



ANNUAL ENVIRONMENTAL REPORT 2012

For

Waterford Joinery Ltd.

IPC Licence P0350-01

(Document Number 1242-05 v1.00)

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Environmental Services for Industry Including –

- ▶ Air, Noise & Water Monitoring
- ▶ Bund Testing
- ▶ Environmental Management Systems to ISO 14001
- ▶ Air & Noise Modelling
- ▶ Energy & Water use reduction
- ▶ IPPC/Waste Licence Compliance
- ▶ EIS & Planning
- ▶ Occupation Dust & Noise

Affiliations & Accreditations

- ▶ ISO14001:2004 Registration No. 2012/1427
- ▶ MCERTS Certified personnel for stack testing
- ▶ Member of Source Testing Association
- ▶ Member Water Monitoring Association
- ▶ Member Environmental Services Association
- ▶ EMP1 Membership



QF 1. v2 Document Lead Sheet

Document Title	AER 2012
Project No.	1242
Document No.	1242-05 v1.00
Client	Waterford Joinery
Address	Ballinamuck, Dungarvan, Co. Waterford.

Issue	Status	Date	Author	Signed for and on behalf of	
				Environmental Efficiency	Client
1.00	Approved	01/05/2013	RD	<i>RSutcliffe.</i>	

Where it is a requirement that this report be issued to a regulatory or other authority, then the client should sign the appropriate place in the above table and, unless specifically agreed in writing to the contrary, forward copies to the appropriate authority (e.g. EPA).

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1. Introduction

1.1 Company Details

Company	Waterford Joinery Ltd.
Address	Ballinamuck
Town	Dungarvan
County / City	Waterford
Business	Joinery Manufacturer
Employees	8
Contact Name	Sean McGrath
Position	General Manager
Telephone	058 41417
Fax	058 42872

IPC Registration Number	P0350-01
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2. Site Description

2.1 Previous site histories

Prior to the establishment of Waterford Joinery at the current site, the 3 hectares of land on which it is situated was a green field area. Therefore there are no previous environmental impacts associated with the site.

2.2 Company background

The company has been in operation since 1965 and employs 8 people. Waterford Joinery produces timber products e.g. doors and frames in addition to speciality joinery products. The main hours of operation are 08:30 – 16:00, 3 days a week.

2.3 Description of equipment

The list below is a description of the major pieces of equipment on site:

- Saws
- Drying kiln
- Vacuum impregnation facility
- Boilers
- Air compressors

2.4 Manufacturing process

The manufacturing process is as follows:

- Timber which is prepared is delivered to our client's site.
- Timber sawing and planning is carried out.
- Some timber is dried in the kiln.
- Small amounts of timber, which are on order from customers, are treated with a preservative i.e. Protim, via a vacuum impregnation process, as follows:

1. Timber is loaded into the treatment vessel.
2. A vacuum is created in the vessel chamber.
3. The preservative enters the chamber and contact is maintained.
4. The fluid is pumped out.
5. The door is opened to remove the treated product.
6. The treated product remains in the bunded area whilst excess preservative drains off

- Adhesive resin and hardener are mixed together and applied to the doors via rollers. Waterford Joinery has decreased their Fire Door production which has significantly decreased the use of resins and hardeners in 2006.
- Doors enter heated press to cure adhesive.
- Finished product is placed on pallets and distributed to or collected by customers.

2.5 Company Organisation

Managing Director

John McGrath

General Manager

Sean McGrath

Environmental Officer / Safety Officer

Sean McGrath

Maintenance

John Dee

3. Summary Information

3.1 Self-Monitoring Data

3.1.1 Emissions to Waters/Sewer

The IPPC Licence requires no monitoring of emissions to waters/sewer.

3.1.2 Emissions to Atmosphere

The IPPC Licence requires no monitoring of emissions to the atmosphere.

3.1.3 Waste Management

The quantities and EWC Codes for the waste materials listed in Schedule 1 (i) Wastes for disposal/recovery: See Table below.

Table 3-1 Tonnages and EWC Codes for waste arising on-site

Waste	EWC No.	Hazardous (Yes/No)	Annual Quantity (kg)	Method of Disposal/Recovery	Location of Disposal/Recovery	Name of Transporter	Name of waste contractor
General mixed municipal waste	20 03 01	No	792 ^{Note 1}	Landfill	Gortnadroma, Limerick	Quality Recycling Ltd WCP-KK-10-545-01	Quality Recycling Ltd Facility facility –WFP-TS-10-0006-03
Recyclable mixed municipal wastes	20 03 01	No	528 ^{Note 1}	Recovery/recycle	Luddemore, Limerick Ballylynch, Carrick-on-Suir, Co. Tipperary	Quality Recycling Ltd WCP-KK-10-545-01	Quality Recycling Ltd Facility facility – WFP-TS-10-0006-03

Note 1: Waste is segregated at the transfer station at Quality Recycling Ltd. and sent on for either disposal or recovery (as appropriate). It is estimated that approximately 60% is destined for disposal and 40% is destined for recover

3.2 Agency Monitoring and Enforcement

During 2012 the Agency carried out 1 site inspection on the 22/11/2012. The details of the inspection are provided in Table 2.

Table 3-2 EPA Inspection summary

Date of Inspection	EPA Reference	Number of Non conformances	Number of observations
22 nd November 2012	P035-01/nc13jmcc	3	9

Table 3-3 Details of EPA non-compliances and observations for 2012

Date	Reference	Content
22/11/2012	P035-01/nc13jmcc	<p>Notification of Non-compliances/ Site Inspection Report</p> <ul style="list-style-type: none"> o Bunding: Non-compliance with Condition 8.3.1 <ul style="list-style-type: none"> (i) Drums containing oil stored outside of banded locations. (ii) Dry residues found in the treatment vessel bund. (iii) Significant amount of water found in the diesel storage tank bund. (iv) Glue residues/ water found in the glue mixing banded area. o Waste Records not adequately maintained : Non-compliance with Condition 6.6 <ul style="list-style-type: none"> (i) No Waste Collection Permits, Waste Permits or Licences of waste contractors stored on file. (ii) No information regarding ultimate destinations of waste arisings.

Date	Reference	Content
		<p>(iii) Waste quantities and codes not recorded.</p> <ul style="list-style-type: none"> ○ Drain near Protim back-up tank not plugged : Non-compliance with Condition 8.3.6 <p>Observations</p> <ul style="list-style-type: none"> ○ Boiler Efficiency: High levels of excess air were recorded during Boiler Efficiency monitoring. ○ Waste Storage/Housekeeping: Wood, metal and sawdust waste arisings have accumulated on-site. ○ Protim System Maintenance: Servicing records for the Protim treatment system have not been maintained ○ Surface Water Drainage: A site drainage map outlining site drainage details must be provided to the EPA. ○ Septic Tank not desludged annually: The Septic tank on-site is not desludged annually in accordance with Condition 8.3.7 of the IPPC licence. ○ Emergency Response Procedure: An incorrect EPA emergency contact number and incorrect fire emergency service details are listed on this document. This document must be updated appropriately. ○ AER: It is necessary to ensure the inclusion of resource use trends for the past number of years in AER's. It is also necessary to ensure the development of corrective actions for EPA Site Inspection Non-compliances and Observations. ○ Incidents and Complaints Record: No hard copy records of incidents/complaints have been maintained on-site. ○ No response to previous Site Inspection: Waterford Joinery Ltd did not respond to the previous Site Inspection Report for the facility issued by the EPA on 24/10/2011.

3.3 Corrective Actions for Non-compliances and Observations as specified in the Site Inspection Report

Table 3-4 Corrective Actions for Non-compliances

Category of Non-compliance	Issue	Corrective Action/s
Bundling	Drums containing oil stored outside of banded areas.	Ensure drum containers are stored in banded areas.
	Dry Residues found in the treatment vessel bund.	Empty bunds and recover/dispose of bund contents through appropriate hazardous waste operator.
	Significant amount of water found in the diesel storage tank bund.	Empty bunds and recover/dispose of bund contents through appropriate hazardous waste operator.
	Glue residues found in the glue mixing banded area.	Empty bunds and recover/dispose of bund contents through appropriate hazardous waste operator.
Waste Records	No waste collection permits, waste permits or licences kept on file.	Maintain current , signed and dated waste permit/licence documentation on-site
	No information kept on file relating to ultimate destination of waste arisings.	Maintain all waste records in accordance with Condition 6.6 of IPPC Licence (PO350-01).
	The quantities and European Waste Codes of waste arising on-site have not been recorded.	Maintain all waste records in accordance with Condition 6.6 of IPPC Licence (PO350-01).
Drain near Protim Back-up Tank not plugged	The drain on the concrete surface near the Protim back-up tank was not plugged	Ensure this drain is plugged at all times.

Table 3-5 Corrective Actions for Observations

Category of Observation	Issue	Corrective Action/s
Boiler Efficiency	High levels of excess air were recorded during boiler efficiency monitoring.	The boiler in operation on-site is required to be serviced to reduce excess air and improve efficiency. Further boiler efficiency monitoring will take place to ensure efficiency
Waste Storage	Wood, metal and sawdust waste has accumulated on-site	These materials must be recovered/disposed of using appropriate licensed waste operators. Housekeeping practices in relation to the storage of waste on-site must be improved.
Protim Maintenance Checks	Maintain an adequate record of servicing/maintenance work carried out on Protim/Osmose treatment vessel	Ensure all details relating to servicing/maintenance works carried out by Protim/Osmose are recorded and kept on file.
Surface Water Drainage	An inadequate amount of information regarding site drainage details has been provided to the EPA	Submit a site drainage map illustrating site drainage details (i.e. hardstanding areas, permeable areas, on-site tanks, drains, pipelines and the nearest receiving waters).
Septic Tank	The septic tank on-site has not been desludged annually	Ensure that the septic tank is desludged annually
Emergency Response Procedure	The EPA emergency contact number provided is incorrect. Incorrect fire emergency service details are provided.	Update emergency contact details in the Emergency Response Procedure for Waterford Joinery
AER's	The following should be included in future AER's; resource use trends, corrective actions for Non-compliances and Observations.	Ensure that this information is included in AER's in the future.
Incident and Complaints Record	No hardcopies of recorded incidents and complaints are kept on file on-site	A blank template to be used for the purpose of recording incidents and complaints will be developed.
Response to Site Inspection 24/10/2011	No response was given to last years site inspection	Must ensure appropriate response to site inspections as requested by the EPA.

4. Energy and Water Consumption

4.1 Energy Consumption for 2012

Table 4-1 Summary for energy consumption 2012

Source	Consumption 2012	Units
Electricity	111,244	kWh
Auto diesel	13,000	Litres
Gas oil	700	Litres

Table 4-2 Energy Consumption Trends

Source	2007	2008	2009	2010	2011	2012	Units
Electricity	441,129	415,051	139,770	110,660	126,622	111,244	kWh
Tractor diesel	17,960	24,127	28,012	0	0	0	litres
Auto diesel	32,398	20,797	23,294	20,455	39,253	13,000	litres
Kerosene	8,183	6,579	5,714	3,779	1,451	0	litres
Grade	0	0	0	0	0	0	litres
Lubricating oil	1,240	0	209	0	0	0	litres
Gas oil	0	0	24,708	25,342	3,526	0	litres

4.2 Water Consumption for 2012

Water Consumption Summary

Waterford Joinery uses no water in the company's operational process. Water is used for domestic related purposes only (e.g. kitchen & toilet facilities).

Table 4-3 Water Consumption Summary 2012

Water Consumption 2012	
m ³	240
€	673

Table 4-4 Water Consumption Trends

Units	Consumption 2007	Consumption 2008	Consumption 2009	Consumption 2010	Consumption 2011	Consumption 2012
m ³	Unknown	Unknown	Unknown	Unknown	Unknown	240
€	521	521	521	None	None	673

5. Environmental Incidents and Complaints

5.1 Environmental Incidents

There were no environmental incidents in the year 2012 as a result of activities originating at Waterford Joinery Ltd.

5.2 Complaints

There have been no complaints logged for 2012 as a result of the activities originating at Waterford Joinery Ltd.

6. Management of the Activity

6.1 Environmental Management Programme (EMP) Report

Table 6-1 Environmental Objectives and Targets for 2012

Objective reference number	Objective	Method	Target completion date
1	Septic Tank	Maintain a record of inspection of the septic tank onsite	Complete/Ongoing
2	Waste Records	Improve the retention and management of waste records onsite including waste licences and permits of all waste contractors	Ongoing
3	Emergency Response Procedure	Ensure Emergency Response Procedure is up to date including all emergency contact phone numbers	Ongoing

6.2 Schedule of Environmental Objectives and Targets

The following table is a schedule of objectives and targets that have been set out by Waterford Joinery Ltd for 2013, in order to reduce any environmental impacts and improve environmental practices.

Table 6-2 Environmental Objectives and Targets for 2013

No.	Licence Objectives	Target Date
1	Improve the retention and management of waste records onsite including waste licences and permits of all waste contractors	July/Ongoing
2	Ensure Emergency Response Procedure is up to date including all emergency contact phone numbers	July/Ongoing
3	Carry out periodic maintenance of bunded areas on-site	August/Ongoing
4	Plug drain near the Protim Back-up tank	June/Ongoing

6.3 Environmental Management Programme (EMP)

Below are all the objectives and targets listed above and the process by which they will be achieved.

Objective Number	OT1: Waste Records
Objective Title	Update copies of all waste licences and permits of all waste contractors employed by Waterford Joinery
Target	July and there after, on-going
Responsibility	Sean McGrath

Plan

Steps	Who	Target
• Review of all waste contractors used by Waterford Joinery	Sean McGrath	July
• Attain copies of waste collection permits and waste licences pertaining to all waste contractors	Sean McGrath	July
• Permits & licences to be reviewed annually to ensure they are up to date	Sean McGrath	July

Objective Number	OT2: Emergency Response Procedure
Objective Title	Ensure Emergency Response Procedure is up to date including all emergency contact phone numbers
Target	July
Responsibility	Sean McGrath

Plan

Steps	Who	Target
<ul style="list-style-type: none"> • Conduct a full review of the current Emergency Response Procedure. • Ensure amongst other things that all contact names and number are fully up to date • Review all emergency response procedures and carry out any amendments required to ensure the Emergency Response Procedure is up to date. • Review all materials used onsite and ensure all hazardous materials are identified. 	Sean McGrath	July

Objective Number	OT3: Bund Maintenance
Objective Title	Carry out periodic maintenance of bunded areas on-site
Target	August
Responsibility	Sean McGrath

Plan

Steps	Who	Target
Periodically, inspect bunded areas for the presence of leftover residues/liquids. Designate personnel to carryout bund inspections. Where dry residues or liquids are found, safely dispose of materials using a certified waste contractor.	Sean McGrath	August

Objective Number	OT4: Plug drain near Protim back-up tank
Objective Title	Plug drain near the Protim Back-up tank
Target	June
Responsibility	Sean McGrath

Plan

Steps	Who	Target
Plug drain near the Protim Back-up tank		
Carry out periodic visual inspections to ensure drain is plugged at all times	Sean McGrath	June

7. Licence-Specific Reports

7.1 Boiler efficiency

The combustion efficiency determination of the Wanson boiler was carried out on the 24-04-2013. The following table summarises the results for this test.

Table 7-1 Combustion efficiency results

Parameter	Result
Temperature °C	18.4
CO ppm	2.0
CO ₂ %	5.2
Excess Air %	194.9
Efficiency %	84
O ₂ %	13.8

In practice, air is supplied to the boiler beyond what is theoretically required for complete combustion: a certain amount of excess air has to be supplied to the burner to ensure full combustion and provide a safety factor. If not (i.e. lack of oxygen), incomplete combustion would result in unburnt or partially burnt fuel, thus result in emission of CO (highly toxic gas), inefficiency and fuel wastage. However, excess air is cooling the combustion chamber, carrying heat away into the flue thus reducing the efficiency. Therefore, the excess air level should not be too high either.

As a guideline, burners should be able to operate down to 15 % excess air with an upper limit of ca.20%, and measures should be taken to adjust the burner if CO₂ in the flue gases is less than ca.13% for oil. The excess value in this boiler is higher than the typical excess air guidelines. This can be explained by the fact that the boiler was not running on full load during the monitoring. This is because this boiler is not used frequently and was switched on for the monitoring.

7.2 Bund Integrity Assessment

The assessment was carried out on 20-06-2012. All bunds on-site passed the water-tightness test. The results are tabulated below. The report detailing the results of the test is Document 1121-06 v2.00.

Table 7-2 Summary bund inspection

Bund Ref.	Description	Adequate size	Suitable construction	Water Tightness Test or Assessment Method	Water Tightness Test or Assessment Result
Twin IBC Spill Pallet	Mobile Bund	Pass	Pass	Water integrity	Pass
2x spill Pallet	Mobile double Bund	Pass	Pass	Water integrity	Pass
Spill pallet	Mobile single Bund	Pass	Pass	Water integrity	Pass
Expansion Vessel	Metal bund, on roof			Water integrity	
Three Chamber Diesel tank bund	Mass concrete, three chamber bund, holding 2x diesel tanks	Pass	Pass	Water integrity	Pass
Thermal oil/Diesel tank bund	Central heating boiler bund,	Pass	Pass	Water integrity	Pass
Back up tank	Covered bund, close to Protum Vessel	Pass	Pass	Water integrity	Pass
Generator Tank	Roof top mass concrete bund along road way	Pass	Pass	Water integrity	Pass
Protum Vessel	Internal pressure treatment vessel	Pass	Pass	Water integrity	Pass

8. PRTR

The relevant PRTR excel sheets sent to the Environmental Protection Agency are provided in this section:

Facility ID and Activities

Sheet : Facility ID Activities

AER Returns Workbook

29/4/2013 10:6



Environmental Protection Agency

| PRTR# : P0350 | Facility Name : Waterford Joinery Limited | Filename : P0350_2012.xls | Return Year : 2012 |

[Guidance to completing the PRTR workbook](#)**AER Returns Workbook**

Version 1.1.16

REFERENCE YEAR 2012**1. FACILITY IDENTIFICATION**

Parent Company Name	Waterford Joinery Limited
Facility Name	Waterford Joinery Limited
PRTR Identification Number	P0350
Licence Number	P0350-01

Waste or IPPC Classes of Activity

No.	class_name
8.3	The treatment or protection of wood, involving the use of preservatives, with a capacity exceeding 10 tonnes of wood per day.

Address 1	Ballinamuck
Address 2	Dungarvan
Address 3	Co. Waterford
Address 4	
	Waterford
Country	Ireland
Coordinates of Location	-7.65117 52.1026
River Basin District	IESE
NACE Code	1610
Main Economic Activity	Sawmilling and planing of wood
AER Returns Contact Name	Sean McGrath
AER Returns Contact Email Address	waterfordjoinery@eircom.net
AER Returns Contact Position	Commercial Manager
AER Returns Contact Telephone Number	058 41417
AER Returns Contact Mobile Phone Number	0872785249
AER Returns Contact Fax Number	058 42872
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	8
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	General

3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

Is it applicable?	
-------------------	--

| PRTR# : P0350 | Facility Name : Waterford Joinery Limited | Filename : P0350_2012.xls | Return Year : 2012 | Page 1 of 2

Have you been granted an exemption ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4. WASTE IMPORTED/ACCEPTED ONTO SITE

[Guidance on waste imported/accepted onto site](#)

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	
--	--

This question is only applicable if you are an IPPC or Quarry site

Treatment and Transfer of Waste

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE (Part 18A (2)(2)(b) (Facility Name: Woodford Joinery Limited) (Reference: P0300_2012_06) (Return Year: 2012))

28/04/2013 10:10
6

Presses enter all quantities on this sheet in Tonnes

Transfer Destination	European Waste Code	Quantity (Tonnes per Year)	Hazardous	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Site Details: Name and Licence / Permit No. and Address of Final Recipient / Depositor (HAZARDOUS WASTE ONLY)	Site Details: Name and Licence / Permit No. and Address of Final Recipient / Depositor (HAZARDOUS WASTE ONLY)
						INC/E	Method Used			
Within the Country	20 03 01	526.0	No	mixed municipal waste	R13	E	Volume Calculation	Coffs in Ireland	Quality Recycling Ltd, WCP- KK-10-545-01 / WFP-TS-10-0005-03	Ballyhinch, Camkock-on-Suir, Co. Tipperary, Ireland
Within the Country	20 03 01	792.0	No	mixed municipal waste	D1	E	Volume Calculation	Coffs in Ireland	Quality Recycling Ltd, WCP- KK-10-545-01 / WFP-TS-10-0005-03	Gormatroma, Limerick, Ire and