
MEMORANDUM

DATE: 10/01/2002
TO: Board of the Agency
FROM: Patrick Geoghegan
RE: Application for an IPC licence from Waterford Carpets Limited, Unit 201, IDA Industrial Park, Cork Road, Waterford, (Reg. No. 510)

Application Details	
Class of activity:	8.5: - the dyeing, treatment or finishing of fibres or textiles (including carpet) where the capacity exceeds 1 tonne per day of fibre, yarn or textile material.
License application received:	12 July 1999
Notices under Article 11(2)(b)(ii) issued:	17 August 1999, 15 th May 2000
Information under Article 11(2)(b)(ii) received:	29 November 1999, 22 March 2000, 15 January 2001
Article 10 Compliance:	15 January 2001
Notice under Section 97 received:	02 Nov 1999
Notices under Article 17(1) issued:	05 March 2001
Information under Article 17 received:	26 October 2001
Article 17 Compliance:	26 October 2001
Site visits:	16 Apr 1999, 05 Nov. 2001

1. Background

Waterford Carpets Limited manufacture ribbed non woven carpet for use in both residential and commercial applications. Approximately 20 % of the product is exported, mainly to the UK market while 80% is used in the home market. The carpet factory was established in the 1940's. The activity operates continuous production from 8am Monday to 8am Saturday on a three shift rota basis.

2. Process:

The process is a relatively simple one. Bales of fibres of goat-hair, wool, nylon and rayon are selected and fed into a bale breaking machine and then into a willowing machine for opening and blending. The fibres are then transported pneumatically to holding bins. At a later stage the fibres from these bins are transported to smaller silos which are located adjacent to carding machines in the production hall.

Fibres are passed through the carding machines and a fleece is generated. The fleece is needled and passed into the carpet making machines. The jute backing (not manufactured on-site) is then introduced. Both the fleece and the jute backing are coated on one side with PVC glue and bonded. Carpet is then passed through curing ovens for gelling of the PVC glue. Rolls of carpet are later sent for shearing and quality control. No dyeing, latexing or moth-proofing of carpet takes place at the site.

Overall, the process at Waterford Carpets does not have any significant environmental polluting potential. However the PVC glue contains a Phthalate based plasticizer and is classified as having endocrine disrupting effects on the environment. This substance is being allowed to discharge to sewer presently, albeit in small quantities (<20litres/week). This is being prohibited in the PD (See section 4.2 of this report, para. 3).

3. Current Licences:

Emissions to sewer are not subject to a sewer discharge licence under the Water Pollution Act, 1977. Emissions to Atmosphere are not subject to an air licence under the Air Pollution Act, 1987.

4. Environmental issues:

4.1 Emissions to Air:

The single boiler on site (65KW) supplying heat for the curing ovens is operated on light fuel oil. It is considered that emissions from this boiler stack are not significant.

The air from within the processing areas is extracted to a central robotic dust extraction and filtration room consisting of rotary and panel filtration prior to being returned to the factory floor. This system was installed to satisfy occupational Health & Safety regulations.

The curing presses/ovens all have local extraction and individual emission points are in place for each of the six ovens. Monitoring data submitted as part of the IPC licence application indicates that concentrations of VOC's and particulates from these ovens are not significant. The proposed Determination stipulates emission limit values in line with BATNEEC for the Sector. The PD requires a feasibility study into a reduction in the number of emission points to air, through objectives and targets.

4.2 Emissions to sewer:

Only boiler blowdown and condensate from an air compressor dryer is discharged to sewer. No dyeing or treatment of the carpet takes place at the site.

Of significance is the use of PVC glue to bond the carpet fibre to the jute backing. Di - (2-ethylhexyl) phthalate is the active substance contained in the plasticizer forming part of the PVC glue. This substance is classified as having endocrine disrupting effects by the European Commission in their report COM (2001 262). The report on the implementation of the Community strategy on endocrine disrupters, focuses on synthetic chemicals principally used in industry, agriculture (pesticides) and consumer products. The substance is restricted under Directive 76/769 and Regulation No. 793/93. This directive relates to restrictions on marketing and use of certain dangerous substances and preparations, while Regulation 793/93 relates to risk assessment of existing substances.

Currently, the only route for the plasticizer to enter an environmental medium is through spillage to sewer, during tanker unloading. In view of the small quantity of this material, Condition 6.4 restricts any discharges containing plasticizer from the facility. Collected spillage shall be treated as a hazardous waste in accordance with Schedule 3(i) of the PD.

The applicant is required to examine the feasibility of substituting the raw material containing Phthalate in establishing objectives and targets.

4.3 Surface water and Groundwater:

Surface water from impervious yard area and roof water is discharged to a surface water sewer. Monitoring of these emissions are conditioned in the proposed determination. Fuel oil-tanks and chemicals are stored in bunded areas. Firewater generated on-site would be mostly contained within the building and could be diverted to sewer or bunded areas. This should be further investigated as part of Condition 13 Accident Prevention and Emergency Response policy and procedures.

4.4 Waste:

The main waste generated on-site includes metal bands from bales, plastic sheets and bags, fabric waste, cleaning from the fallout from the carding machines, carpet trimmings, cardboard centres, jute backing rolls and timber pallets. All wastes destined for landfill, are stored in skips. Waste segregation and the feasibility for recycling are scheduled in the PD as objectives and targets.

Waste oil and fluorescent tubes will be sent for recovery.

4.5 Noise:

One complaint was received on 2/9/1999 from Waterford Corporation concerning noise from the Industrial Park. The complaint was sent to a number of IPC facilities in the area. Consequentially, the applicant conducted a noise survey. Results indicated that BATNEEC for the sector was being complied with. Accordingly noise limits have been set at the boundary in line with new plant BATNEEC. An annual noise survey requirement is also conditioned.

5. Submissions:

One submission was received and is summarised and commented on below:

South Eastern Health Board - 15 September 1999.

The Health Board received a complaint from Lismore Park Resident's Association regarding noise from the Industrial Park as a whole. The Board

carried out noise monitoring on a number of facilities to include Waterford Carpets. The monitoring did not indicate any noise nuisance from the facility. The Board recommend that appropriate limits be set and that EPA noise monitoring be carried out.

5.1 Comment:

See Section on Noise above. In addition, noise monitoring by the applicant has been built into the enforcement requirements and monitoring will be carried out by the Agency during routine monitoring visits to the facility.

6. Recommendations:

That the Board approve the proposed determination as submitted.

Patrick Geoghegan
Licensing & Control