

16/04/2011	50.9	56.49	45.30	82.38
17/04/2011	49.36	54.78	43.93	85.88
18/04/2011	47.69	52.93	42.44	81.2
19/04/2011	45.61	50.62	40.59	79.35
20/04/2011	53.8	59.71	47.88	83.03

The N21 is audible most of the time at the Holland residence and the poultry operation at Pat Kenny's is only detectable when large vehicles are entering or exiting the operation.

No tonal component was determined

## 5.0 Conclusion

### 5.1 Sources and Emissions

The site operates on a batch cycle basis typically 35 to 38 day cycle with the site in continuous operation during this period. On average over the last 5 years Mr Kenny's poultry operation has 6 batches per year. Delivery of raw materials and hatchlings by road, operation of the facility and shipping birds to the processing plants are the main noise sources from the site. Road traffic to and from the site is considered a noise source in terms of the overall traffic flow and pattern in the area.

The character of each noise source has been stated as broadband, tonal or impulsive as assessed at the measurement distance. It should be noted that an assessment of tonality or impulsivity at source does not necessarily mean that this character is audible at the boundary of the plant or at nearby residences.

The measurement locations are shown on Figure 1.0. The results for each location are shown in Table 1(a), 1(b) and 1(c). The results include A-weighted sound pressure levels for all Locations, with comments as appropriate. The measurements were generally short  $L_{Aeq}$  measurements. Some measurements of  $L_{max}$  levels are noted in the Table. **Note** that the "Fast" Time Weighting was used for  $L_{max}$  measurements.

Weather conditions can have both positive and negative effects on sound propagation. A positive wind vector or a temperature inversion can give an increase in noise level at a distance from a source. A negative wind vector can reduce the received noise levels. These effects tend to become more significant at relatively long distances from the noise source. When wind speeds rise above about ten knots (five metres per second), locally generated wind noise (through trees, etc.) can have a significant masking effect, often rendering a low level noise source inaudible.

Noise measurements were confined to periods when weather conditions on and around the Pat Kenny's poultry operation is judged to have minor impact on noise propagation during the survey.

Where poultry operation noise is steady and audible during operation, but there are extraneous noise sources such as road traffic, birds or intermittent local activities,  $L_{A90}$  usually gives a good approximation of the relatively constant plant noise level. Where the poultry operation, etc is stated as clearly audible or the dominant background source, poultry operation noise may be taken as approximately equal to  $L_{A90}$ .

## **5.2 Noise Impact**

The Pat Kenny's poultry operation noise levels are dominated by the operation of the road traffic on the site, the local roads and N21, followed by the site. The poultry operation noise levels are auditable at all locations but only when vehicle movements occur on-site delivering feed, delivery and collecting birds, removing litter, delivery various raw materials such as wood chip. The duration of these activities is short but the noise levels are unlikely to result in a noise complaint.

The Pat Kenny's poultry operation does not generate significant noise levels and the noise auditable on site consists of:

- Road Noise from the Adjacent Local Road.
- Site Traffic movements.
- Noise from site operations, etc

The range 35 to 45 dB(A), is suggested by the EPA (Guidance Notes for Noise in relation to Scheduled Activities), as the range of target levels appropriate to avoid disturbance at night outside houses. An important aspect of acceptability is the absence of significant tones or impulses.

The results of the noise survey indicate that there is no significant impact on noise sensitive locations outside the boundary. The plant may be audible at times at ML 1 to 5, but however, the Pat Kennys poultry operation noise levels are unlikely to give rise to any disturbance to generate complaints or nuisance.

The EPA guidelines of 55 dB(A)  $L_{Aeq}$  (day time) and 45 dB(A)  $L_{Aeq}$  (night), would be more applicable were the  $L_{A90}$  for all NSL's for the daytime are shown below and all would meet the EPA guidelines.

<b>Location Reference</b>	<b>L<sub>Aeq</sub></b>	<b>L<sub>A90</sub></b>
<b>ML1</b>	45	42
<b>ML2</b>	43	40
<b>ML3</b>	46	41
<b>ML4</b>	48 to 54	43 – 48
<b>ML5</b>	46 – 54	41 – 48

### **Summary**

The single biggest noise source at the Noise Monitoring Locations 1 - 5 is road noise from vehicles movement on-site and along the local roads. There are no residential location where the EPA guidelines are exceeded and thereby unlikely to cause noise nuisance to a reasonable person.

## **6.0 References**

British Standard BS 5228 (1992): Noise control on construction and open sites  
Part 4 Code of practice for noise and vibration control during piling.

BS5228: Noise control on construction and open sites.

1509613: Acoustics - Attenuation of sound outdoors, Part 2: General method of calculation, 1996.

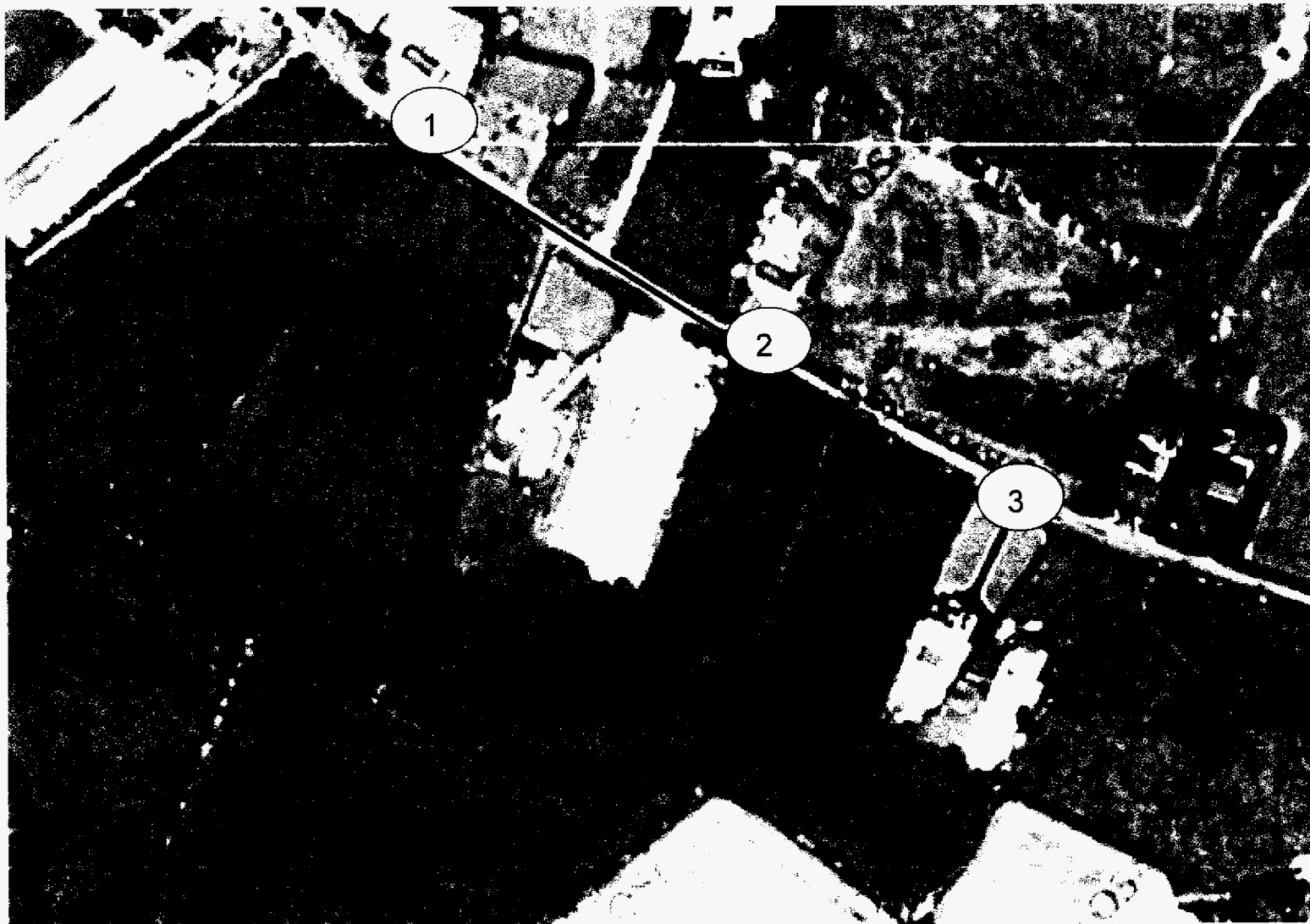
ISO 1996: Acoustics - Description and measurement of environmental noise: 1982.

EPA 1995        Guidance Note for Noise in Relation to Scheduled Activities, 1995

EPA 2003,        Environmental Noise Survey, Guidance Documents

## 7.0 Figures





### Legend



Site Location

**MONTGOMERY E.H.S.**

Client

**Pat Kenny**

Title

**Noise Monitoring Location**

Scale.

**NTS**

Project No.

**P011 01**

Figure No.

**Figure 13**

Rev.

**A**