

Noise, Vibration, Air & Water Quality Report / June 2025

Executive Summary

Noise, vibration and air quality data is generated by onsite internal monitors, administered by Acoustic1, located in the North and South of the site. An additional vibration monitor offsite is located at the Whitchurch Hospital Chapel.

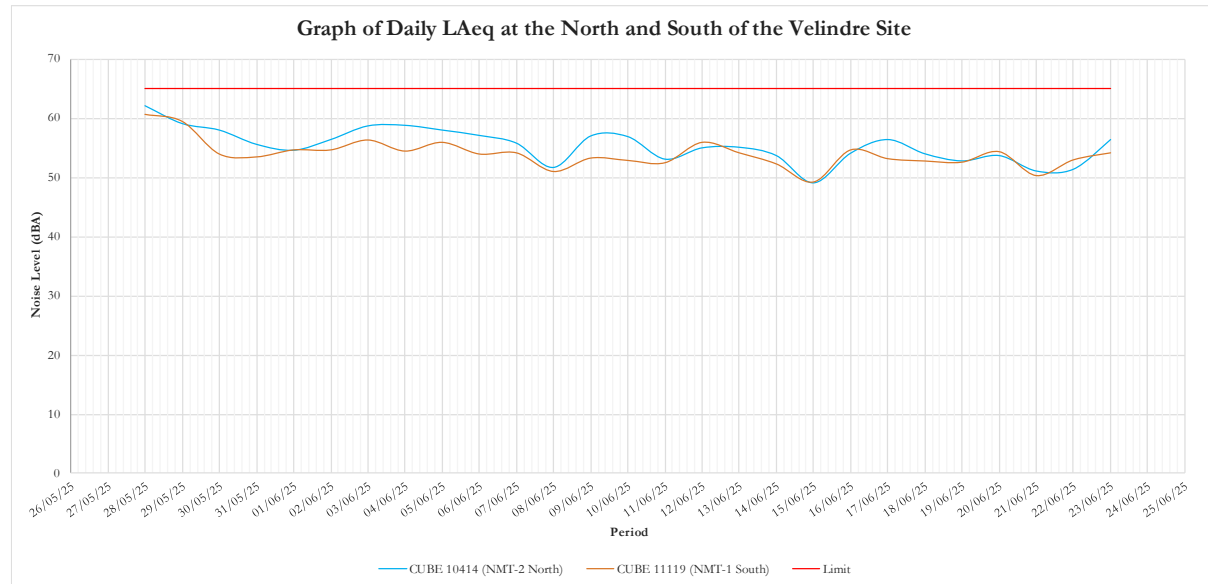
Water quality data of the attenuation pond is measured using a handheld pH monitoring device on a weekly inspection basis.

Data is compiled monthly. Over the June measurement period, no exceedances on limits to noise, vibration, air quality or water quality were recorded.

| | Layout | Period | Data Type | Threshold Values | Work Hours |
|-------------|---|-----------------|-----------|----------------------|------------|
| Noise | One graph of both CUBE Units | Daily averages | Leq | 65dB | 8am-6pm |
| Vibration | Two graphs, on site and off site (church) | Hourly averages | mm/s | 3mm/s | 8am-6pm |
| Air Quality | One graph of both KUNAK Units | Hourly averages | PM10 | 190µg/m ³ | 8am-6pm |

| Location | CUBE | ORION | KUNAK |
|------------------------|--------------------|---------------|------------|
| South Monitoring Point | CUBE 11119 (NMT-2) | ORION (VMT-2) | K-B3 SOUTH |
| North Monitoring Point | CUBE 10695 (NMT-1) | ORION (VMT-1) | K-B3 NORTH |
| Church | N/A | ORION (VMT-3) | N/A |

Noise

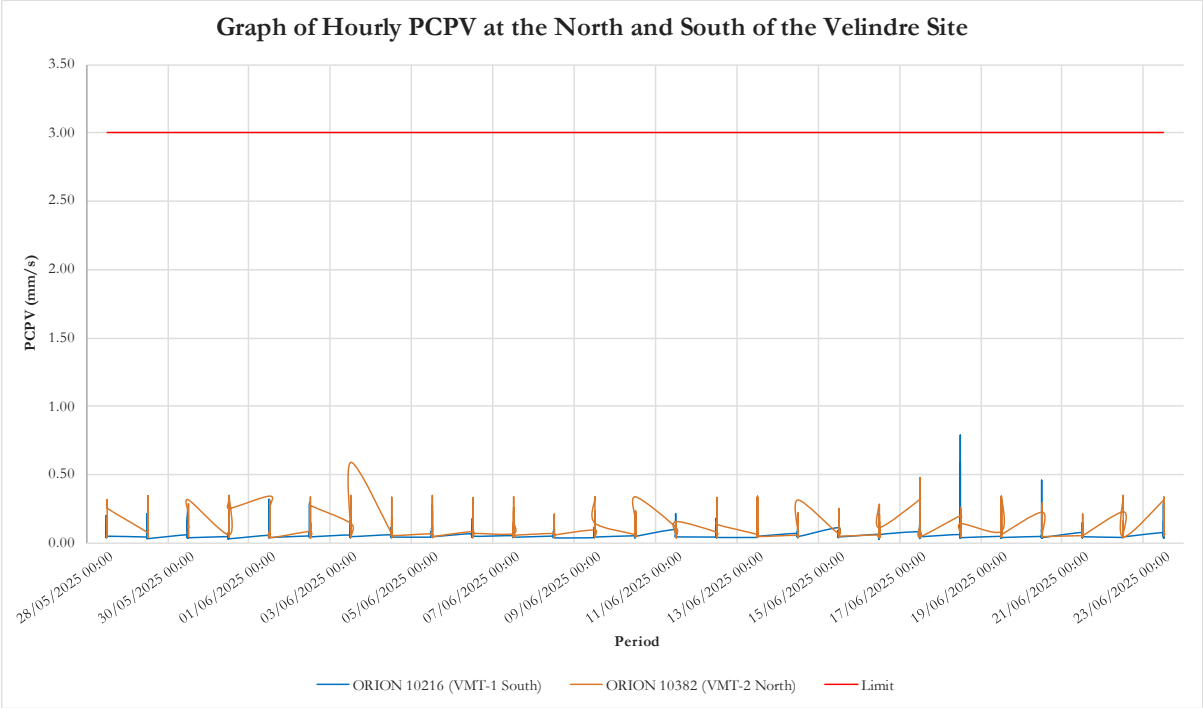


It was recommended in the Environmental Strategy (ES – produced by Walters) to limit noise on site to 70dB(A). Sacyr has set a soft limit of 65dB(A); anything surpassing this limit requires investigation, though mitigation measures need to be in place for anything over the hard limit of 70dB(A).

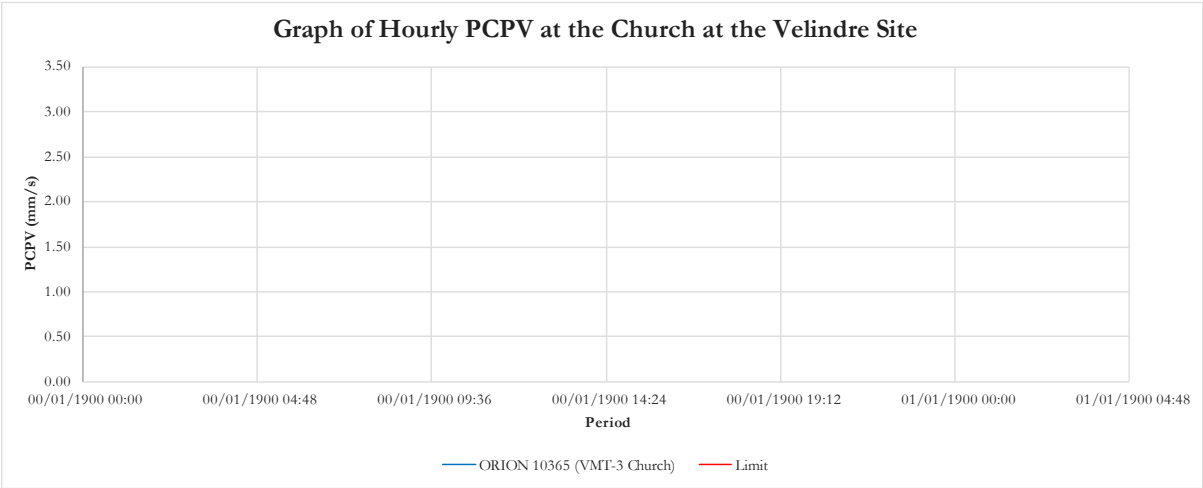
No Noise exceedances recorded in the period 28/05/25 – 23/06/25

Vibration

No limit on vibration has yet been set between Sacyr and Cardiff Council, however, a provisional limit has been set as vibrations measuring 1.00mm/s or more, lasting for longer than an hour, can often be felt by nearby residents and can be subsequent causes of complaint.



No vibration data recorded exceeded the 1.00mm/s limit at both the North and South monitoring stations on the Velindre site for the period covering 28/05/2025-23/06/2025.



There is no vibration data available for June 25 from the Church vibration monitor station as it is currently offline due to access issues.

Air Quality

Internal air quality monitors measure 'Particulate Matter' PM1, PM2.5 and PM10. These refer to the size (microns) of the particulates, with PM10 being the largest. Limits on PM10 must not exceed 40µg/m³ on an annual average and no more than 35 instances per year of 50µg/m³ daily average.



There were no exceedances on PM10 recorded.

The mean average for hourly recordings of PM10 (01/06/25-23/06/25) are as follows:

South monitoring station PM10 AVG1h (ug/m³) – 4.24ug/m³

North monitoring station PM10 AVG1h (ug/m³) – 4.04ug/m³

Water Quality

The nVCC site features drainage systems to manage water onsite which is directed to an attenuation pond. The pH of the water in the attenuation is monitored on a weekly basis. A pH range is set by Dwr Cymru Welsh Water with a lower limit of pH6 and upper limit of pH 11.

| Date | Time | Water Level (cm) | Level Status | Equipment Used | Weather Conditions | Action Taken |
|-----------|---------|------------------|--------------|----------------|--------------------|--------------|
| 6-Jun-25 | 10:50am | 20 | (pH 9.03) | pH Monitor | Partial cloud | None |
| 13-Jun-25 | 11:00am | 15 | (pH 7.89) | pH Monitor | Sunny | None |
| 20-Jun-25 | 9:30am | 30 | (pH 8.30) | pH Monitor | Sunny | None |
| 27-Jun-25 | 10:00am | 30 | (pH 9.80) | pH Monitor | Sunny | None |

No lower or upper exceedances recorded in weekly measurements June 2025.