

Noise, Vibration, Air & Water Quality Report / July 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.

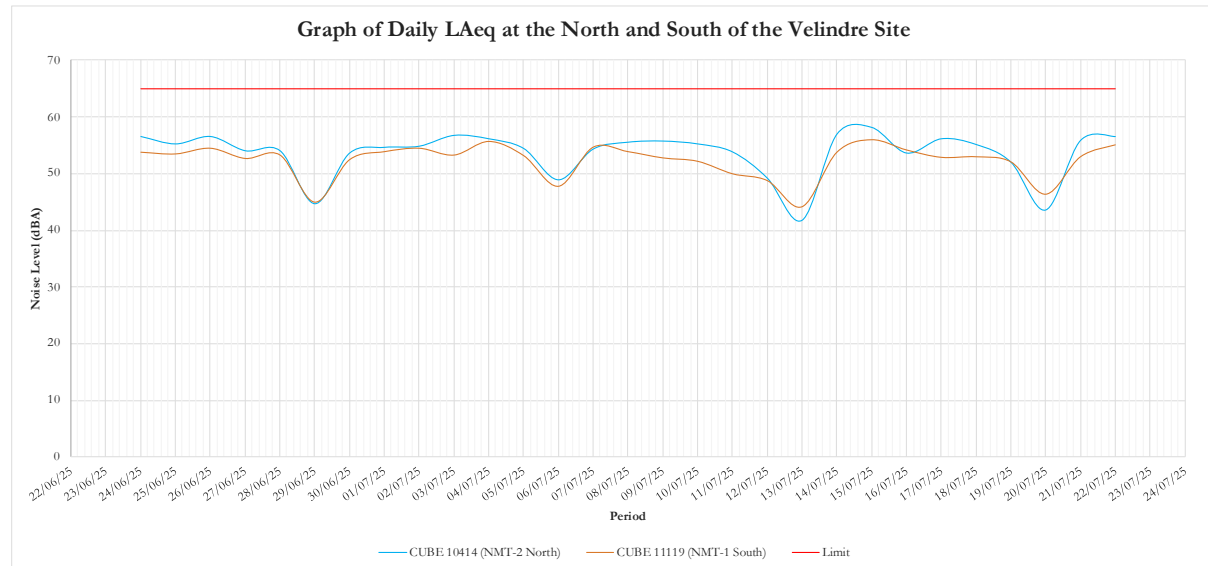
Water quality data of the attenuation pond is measured using a handheld pH monitoring device on a weekly inspection basis.

Data is compiled monthly. Over the July measurement period, one exceedance on the vibration limit was recorded on the Velindre site north monitor. Exceedance unlikely to have originated from the construction site as no peaks observed on the south monitor.

	Layout	Period	Data Type	Threshold Values	Work Hours
Noise	One graph of both CUBE Units Two graphs, on site and off site	Daily averages	Leq	65dB	8am-6pm
Vibration	(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

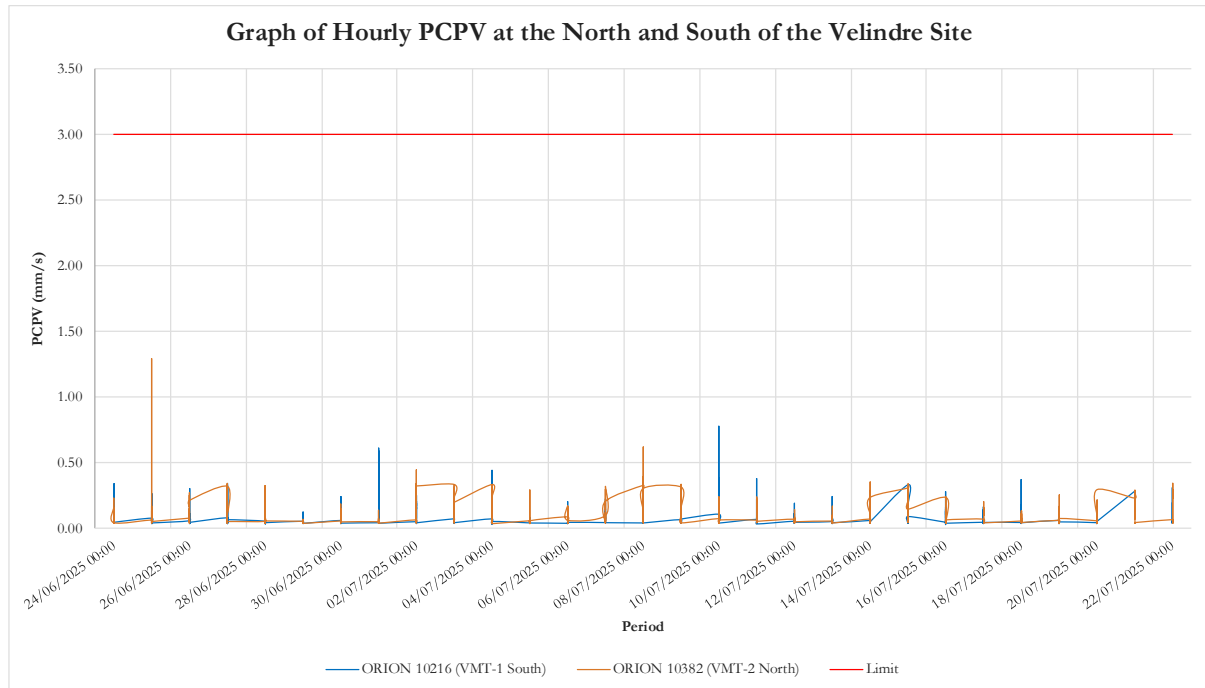


It was recommended in the Environmental Strategy (ES – produced by Walters) to limit noise on site to 70dB(A). Sacyr has set a soft limit of 65dB(A); anything surpassing this limit requires investigation, though mitigation measures need to be in place for anything over the hard limit of 70dB(A).

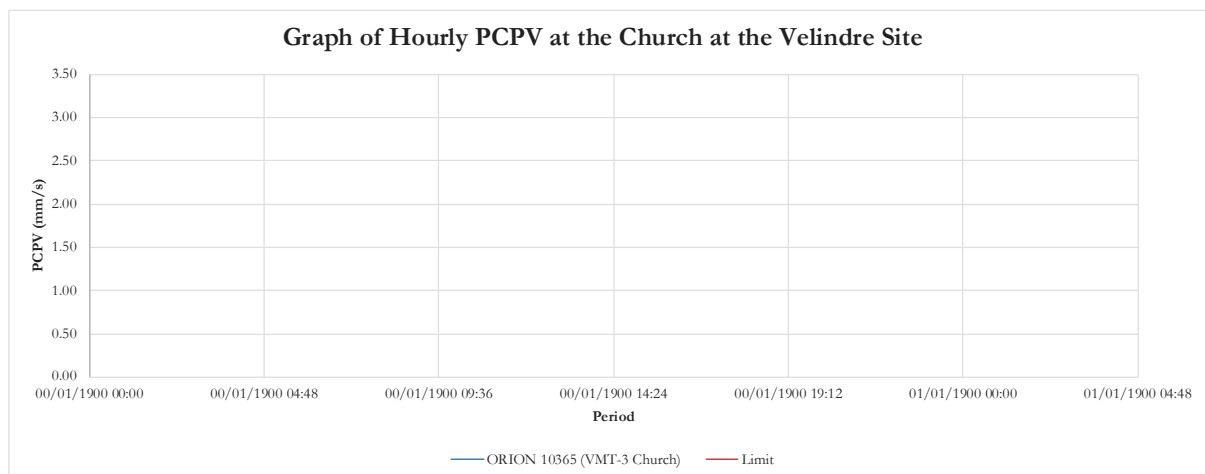
No Noise exceedances recorded in the period 24/06/25 – 22/07/25.

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.



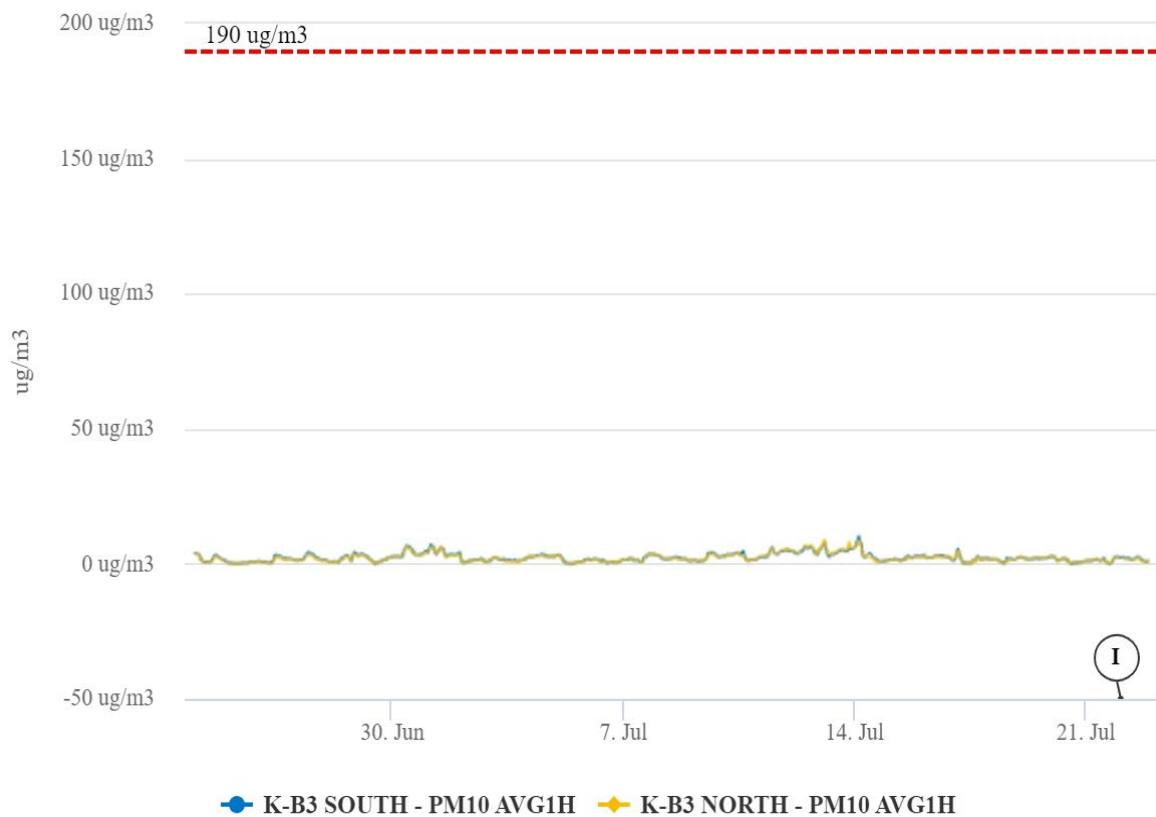
A vibration exceedance to the 1.00mm/s limit was recorded at the North monitoring station on the Velindre site at 09:00 25/06/2025 of 1.30mm/s. The exceedance is unlikely to have originated from the Velindre site as no peaks are seen on the South Monitoring station.



There is no vibration data available for July 25 from the Church vibration monitor station due to connectivity and data transmission 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 (24/06/25-22/07/25) are as follows:

South monitoring station PM10 AVG1h (ug/m³) – 2.31ug/m³

North monitoring station PM10 AVG1h (ug/m³) – 2.19ug/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
10-Jul-25	12:45pm	40	(pH 9.47)	pH Monitor	Sunny	None
18-Jul-25	12:10pm	20	(pH8.90)	pH Monitor	Overcast	None
25-Jul-25	10:30am	5	(pH8.42)	pH Monitor	Sunny	None

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