/s PPV as shown in the raw data and graph above. The vast majority of the exceedances at this location are generally being caused by plant vehicles travelling along the haulage road which is directly in front of where the vibration monitor is currently located. This was confirmed by the site team via emails to Cass Allen, over the course of the week. These vehicle movements are unavoidable and there are no reasonably practicable measures that the site team can implement to reduce these emissions at this time.

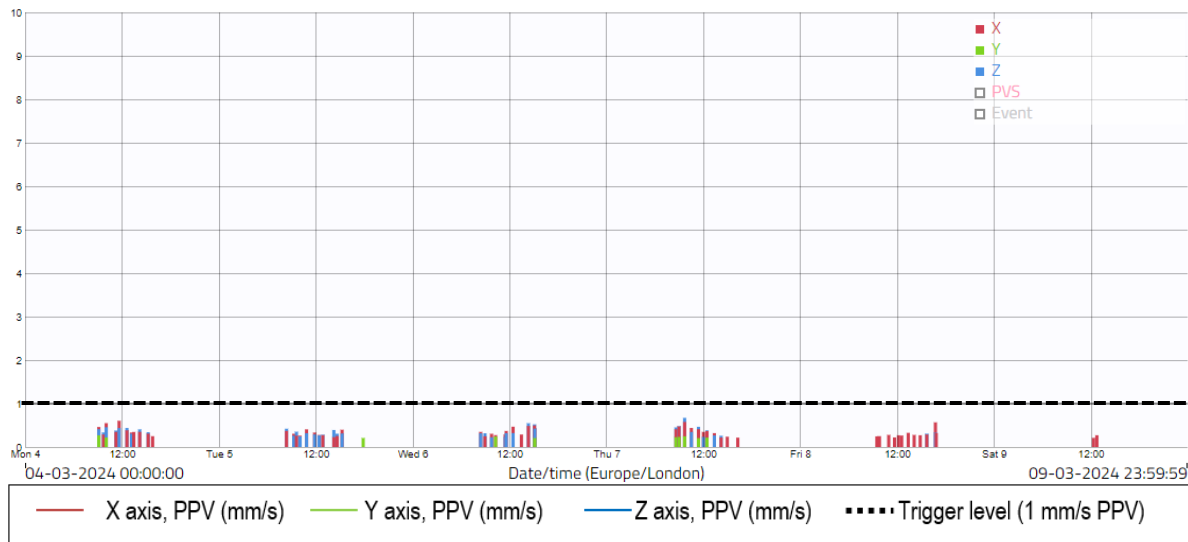
3.12 However, due to the proximity between the vibration sensor and the nearest sensitive receptor, it follows that the vibration levels at this position would have been lower than shown at the sensor location, but still likely above the 1.0 mm/s PPV action level at the NSR, at times.

3.13 Cass Allen will continue to review noise and vibration emissions and advise on any further practicable measures to minimise vibration.

Location 4 – Raw data

| Measuring point: | Period: | Order | Value | Date | Time |
|--------------------|--------------------------|-------|-------|------------|-------|
| Holloway - L4 Temp | 04/03/2024 to 09/03/2024 | 1 | 0.75 | 07/03/2024 | 09:42 |
| | | 2 | 0.66 | 07/03/2024 | 09:00 |
| Criteria mm/s PVS | Exceedances | 3 | 0.63 | 06/03/2024 | 14:21 |
| 1.0 | 0 | 4 | 0.62 | 04/03/2024 | 11:39 |
| | | 5 | 0.62 | 06/03/2024 | 15:06 |
| | | 6 | 0.61 | 07/03/2024 | 08:59 |
| | | 7 | 0.59 | 08/03/2024 | 16:46 |
| | | 8 | 0.59 | 06/03/2024 | 14:31 |
| | | 9 | 0.58 | 07/03/2024 | 09:41 |
| | | 10 | 0.58 | 07/03/2024 | 09:40 |

Location 4 – Time-history graph



3.14 There was 100% data coverage at Location 4 for the monitoring period covered by this report. The monitor went offline on Thursday 15th February due to a technical fault. The manufacturer of the monitor requested it to be removed from site for a fault investigation; however, a temporary replacement was installed at the same location at 11:40 on Friday 23rd February. The graph above shows the data from the temporary monitor, for the week covered by this report. During this week, there were no exceedances of the project vibration trigger level of 1.0 mm/s PPV, as shown in the raw data and graph above.