
M E M O R A N D U M

DATE: 13 October 1998
TO: Each Board Member
FROM: Fiona McCoole
RE: Waterford Joinery Ltd. (Reg. No. 350)
Ballinamuck, Dungarvan, Co. Waterford.

Class of activity	8.3 The treatment or protection of wood, involving the use of preservatives, with a capacity exceeding 10 tonnes per day
Application lodged	14 October 1997
Submission from Dept. of the Marine & Natural Resources	3 December 1997
Article 11(2)(b)(ii) issued	10 December 1997, 8 May 1998
Article 11(2)(b)(ii) info received	11 March 1998, 7 July 1998, 27 August 1998
Article 10 compliance	27 August 1998
Site visits	8 October 1997; 5 August 1998; 19 August 1998.

Company:

Waterford Joinery manufacture flush doors, fire rated doors, external hardwood doors, windows, stairs and specialist joinery products. There is a Protim double vacuum Prevac plant on-site for the treatment of softwood joinery. The company employs 48 people. The operating hours of the sawmill are 8 am to 5 pm Monday to Friday.

Timber treatment process:

The Protim plant is an enclosed, purpose built, banded treatment plant, installed in 1978. The preserving fluid used is **Protim 210WR**, a mixture of hydrocarbon solvent, tributyltin oxide and lindane. Protim 210WR is listed as irritating and flammable and is classified as a List I substance under Directive 76/464/EEC on pollution caused by certain substances discharged into the aquatic environment.

Emissions to atmosphere:

There is currently one diesel boiler operating on-site, with a rating of 320 kW. An annual report on combustion efficiency is required as part of the AER. For gas-oil boilers with a rating between 120 - 650 kW, the stack height should be at least 1 m above roof, pointing upwards. Condition 5.3 requires that the licensee carry out an assessment to ascertain whether the existing stack height offers adequate dispersion for boiler emissions.

When the application was made, the company were operating two NIHOT boilers for burning sawdust, but these boilers have since been decommissioned.

Sawdust waste is extracted from the Flush Door Manufacturing Dept. to an area of open waste ground to the rear of the plant, known as "The Glen". Sawdust from the remainder of the plant is extracted and discharged through a cyclone silo to the Sawdust Collection House (see photos 1 & 2). Condition 8.3.8 requires that the company submit a proposal within nine months of the date of grant of licence for the combined extraction of sawdust from all areas of the site to a centralised, enclosed area. The company are already investigating this option and using an external contractor to come on-site to bale all sawdust waste for sale.

Process effluent emissions:

Wood adhesives (urea-formaldehyde resin + ammonium chloride hardener) are used in the Flush Door Manufacturing Section. All glue wastes are discharged to a sump. Aqueous wastes from the sump discharge to ground at The Glen. The sump is cleaned out approximately twice per year and the solid wastes are also disposed of to The Glen. According to the *Waste Catalogue and Hazardous Waste List* aqueous liquid waste containing adhesives and sealant (08 04 08) and hardened adhesives and sealants (08 04 04) are non-hazardous wastes. There are no other process effluent emissions from this facility.

Groundwater and Surface Water:

The wood treatment unit is totally enclosed and bunded and Condition 8.3.2 requires that the integrity be tested. All run-off from the treated timber is directed back to the sump area when the bogey holding the treated timber is withdrawn from the plant. After drying the treated timber is held in a roofed storage area.

Since making their application, the company have bunded and roofed the preservative bulk storage tank, and provided a hardstanding area with plinth walls for tanker loading. On a site visit it was noted that there is a drain from this hardstanding area which discharges to The Glen. Condition 8.3.6 requires that this drain be plugged at all times, except when discharging uncontaminated rainwater.

There is no formal surface water drainage system on-site. Roof waters are discharged directly to The Glen. The yard, apart from the tanker loading area, is unpaved with no formal gully collection. For this reason, and the fact that the site is upgradient of the River Colligan, Condition 8.2 Firewater Retention has been included in the PD.

The River Colligan runs behind Waterford Joinery. This river discharges to Dungarvan Harbour, which is a proposed Natural Heritage Area. Patrick Kilfeather (Southern Regional Fisheries Board) confirmed that there was no history of incidents at this site. Results of EPA physico-chemical monitoring upstream and downstream of the site for the period 1995 to date indicate satisfactory quality (the site is downstream of the last station to be sampled biologically). No surface water monitoring requirement has been included in the PD as there is no discharge of surface water directly to the River Colligan.

There are two septic tanks on-site. No details were provided on the date of installation of these tanks. There is no record of the tanks having been de-sludged to date. Condition 8.3.7 requires that the septic tanks be inspected every six months and de-sludged at least annually.

Noise

The PD stipulates that noise from the activity shall not exceed 55 dB(A) during day-time at noise sensitive locations, the limit specified in the *EPA Guidance Note for Noise for Scheduled Activities*. The facility is located in a cul-de-sac, with the nearest house >200 m away. There is no history of noise complaints.

Waste

Production waste, comprising joinery off-cuts, trimmed door lippings, waste plywood, sawdust, used sand belts, cardboard cartons, wrappings etc. is dumped on open ground in The Glen (see attached photos 3 & 4). No treated timber is disposed of to The Glen. Approximately 90 tonnes of waste are disposed of in this on-site landfill per year. Untreated timber off-cuts are collected by a subsidiary company, Gold Coast Holidays Ltd. and by the employees for home heating. Canteen/office waste is collected by Fennell Haulage & Waste Disposal Ltd. and disposed of at Dungarvan Dump. Under Condition 6.3 the company are required to provide segregation of waste to cease indiscriminate dumping of waste to The Glen. Under Condition 2.2.2 the EMP shall include as an objective recovery/recycling of production waste.

Small amount of lacquers, thinners and paints are used on site and *Schedule 1(i) Wastes for Disposal/Recovery* stipulates that empty chemicals containers must be returned to supplier or removed by hazardous waste disposal contractor.

While no hazardous wastes were listed on the IPC licence application, some non-routine hazardous wastes which may arise have been included in *Schedule 1(i) Wastes for Disposal/Recovery* and require that a hazardous waste disposal contractor be used.

Submissions

One submission was received, from the Department of the Marine and Natural Resources, on 3 December 1997. This submission requested:

1. *Total compliance with control technologies and ELV required by BATNEEC.*

The control technologies relevant to this facility have been included in the PD.

2. *Prevention of entry of preservative to surface water drains and foul sewers.*

Prevention of entry of preservative to drainage system will be achieved by the containment of all process vessels and bunding of storage tanks. All newly treated timber is held on the tracks leading from the treatment vessel for dripping, and this area is bunded. Integrity assessment of all bunds is required in the PD.

3. *Inclusion of a toxicity monitoring clause for the effluent discharge and full containment of wastes and raw materials at the time of issue of the licence.*

The aqueous discharges from the site are uncontaminated surface water and non-hazardous aqueous wastes from the glue sump, thus removing the requirement for a toxicity monitoring clause. Full containment of wastes and raw materials is currently achieved through bunding and roofing of the treatment area.

4. *Provision to divert all uncontaminated waters from the dripping area. Dripping areas should be roofed and covered to avoid rainfall ingress.*

The current process layout precludes exit of preservative contaminated storm water from the process area.

5. *Where the treatment process is operated at a sawmill, and there is the likelihood of large volumes of sawdust present at the site having the potential to enter waterways, leading to high suspended solids or blanketing of the river bed, a suspended solids monitoring regime shall be put in place and a suspended solids limit set down for any surface water emission prior to discharge to a watercourse.*

There is no surface water discharge to the River Colligan from this site.

Recommendation

It is recommended that the Board of the Agency approve the Proposed Determination as submitted.

Signed

Fiona McCooile
Inspector