

25044-L01-SW

Steve Day
C Project Ltd
44 Fox Dene
Godalming
Surrey GU7 1YQ

09/12/2025

Dear Steve,

APP/25/00512 – RESPONSE TO NEIGHBOUR COMMENTS

Thank you for forwarding the comments received relating to our report reference 25044-R01-SW (dated 30th May 2025) with reference to the above application for replacement of the existing roll-over (RO) car wash at Park Lane Service Station with two new units.

Car Wash Noise Levels

There appears to be some confusion between sound pressure and sound power levels. As a simple analogy, the sound power is the inherent energy of the source (like a kW rating on an electric heater) and does not change, whereas sound pressure is the 'temperature' at the measurement point, which is affected by distance, screening, etc.

The sound pressure level measured at 5m from the existing car wash entrance was 76dB_{L_{Aeq,T}}. As detailed in 5.1 of the report, the acoustic model found that modelling the existing RO car wash as a point source with a sound power level of 102dB_{L_{WA}} allowed accurate calibration against the noise levels measured on site.

The new units proposed each have a sound power level of 100dB_{L_{WA}}, i.e. each machine is 2dB quieter than the unit being replaced.

The noise model is used to accurately reflect site conditions, including the acoustic effects of the car wash enclosure, fencing etc, to predict the resultant sound pressure level at the residential properties. It was produced using industry standard software and methodologies.

Decibel Addition

Decibels add logarithmically – this is seen in Table 5 of our report where the existing ambient noise level (which includes road traffic, and all activity on the site) is added to the predicted noise level from the replacement car wash. The overall increase in noise levels at the receptors as a result of the proposals is no greater than 2.5dB which would not have any adverse impact at the receptors.

As seen in Table 4, the specific noise arising from the RO car wash is increased by 1dB compared to the existing situation.

As a general guideline, 3dB is the smallest change in noise levels which is perceptible by the human ear.

Noise Survey

Measurement Location

Measurements were made adjacent to 95 Park Lane to allow a worst-case for assessment; noise levels measured at the Purbrook Way entrance would be expected to be higher than those used due to proximity to road traffic on Purbrook Way.

As such, the predicted 2.1dB increase in noise levels at the rear of 301 Purbrook Way is likely an over-estimate. For example, if the ambient noise level at the rear of 301 Purbrook Way is assumed to be 2dB greater than that at the measurement location (not unreasonable given greater exposure to road traffic), the resultant increase in noise level would be just 1.5dB.

Weather Conditions

As detailed in Appendix B, although there were scattered showers during the noise survey, an analysis of the data indicated that this had no effect on the measured noise levels. There was no standing water on the roads.

The noise climate at the site is dominated by road traffic noise, which would not be expected to vary significantly from day to day. This is demonstrated by the data in Table B2, during which two full days of measurement data are shown with very little variation in either the ambient or background noise level.

Intensity of Use

If we accept the argument that fewer people would wash their cars on a damp February day, the effect would be that the noise levels measured (and subsequently used for the assessment) would potentially be lower than those on a busy day.

As such, the measured noise levels represent a worst case for assessment of impact, as we are comparing the predicted noise levels of the new units with the existing ambient noise level. With a higher ambient noise level, which might potentially be measured on a sunny summer day, as the predicted noise level due to the new units is the same, a smaller overall increase in noise level at the receptors would occur.

As detailed in 5.6 of the report, our assessment assumes that the two RO units would be in continuous use throughout the day. Again, this likely over-estimates the actual usage, particularly during the evening period.

Traffic Generation

The noise climate at the site is dominated by road traffic noise. To increase noise levels from vehicle movement by 3dB, the smallest perceptible change, the number of vehicle movements on Purbrook Way and Park Lane would need to double.

Even if the number of vehicles moving within the site itself were to double, the effect of road traffic on the surrounding roads would mean that no impact on noise levels at the receptors would be anticipated.

Potential Nuisance / Impact on Residential Amenity

The determination of a statutory noise nuisance is at the discretion of an Environmental Health Officer.

There are, however, contextual factors supporting our conclusion that the proposed development would have a negligible impact on residential amenity;

- Replacement of the existing RO car wash does not introduce a new noise source or change the character of the existing noise climate.
- The daytime ambient noise level of 62dBL_{Aeq,T} is controlled by road traffic noise and is relatively high. This already exceeds WHO guidance of 50-55dBL_{Aeq,T} for external amenity areas. Even at night, with limited activity at the Service Station and no use of the existing car/jet washes, the ambient noise level due to road traffic is 55dBL_{Aeq,T}. We therefore consider that, relative to road traffic noise, the impact on external amenity due to activity at the site is minimal.

Conclusion

The noise impact assessment submitted is a robust, "worst-case" assessment of potential noise impact at the residential receptors. It is clearly demonstrated that the impact of the proposed replacement of the RO car wash would have a negligible impact on residential amenity.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'S Witterick', written over a faint, circular official stamp.

Susan Witterick

Director, dBx Acoustics Ltd