



TOBIN

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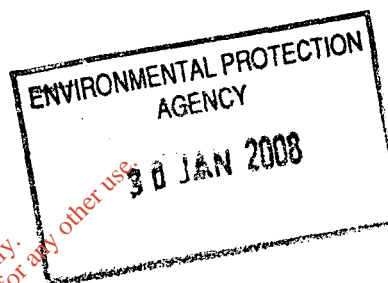
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Our Ref: 3584-230108-EPA-YF-vitra discharge limits

24th January 2008

Licensing Unit
Office Of Climate, Licensing & Resource Use
Environmental Protection Agency
PO Box 3000
Johnstown Castle Estate
Co. Wexford

Attn of: Yvonne Furlong



RE: Integrated Pollution Control Licence for Vitra Tiles Facility at the IDA Business Park, Ballynattin, Arklow, Co. Wicklow.

Dear Yvonne,

We refer to the proposed discharge limits you intend to apply to the IPC licence for the Vitra Tiles facility at Ballynattin, Arklow as per your correspondence to the IDA of 27th November 2007 and comment as follows:

- The IDA treatment plant is designed to treat domestic sewage only, to the standard outlined in the Second Schedule Part 1 of the Urban Waste Water Treatment Regulations, 2001, summarised in the table below.

| Parameters | Concentration |
|---------------------------|-------------------------|
| Biochemical oxygen demand | 25 mg/l O ₂ |
| Chemical oxygen demand | 125 mg/l O ₂ |
| Total suspended solids | 35 mg/l |

Directors: D.A. Downes (Chairman) L.E. Waldron (Managing Director) M.F. Garrick R.F. Tobin J. Colleran B.J. Downes S. Finlay P.J. Fogarty D. Grehan J.P. Kelly B.M. Mulligan B. Murray C. O'Keeffe F. Renkema (Dutch) E.J. Harrigan (Company Secretary)


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Co. Reg. No. 42654 - Registered Office: Fairgreen House, Fairgreen Road, Galway, Ireland.

- The treatment process is not designed to handle heavy metals or toxic compounds. The cumulative concentrations of heavy metals appear to be high. The bacterial cultures bioaccumulate heavy metals and this might affect the ultimate destination for sludge disposal, as the accumulated sludge metal concentration might be high. It might prohibit its application to land or a composter might express reservations on its acceptance. We are also concerned about toxicity as there may be a combination of elements or compounds that might give rise to a toxic or inhibitory effect.
- The sulphate is high but probably will not be an issue unless the effluent becomes septic anywhere along its route as it has the potential to produce large amounts of hydrogen sulphide with the levels of sulphate allowed.
- Currently we would estimate the sewage from Vitra is well above 50 mg/l SS at times.
- Is there a reason why a COD limit of 800 mg/l and a BOD limit of 150 mg/l are stated. Is there data available that would suggest a COD:BOD ratio of > 5?
- The proposed discharge volume limit of **53m³** per day is in excess of the anticipated demand for the IDA Industrial Estate as a whole (as envisaged at planning for the next three years). This will overload the existing IDA treatment plant in its current arrangement. Recycling of the process water within the Vitra Tiles facility would greatly reduce the discharge volumes.
- We have been unsuccessful in the past in obtaining lab results on the effluent from the Vitra Tiles facility. Is it possible for the results of your future monitoring of the Vitra effluent be made available to the IDA for the purposes of assessing the impact on their own discharge obligations.
- Also, what are the proposals to monitor the flow from the site?

Yours faithfully,



Anthony Dale
For TOBIN Consulting Engineers

Cc: Declan O'Neil – IDA Property Section