LEOMINSTER TOWN COUNCIL

Report of the meeting held between Leominster Town Council, Herefordshire Council and BPI on Monday 6th February 2017 at 10.00am at the BPI Factory, Leominster.

PRESENT:

Leominster Town Council: Cllr Jenny Bartlett, Cllr John Rumsey, Cllr Roger Pendleton, Mr Paul Russell (Town Clerk).

RPS Acoustics: Mr Torjussen

BPI –Leominster: Mr Neil Shaw (Operational Manager- Leominster), Neil Hawkins (Health, Safety & Environment Manager – Leominster),

Herefordshire Council Environmental Health: Bruce Chartres (Service Manager), Elisabeth Laughland (Principal Environmental Health Officer).

BPI had commissioned RPS to carry out a full noise survey. A presentation was provided to the meeting which included the findings and recommendations.

The survey had been triggered by complaints regarding the low frequency rumble/vibration allegedly from the factory. The low frequency waves travelled long distances and had not been audible in the previous investigation.

The mains aims of the survey were as follows:

- To detect sounds and vibrations;
- To ascertain whether they were being produced by the BPI factory;
- To assess the acceptability of the noise against BS4142, NANR45 and BS6472.

Background information on sound and vibration was provided. Infrasound was normally lower than 20Hz whilst low frequency was measured between 20Hz to 100Hz. The human ear was not designed to hear frequencies that low.

Measurements of sound and vibration were taken on the BPI Factory site (packing area, storage facility near compressor, new processing and manufacturing area, next to external refrigeration units, old production area, vent ducts, compressors and storage tanks) and at various locations in the residential area to BS4142. Vibration measurements were taken to quantify possible ground borne vibrations. A further measurement was taken to record standard background sound.

The measurements were taken between 18th and 30th August 2016. During the shutdown the measurements went down as expected but some equipment remained on during the shutdown.

Although there was not enough evidence found to suggest that the external noises all emanated from BPI, there was a very clear low frequency noise recorded. There was also evidence of infrasound.

It was noted that windows in properties provided poor resistance to low frequency noise. Measurements were taken in residential properties and logs were kept by some residents who recorded when the noise was at its most disturbing. These records did not correspond to the actual activity recorded. This was probably due to quite a high emotional influence. Details of the range of noises recorded were provided.

The conclusions reached following the measuring exercise was that the noise was not coming from the Extruders. This was based on the formula which compared the difference between the Rating Level and the Background Noise recorded.

With regard to ground borne vibrations the measurements recorded suggested that it was unlikely to be causing an adverse impact.

Internal sound exceeded 90dB in many areas, 100dB in some. It was concluded that the façade might need upgrading to contain noise breakout.

Few machines had mounts and the vibrations of equipment were going straight into the walls and being amplified due to the construction of the building. It was concluded that the building could be amplifying the vibrations. This was demonstrated very effectively.

Noise sources:
- Sound was breaking through ducts, vents and louvres
- External plant
- Building envelope sound amplification

Mitigation Options:
- Completely enclose building envelope;
- Isolate the mezzanine structures from the existing building envelope;
- De-tune existing building structure envelope;
- Isolate individual items of plant.

All would require local enclosure options to tackle airborne noise.

In future BPI would develop an internal noise and vibration policy covering supply, installation and servicing of equipment that goes beyond the standard HSE or planning requirements.

The final conclusions were as follows:
- BPI is a strong source of low frequency noise;
- However, no direct link was established between the low frequency noise from BPI and that experienced by residents;
- Ground borne vibration as unlikely to give rise to adverse impact at complainants properties;
- Noise/vibration was more likely to be airborne.

The survey had been undertaken totally independently of BPI, who would be taking the recommendations on board and would work with RPS on additional survey works.

It was agreed to work together to improve communications with residents and to keep them informed of future mitigation plans. BPI was happy to be open but required some level of protection. An open letter from the company would be produced within the next two weeks and displayed on the Town Council's website.

There being no other business everyone was thanked for their attendance and the meeting closed at 12.35pm.