
M E M O R A N D U M

DATE: 28th November 2003
TO: Each Board Member
FROM: Seán O Donoghue
RE: Report on application for IPC licence from Wyeth Nutritionals Ireland, Reg. No. 678.

Application Details	
Class of activity:	Class 7.2 – The manufacture of dairy products where the processing capacity exceeds 50 million gallons of milk equivalents per year. Class 2.2 – The burning of any fuel in a boiler or furnace with a nominal heat output exceeding 50 MW.
License application received:	10/07/03
Notices under article 8 issued:	19/08/03
Information under article 8 received:	11/09/03
Additional information received	30/10/03
Notices under article 17 issued:	None
Site visits:	20/05/03
Submissions	None

Company

Wyeth Nutritionals Ireland is part of the American Home Products Corporation and was established in Askeaton in 1973. A range of Infant Nutritional products is produced on site including canned powder baby food formula and liquid Ready-To-Feed formula in glass bottles and Tetra-Packs. A number of expansions have taken place since the initial 50-employee operation to the present operation employing 599. The plant is located in a rural area outside the town of Askeaton. The company is in operation 24 hours per day, Monday to Friday with additional operations at weekends as required.

The company were granted a licence by the Agency on 27th October 2000 in respect of class 7.2 and their performance in relation to compliance with the conditions of that licence has been satisfactory.

Application

This application relates to a proposal to operate a Combined Heat and Power (CHP) Plant on site. The plant is planned to be operational from the last quarter of 2004, and will comprise two main items of equipment: a 5.2 MWe Natural Gas fuelled Gas Turbine powered generator, and a 30 tonne/hr Waste Heat Recovery Steam Boiler (WHRB). The generator will supply the plant with electricity, exporting any surplus to the grid. Two of the existing boilers will be converted to natural gas firing, with Marked Gas Oil (MGO) as backup fuel. The oldest existing boiler will be retained as a backup and converted to emergency only use, using MGO. These boilers are currently using Heavy Fuel Oil.

Planning application for the proposed development was granted by Limerick County Council on the 1st November 2002.

Proposed Determination

The PD incorporates the provisions of the existing licence where appropriate and has been updated to reflect current Agency licensing policies and practices.

Air:

The proposed gas turbine plant, with a thermal input of 16MW at ISO conditions, is outside the scope of the Large Combustion Plant Directive 2001/80/EC.

The proposed CHP plant will have the effect of reducing SO_x emissions to insignificant levels, while increasing NO_x emissions. A NO_x Emission Limit Value (ELV) of 300 mg/Nm³ has been set for the CHP plant in the PD, the two natural gas boilers have ELVs of 115 mg/Nm³ (from 1/1/2005) while the backup (MGO) boiler has a NO_x ELV of 220 mg/Nm³ (from 1/1/2005). These ELVs are generally consistent with limit values specified in the UN Convention on Long Range Transboundary Air Pollution (the Gothenburg Protocol). MGO has a Sulphur content of 0.2%, and the ELV for this boiler has been set accordingly.

The applicant used the ISCST3X dispersion model to predict hourly maximum, 99%ile, and 99.8%ile GLC values for NO_x. The model used worst-case scenario emission levels of 320 mg/Nm³ for the CHP Plant and 115 mg/Nm³ for the two boilers. Actual terrain elevations for the vicinity, building profile data, and meteorological data taken from the Shannon station for the year 1997 were used in the model.

The 99.8%ile value predicted by the model was 198 ug/Nm³. Taking typical rural background NO_x levels into account (2 ug/Nm³ was measured in 1991, and reported in the EIS submitted with the original IPC application), the modelling indicates that, theoretically, NO_x emissions from the plant may cause a slight breach of the Air Quality Standard for NO_x of 200 ug/Nm³ as specified in S.I. 271 of 2002. However, given that the model is highly conservative it is considered unlikely that such a breach will occur.

Water:

Boiler blowdown from the WHRB will be similar in volume and composition to that from existing boilers. There should be no net change in total blowdown emission volume or composition discharged to the effluent treatment plant.

There are no new emissions to surface or ground waters proposed

Waste:

New hazardous wastes arising from the CHP plant are lubricating oils and oil filters, which will be sent to appropriately permitted and licensed waste recovery contractors.

Noise:

The results of a noise survey of a similar existing CHP plant were used as input values in a noise prediction model to assess the impact of noise emissions. The modelling exercise found that the plant would have no significant impact on noise sensitive locations in the vicinity. The Company has reduced noise emissions from the site since the issuance of the existing licence, and has acquired two nearby dwellings, ensuring that on site activities will not cause exceedances at noise sensitive locations of 55dBa during daytime and 45dBa at nighttime. Conditions in the PD have been written accordingly.

IPPC:

The activity is covered under heading 6.4(c) of Annex I of Council Directive 96/61/EC (the IPPC directive), the treatment and processing of milk, the quantity of milk received being greater than 200 tonnes per day (average value on an annual basis). Conditions in the PD for an IPPC activity have been included (see residuals management, environmental liabilities, and energy headings below).

Energy:

The proposed CHP plant will result in energy savings due to increased fuel efficiency (>80%). These energy savings are the economic justification for the cost of switching from HFO to Natural Gas (the plant is located approximately 5km from the Gas Transmission Line). The PD requires an energy audit to be conducted within one year of date of grant of licence.

Residuals Management:

Condition 13 of the licence requires the submission of a residuals management plan within six months of date of grant of licence, and also requires that the plan is reviewed annually and a report on the review is submitted as part of the AER.

Environmental Liabilities:

Condition 15 of the PD requires an Environmental Liabilities Risk Assessment to be carried out within 12 months of date of grant of licence and requires the licensee to obtain appropriate financial indemnity within eighteen months of date of grant of licence. The licence will also be required to review the amount of indemnity annually, and revise the amount if appropriate.

Submissions:

None

Recommendations:

That the board approve the proposed determination as submitted.

Signed

Sean O Donoghue
Licensing & Guidance

Procedural Note

In the event that no objections are received to the Proposed Determination of the application, the final licence will issue from the division in accordance with Section 85(4) of the Environmental Protection Agency Act 1992 as soon as may be.