Visited The Old Forge, Sand Hutton on 29.09.15 to undertake noise measurements and recordings using the Norsonic 140.

Arrived at 0900h.

Weather conditions, warm, dry & sunny, calm/still – no discernible wind or breeze.

Set up the 140 in garden of the Old Forge near 'The Shed' which is a single storey cabin used to accommodate guests' approx 4m from boundary with Whey Carr Farm, adjacent to what appeared to be the main Timber Processing workshop. One side of this outbuilding runs parallel to the boundary ~2m beyond the boundary.



I calibrated the Norsonic, the instrument response was satisfactory and I made voice notes at the start of the measurement. The first measurement started at 0910h and took several one minute recordings during the measurement which continued for ~35 minutes until 0945h when there was a battery failure.

Noise from Whey Carr seemed to be the sound of an extractor operating continuously and an intermittent machine saw. Ambient soundscape consisted of birdsong and the occasional passing motor vehicle. The LAeq for the first 27 minutes of the measurement was 47dB. The extractor went off after ~ 27 mins (a recording was made with the extractor off) and this resulted in an SPL reduction of ~ 6dB to result in an LAeq of ~41dB. After a further 3 minutes a saw or plane started up (the extractor appeared to still be off) and operated continuously for ~ 3 mins increasing the LAeq to ~51dB. Just before he complainant left at ~0940h, she told me noise levels from Whey Carr had been relatively low so far this morning.

After replacing the batteries and carrying out a calibration check I commenced a second measurement at ~0947h. This measurement lasted for ~15 minutes and included several several one minute recordings.

An extractor was audible early in this measurement. Intermittent wood working machinery also audible, this increased the SPL by ~10dB to ~ > or =55dB. Saw tended to operate for a second or two every 30 seconds. At ~1000h a machine/extractor started up that increased the LAeq for the rest of (the final 2 minutes) of the measurement to ~55dB from a value of 48dB. The LAeq for the entire measurement was 50dB.

A third measurement was started at 1002h. The extractor that started up towards the end of the previous measurement was still operating and was presumably the extractor for the particular machine tool now in use. The extractor gave rise to a fairly steady noise level of ~55dBA which increased to ~ 57dB and up to 60dB when the saw was in use. Several recordings made during this measurement. The extractor noise was continuous for the first 16 mins of the measurement, the noise level was very steady with intermittent increases of ~2 to 3 dB associated with sawing. Overall this resulted in an LAeq of 56dB for the 16 minute period.. The noise from timber processing dominated the soundscape, passing traffic was not audible and there was no other discernible extraneous noise.

The extractor stopped at ~1019 and there was no noise audible noise from processing operations. The SPL dropped to below 45dBA.

A fourth measurement (duration 15 mins) was started at 1019. There was no extraction or processing activity audible at the start and for the first ~8 mins, LAeq = 39Db.Passing traffic now audible in the background. A radio playing music at Whey Carr was also just discernible now. Passing vehicles increased the SPL transiently to ~44dB typically. Processing machinery started again at ~1027 and LAeq increased to 47dB for the remainder of the me asurement. The noise from Whey Carr consisted of an extractor (not the noisiest one) and intermittent machinery (saw).

A fifth measurement was started at 1035h. Noise from Whey Carr similar to the end of last measurement, extraction, intermittent saw (every ~30secsand occasional bang (not loud bangs). This continued for 13 mins over which period the LAeq was 48dB. An engine then started up (forklift) mainly at low revs but occasional higher revs. This increased noise level with an LAeq of 57dB for the last minute of the measurement. The batteries then ran down and the Norsonic switched off. The ocerall LAeq for the 14 minute measurement was 50dB.

Conclusions

The measurements and recordings show noise levels from activity at Whey Carr Farm did give rise to exceedence of the boundary noise limit of 45dB (LAeq 15min) set by Condition 10 of Planning Decision 3/111/19C/FA. This was primarily due to the noise of various (at least two) extraction

systems which produced steady levels of ~47 dB in one case and ~ 55dB in the other. The noise from what is presumed to be a diesel engine forklift truck exceeded this (57dB).

It seems that on this occasion at least there was only one person using machine tools at the site and activities appeared to be undertaken serially as opposed to multiple tasks and activities going on at the same time. E.g. when the forklift was in use there was no sawing and extraction plant operating.

I spoke to the complainants gardener who stated that the noise from activity undertaken during my visit was typical of what he had observed previously during weekday working hours. He has been visiting to carry out gardening duties regularly for the last 18 months.

The main cause of breaches of the boundary noise limit is extraction equipment and the forklift. Extraction equipment is likely to operate for periods of greater than 15 minutes at a time (as indered it did during this visit). It is difficult to gauge forklift usage but it did give rise to significant noise levels.