

Thank you for consulting Environmental Health (pollution) regarding the above application. I have reviewed the noise assessment, plans and elevations and I have concerns that the noise level resulting from the air source heat pump is likely to result in adverse noise impacts to occupiers of the neighbouring property.

The noise assessment has not considered the perceived loudness of the Air Source Heat Pump (ASHP) due to characteristics of the noise (such as being distinguishable from the ambient sound and intermittency of the noise source) and has not considered the reflective surface adjacent to the assessment position window. These factors are expected to significantly increase the perceived loudness of the ASHP.

Noise from the proposed ASHP in that location is likely to be audible and intrusive inside the neighbouring property with a partially open window in both the ground floor living room and first floor bedroom directly above and is anticipated to result in Significant Observed Adverse Effect, such as closing windows to shut out the noise.

I therefore recommend the application is refused due to noise concerns.

To overcome my recommendation of refusal noise from the ASHP would need to be significantly mitigated/reduced. This could be achieved by increasing the distance from the assessment position, choosing an ASHP with a lower sound power level or encasing the ASHP in acoustic housing. It is unlikely that the applicant would be able to source an ASHP quiet enough to install at the proposed location or encase in acoustic housing at that location due to space required around the ASHP to allow it to function properly.

It may be viable to install the ASHP on the opposite façade of the dwelling, depending on the distance to the nearest neighbouring window of a habitable room and whether there is room for the unit to be encased in acoustic housing [if required]. However, it may be that the orientation and layout of the buildings may not be suitable for an ASHP to be installed.

Kind regards

Craig Milligan

Environmental Protection

Environmental Health