

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

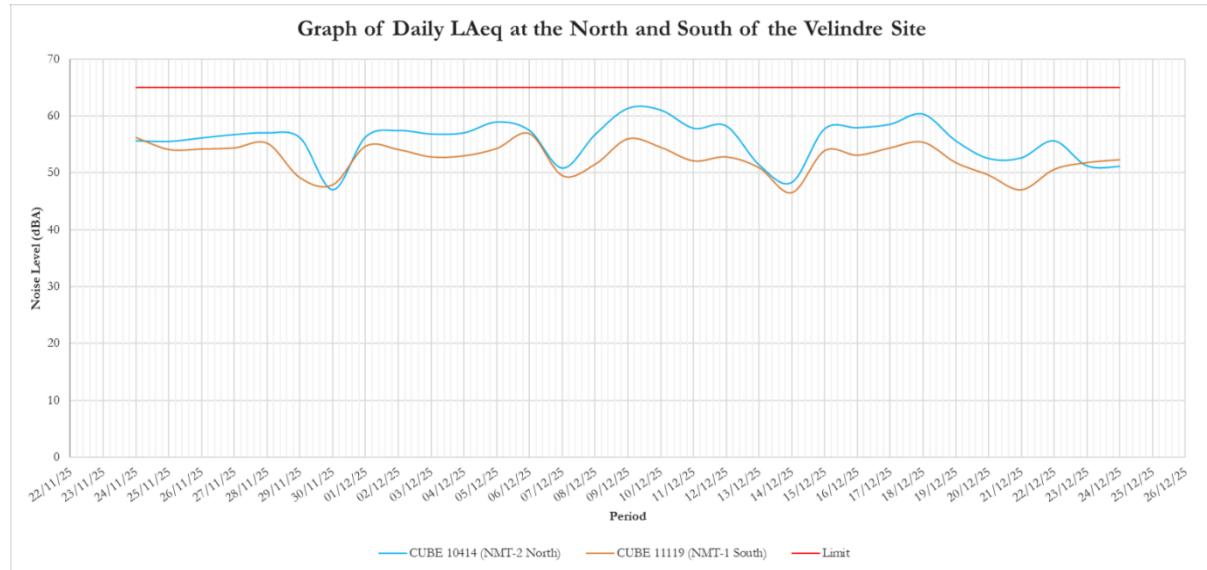
Water quality data of the attenuation pond is measured using a handheld pH monitoring device on a weekly inspection basis.

Data is compiled monthly. Over the December measurement period, no exceedances were recorded. Water quality remained within acceptable ranges.

Noise	Layout	Period	Data Type	Threshold Values	Work Hours
	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	190 μ g/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

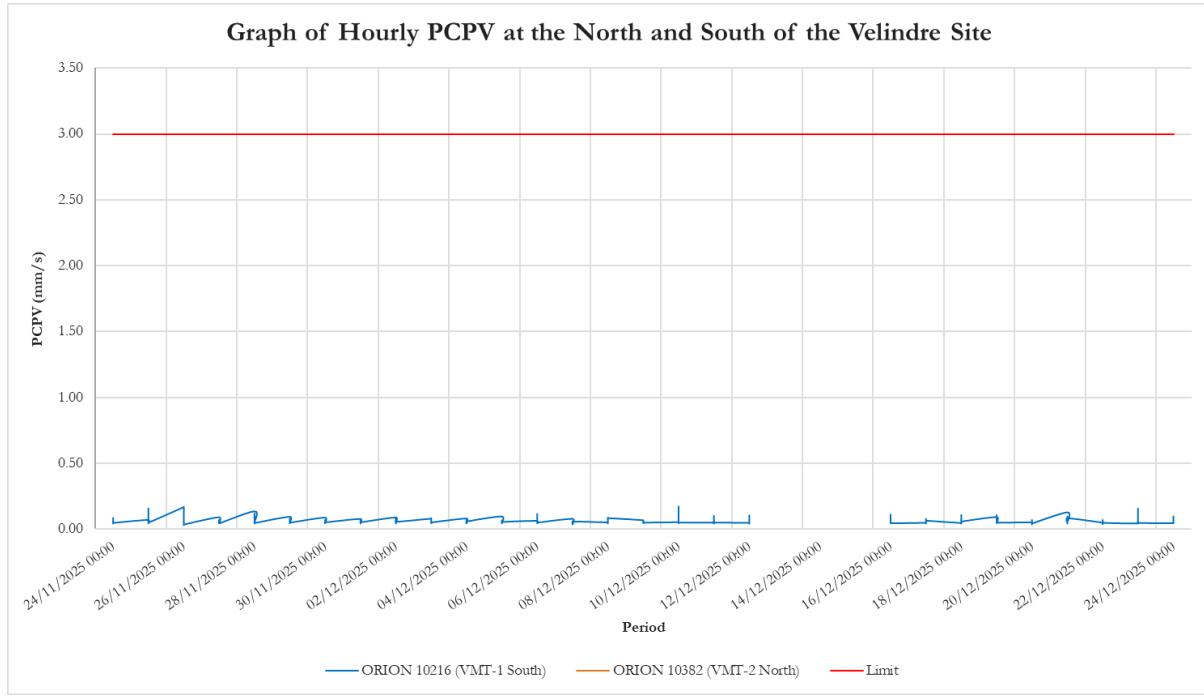


It was recommended in the Environmental Strategy (ES – produced by Walters) to limit noise on site to 70dB(A). Sacyr has set a soft limit of 65dB(A); anything surpassing this limit requires investigation, though mitigation measures need to be in place for anything over the hard limit of 70dB(A).

No noise data recorded exceeded limits at both the North and South monitoring stations on the Velindre site in the period covering 24/11/25 – 24/12/25.

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.

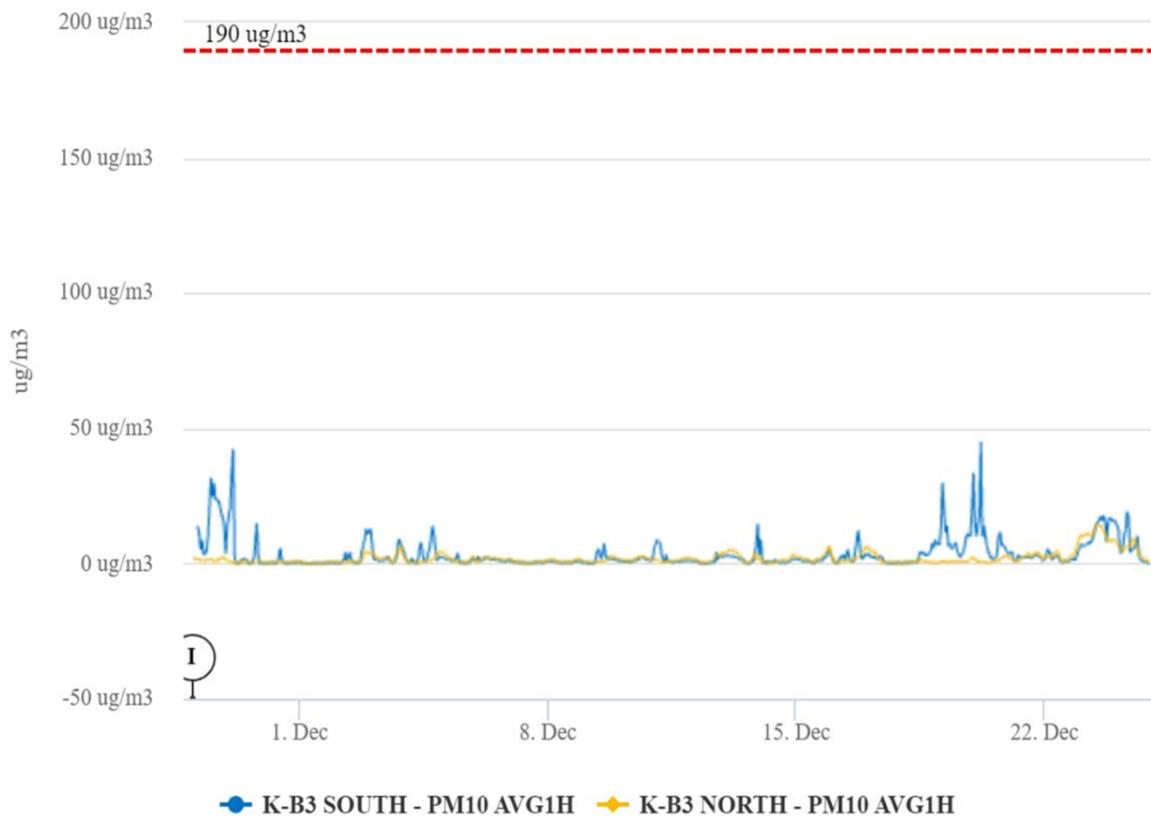


No vibration data recorded exceeded the 1.00mm/s limit at both the North and South monitoring stations on the Velindre site in the period 24/11/25 – 24/12/25.

No vibration data was recorded at the Church monitoring station outside the Velindre site for the period covering 24/11/25 – 24/12/25, due to ongoing connection 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 40 $\mu\text{g}/\text{m}^3$ on an annual average and no more than 35 instances per year of 50 $\mu\text{g}/\text{m}^3$ daily average.



There were no exceedances on PM10 recorded.

The mean average for hourly recordings of PM10 (24/11/25 – 24/12/25) are as follows:

South monitoring station PM10 AVG1h ($\mu\text{g}/\text{m}^3$) – 3.50 $\mu\text{g}/\text{m}^3$

North monitoring station PM10 AVG1h ($\mu\text{g}/\text{m}^3$) – 1.90 $\mu\text{g}/\text{m}^3$

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 pH11.

Date	Time	Water Level (cm)	Level Status	Equipment Used	Weather Conditions	Action Taken
11/27/2025	09:00am	45	(pH7.74)	pH Monitor	Intermittent Rain	None
12/2/2025	11:30am	60	(pH8.50)	pH Monitor	Overcast	None
12/10/2025	16:00pm	55	(pH7.54)	pH Monitor	Partial Cloud	None
12/18/2025	08:45am	55	(pH8.60)	pH Monitor	Rain	None

No lower or upper exceedances recorded in weekly measurements for December 2025.