Noise, Vibration, Air & Water Quality Report / November 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 November measurement period, 1 exceedance to the vibration limit was recorded. No exceedances to air quality or noise limits were recorded. Water quality remained within acceptable ranges.

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

ORION (VMT-2)

ORION (VMT-1)

ORION (VMT-3)

K-B3 SOUTH

K-B3 NORTH

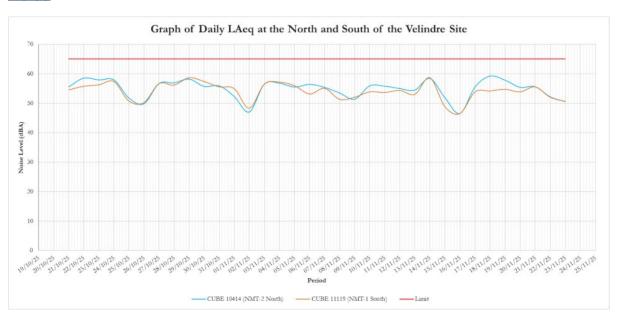
N/A

North Monitoring Point CUBE 10695 (NMT-1) Church N/A

CUBE 11119 (NMT-2)

Noise

Point

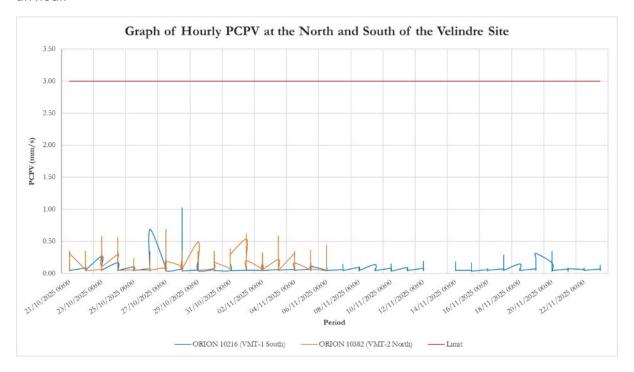


It was recommended in the Environmental Strategy (ES – produced by Walters) to limit noise on site to 70dB(A). Sacyr has set a soft limit of 65dB(A); anything surpassing this limit requires investigation, though mitigation measures need to be in place for anything over the hard limit of 70dB(A).

No noise data recorded exceeded limits at both the North and South monitoring stations on the Velindre site in the period covering 21/10/25 – 23/11/25.

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.

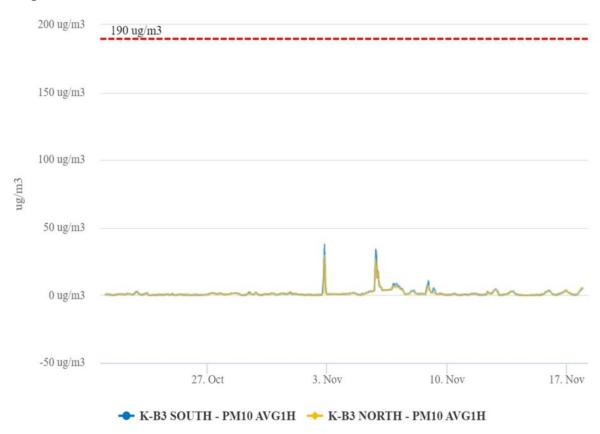


An exceedance was recorded on the South monitoring station on 28/10/25 (1.025mm/s) at 04:00am outside of working hours and unrelated to site activities.

No vibration data was recorded at the Church monitoring station outside the Velindre site for the period covering 21/10/25 - 23/11/25, 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 $40\mu g/m3$ on an annual average and no more than 35 instances per year of $50\mu g/m3$ daily average.



There were no exceedances on PM10 recorded.

The mean average for hourly recordings of PM10 (21/10/2025 – 23/11/25) are as follows:

South monitoring station PM10 AVG1h (ug/m3) – 1.49µg/m3

North monitoring station PM10 AVG1h (ug/m3) – 1.42µg/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 pH11.

Date	Time	Water Level (cm)	Level Status	Equipment Used	Weather Conditions	Action Taken
10/30/2025	10:30am	50	(pH9.57)	pH Monitor	Overcast	None
11/7/2025	10:00am	30	(pH8.60)	pH Monitor	Overcast	None
11/12/2025	11:30am	80	(pH9.21)	pH Monitor	Intermittent Rain	None
11/20/2025	11:00am	Iced Over	N/A	N/A	Sunny (Frosty)	None

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