Noise, Vibration, Air & Water Quality Report / May 2026

Executive Summary

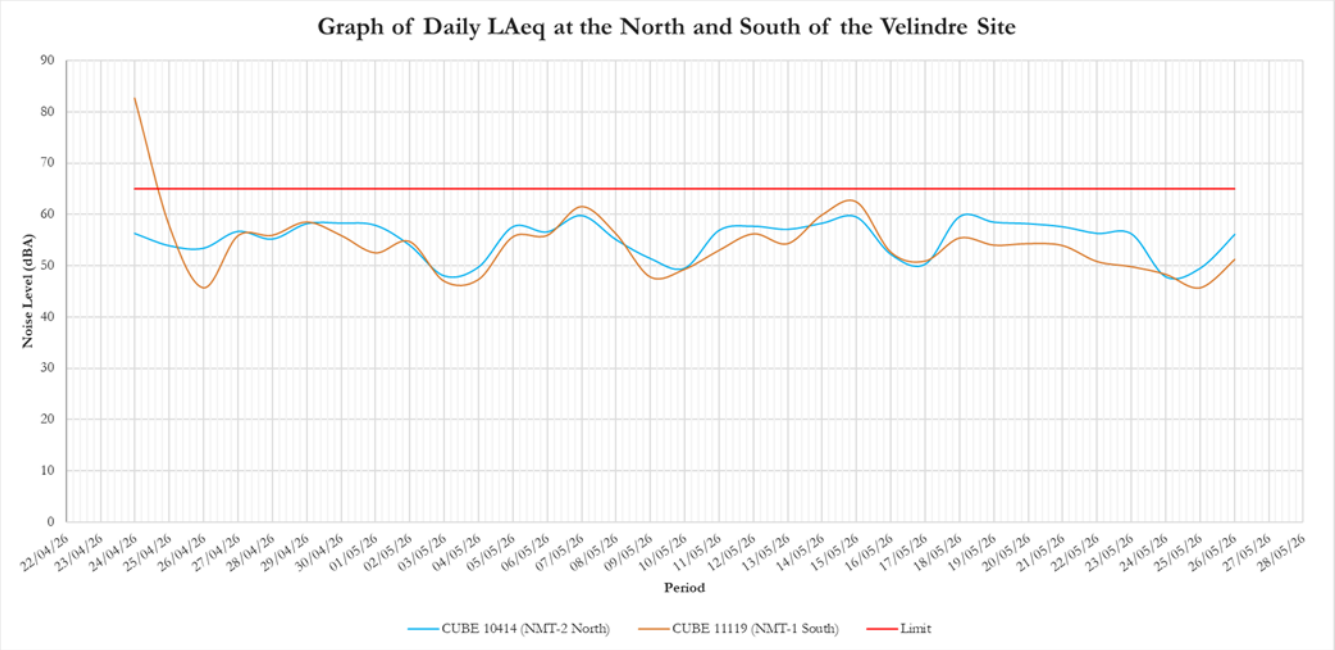
Noise, vibration and air quality data is generated by onsite internal monitors, administered by Acoustic1, located in the North and South of the site. An additional vibration monitor offsite is located at the Whitchurch Hospital Chapel.

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

	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



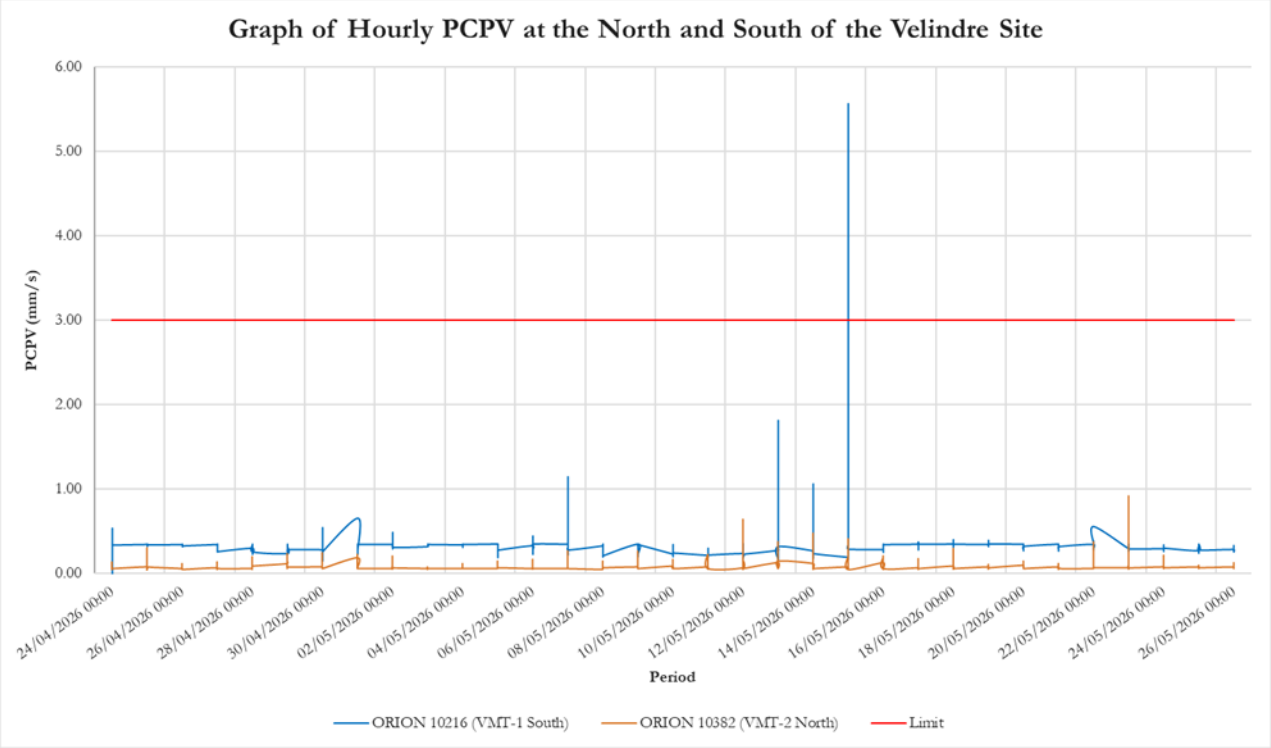
It was recommended in the Environmental Strategy (ES – produced by Walters) to limit noise on site to 70dB(A). Sacyr has set a soft limit of 65dB(A); anything surpassing this limit requires investigation, though mitigation measures need to be in place for anything over the hard limit of 70dB(A).

There was one localised exceedance recorded on 24/04/26 on the South monitoring station. This is due the close proximity of civils works to the monitor, demolishing concrete for manhole

installation. This is confirmed not to be associated with general site activities, evidenced by the North monitor recording no exceedances in the same period.

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.



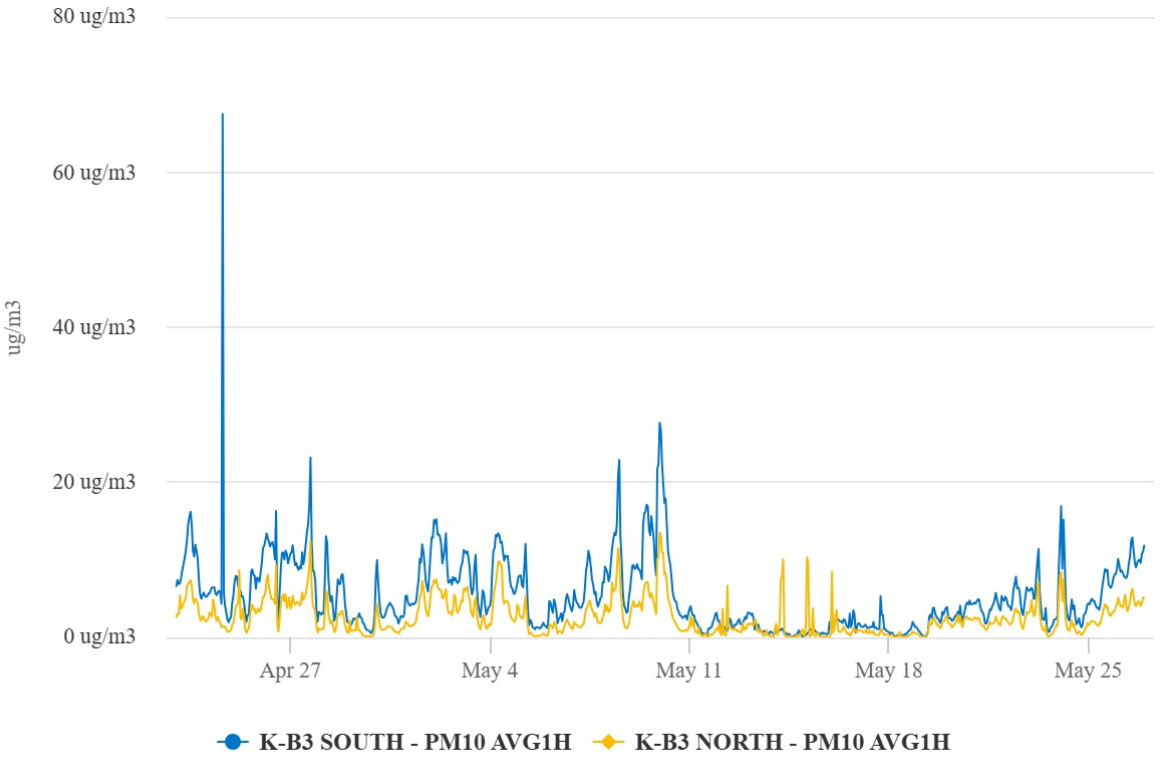
Vibration data, recorded on the South monitor, briefly exceeded the 1.00mm/s limit on 4 days. The breaches on the South monitor were short lived due to essential civils works (excavations and drainage connections) in very close proximity to the monitor and are not due to general site activity as evidenced by the low readings taken on the North monitor over the same period.

No further exceedances recorded in this period.

No vibration data was recorded at the Church monitoring station outside the Velindre site for the May 2026 period. The monitor is offline and awaiting access for repairs as required.

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 (23/04/26 – 26/05/26) are as follows:

South monitoring station PM10 AVG1h (ug/m3) – 5.40µg/m3

North monitoring station PM10 AVG1h (ug/m3) – 2.58µg/m3

A peak in PM10 was recorded on the South Monitor on 24/04/26 at 15:00, lasting for less than an hour and remaining below the 50µg/m3 24-hour daily average. The peak is due to due the close proximity of civils works to the monitor, demolishing concrete for manhole installation. This is confirmed not to be associated with general site activities, evidenced by the North monitor recording no exceedances in the same period.

Water Quality

Date	Time	Water Level (cm)	Level Status	Equipment Used	Weather Conditions	Action Taken
5/1/2026	12:00pm	40	(pH7.22)	pH Monitor	Overcast	None (No discharges)
5/8/2026	13:30pm	40	(pH7.13)	pH Monitor	Intermittent Rain	None (No discharges)
5/13/2026	14:40pm	35	(pH7.11)	pH Monitor	Intermittent Rain	None (No discharges)
5/21/2026	15:40pm	45	(pH7.33)	pH Monitor	Sunny	None (No discharges)

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.

No lower or upper exceedances recorded in weekly measurements for May 2026.