From: kfinn [kfinn@esatclear.ie] Sent: 15 June 2006 02:05

To: John Doheny

Cc: Wexford Receptionist; Sean O'Donoghue Subject: Re: DAIRYGOLD IPC 404 & 775

DAIRYGOLD IPC 404 & 775

Thanks John

Further to our meeting, I have the following comments/submission in re both IPC 404 & 775:

NOISE:

- 1. The high pitched whine(s) emanating from Dairygold's Castlefarm plant appear to be close to pure tones. At higher frequencies, these may not be detectable on A scale measurement, particularly for higher frequencies where the band width is wider. At these higher frequencies (or lower frequencies where the tonal noise is approaches a pure tone), measurement over a band width has an averaging effect which may result in the tonal noise remaining undetected using A scale measurement.
- 2. What is required and whit is provided for in the EPA original Noise Guidance document is that such tonal noise should be measured using narrow band analysis. This is a much narrower (and therefore much more focussed) measure than the A-scale measure.
- Narrow band measurement presents some problem in focusing on the correct narrow band width to measure at, as close as possible to the tonal noise heard.
- 4. As discussed, the most effective option is to do a walkaround external noise survey of the castlefarm plant and record say 30 second measurements at the various locations that tonal noise is detected. This could be upwards of 100 different measurement/ locations. Measurements should also be recorded of indoor equipment with windows and/or doors open. Both the frequency and power (strength) of the noise should be recorded at a distance of say 20 meters from each noise source. This includes all pumps, exhausts, evaporators, blowers, aerators, compressors, generators or other noise generating equipment.
- 5. Such a survey could be completed in a single day or over 2 days for the different production processes.
- 6. The top 10 loudest (power) frequencies/noise sources can be identified. One or other or 2/3 of these are most likely to be those carrying through and heard at King's Square/Kingston close.
- Narrow band measurements can then be taken at the noise sensitive locations in King's Square/Kingston Close focusing on the frequencies around the top 10 loudest (most powerful) noise emitters to identify those causing the problem when the wind is from the NW.
- 8. Alternatively, those top 10 noise emitters can be attenuated such that they are eliminated or put to the bottom of the table, and a subjective noise measure/survey carried out at King's Sq/Kingston Close (thereby avoiding the need for narrow band measurement).
- 9. I would be surprised if this first elimination is not successful. However, if not, then the next 10 most powerful (loudest) on the list should be attenuated and so on.
- 10. Alternatively, Dairygold should be instructed to either relocate an/or house all external noise generating equipment indoors, or alternatively attenuate all external noise generating equipment.
- The one/two day on site noise survey should be carried out by the EPA, or at very least as a joint survey with Dairygold's Noise Consultant. The whole process could be carried out immediately following the forthcoming Annual Noise Survey as a supplementary survey.

MAL-ODOUR:

This problem has persisted since approx.1986/9 when DG undertook a large expansion of the Castlefarm facility. It abated somewhat from around 2001/2, but got much worse in intensity and frequency in 2005. It got worse again (in intensity particularly) from the beginning of this year. The problem may be exacerbated by the elimination/reduction of effluent from the Galtee Meats facility,

where slaughtering operations were ended in late 2005.

- It seems to have abated somewhat in composition in the last two weeks or thereabouts. For instance, there was a yeasty mal-odour present this evening in place of the usual effluent malodour. However, the effluent mal-odour was present on most days/evenings during last week (5th-11th June) and was present again last night 13th June 2006. (I was away from 6th to 12th June, but the occurrence of DG effluent mal-odours was reported to me by others).
- 23. The actions taken by DG currently to deal with this ongoing problem are not effective. Furthermore any chemical treatment/block that might be put in place must necessarily be:
 - Fully automated and not rely on any manual system liable to operator error.
 - Able to effectively deal with shock loading causing shock mal-odour discharges.
 - Deal with the full range of mal-odour sources and combination of sources.
- 24. It seems to me that the only fully effective way of dealing with this plant is to house it fully, relocating some elements as necessary), and fitting an air/odour filter on the exhaust air.
- It has been suggested that such a system would have health and safety implications arising out of working in an enclosed space. These can be dealt with by:
 - a. Requiring operators to wear breathing apparatus, similar to fire men.
- b. Constructing further holding/balancing tanks, temporarily shutting off intake, Segmenting the housing and temporarily diverting effluent to one part of the plant while another part is worked on.
- Alternatively, a new modern enclosed facility should be constructed, similar to that in the new Dublin Poolbeg domestic sewage treatment facility, to replace the current ETP.
- 27. In the absence of a fully effective, tried and tested treatment system eliminating mal-odours from the Castlefarm plant, DG should be directed to reduce the effluent production/input to 50% of its 2005 volume or in any case to a level such that the make dour problem is eliminated fully. It should be maintained at that level until DG can demonstrate fully and clearly that any new system they propose will be fully effective in dealing with the problem, and in this event effluent volume/input should only be increased incrementally.

MILL STREAM & LAKES:

- 31. DG should be required to immediately clean and desludge these fully, and dispose of the waste in an environmentally friendly way.
- 32. DG should be required to empty the lakes and stream fully of all water, effluent, sludge, and to fully reinstate the lining and embankments to the lakes to their former (pre 1922) condition, and thereafter refill and restock the lakes.
- 33. The works should be carried out under visual on-site inspection by the EPA and DUCHAS and/or THE HERITAGE COUNCIL OF IRELAND.

GENERAL:

- 41. Reports alone will not fix these problems. What is required is defined action plans with a short completion timescale.
- 42. It is completely unacceptable that funding should be a limiting factor at a time when DG are making proffits. ALL such proffits should be firstly directed at solving these continuing problems.
- In addition, following rationalisation, DG are now a more profitable company and able to borrow substantial funds to tackle these ongoing problems in the short term. It is therefore completely unacceptable that funding should be a limiting factor in this context.
- 44. It is completely unacceptable that such problems (in breach of the existing IPC Licence 404, should be persisting 6 years (production seasons) after DG were granted their licence.
- 45. The requirement (some 6 years down the road) is to meet BAT standards, which precludes funding being a limiting factor in dealing fully with these problems NOW and into the future.
- I therefore request that the above measures be fully incorporated in both the current licence and in the conditions attached to any new licence.

Yours sincerely

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---- Original Message -----From: John Doheny

To: kfinn

Sent: Wednesday, June 14, 2006 5:16 PM

Subject: Odour Log Documents

Dear Mr Finn,

Further to our meeting yesterday I attach odour documents as you requested.

Regards, John Doheny

John Doheny

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