



# ANNUAL ENVIRONMENTAL REPORT 2011

## For

## Waterford Joinery Ltd.

*IPC Licence P0350-01*

---

Email: [energy@iol.ie](mailto:energy@iol.ie) [www.enviro-consult.com](http://www.enviro-consult.com) Registered Office as above. Registered Number 243 412  
Directors: Noel J. McGrath Robert B. Sutcliffe

### 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

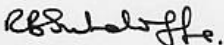
### Affiliations & Accreditations

- ▶ 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
- ▶ EMPI Membership



## QF 1. v2 Document Lead Sheet

Document Title	AER 2011
Project No.	1242
Document No.	1242-04
Client	Waterford Joinery
Address	Ballinamuck, Dungarvan, Co. Waterford.

Issue	Status	Date	Author	Signed for and on behalf of	
				Environmental Efficiency	Client
1.00	Approved	01/08/2012	GM		

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).

**EEC Project Manager:** Bob Sutcliffe, CEng, MIMechE

**EEC Document Author:** Gillian Mathews, BSc.Ag. MSc, H.Dip EIA  
Mgmt

**Conditions relating to the issue of this report:**

1. No alteration to this report by third parties is permitted
2. Where this report is reproduced, it shall only be reproduced in full.
3. Reports remain the property of Environmental & Efficiency Consultants (Ireland) Limited until paid for in full.

**Table of Contents**

1.	Introduction .....	4
1.1	Company Details .....	4
2.	Site Description .....	5
2.1	Previous site histories .....	5
2.2	Company background .....	5
2.3	Description of equipment .....	5
2.4	Manufacturing process .....	5
2.5	Company Organisation.....	6
3.	Summary Information .....	7
3.1	Self-Monitoring Data .....	7
3.1.1	Emissions to Waters/Sewer .....	7
3.1.2	Emissions to Atmosphere.....	7
3.1.3	Waste Management .....	7
3.2	Agency Monitoring and Enforcement.....	9
4.	Energy and Water Consumption .....	11
4.1.1	Energy Consumption for 2011 .....	11
4.1.2	Water Consumption for 2011 .....	11
5.	Environmental Incidents and Complaints .....	11
5.1.1	Environmental Incidents .....	11
5.1.2	Complaints .....	11
6.	Management of the Activity.....	12
6.1	Environmental Management Programme (EMP) Report.....	12
6.2	Schedule of Environmental Objectives and Targets .....	13
4.3	Environmental Management Programme (EMP).....	14
7.	Licence-Specific Reports .....	17
7.1	Boiler efficiency .....	17
7.2	Bund Integrity Assessment.....	18
8.	PRTR.....	18

## 1. Introduction

### 1.1 Company Details

<b>Company</b>	Waterford Joinery Ltd.
<b>Address</b>	Ballinamuck
<b>Town</b>	Dungarvan
<b>County / City</b>	Waterford
<b>Business</b>	Joinery Manufacturer
<b>Employees</b>	11
<b>Contact Name</b>	Sean McGrath
<b>Position</b>	General Manager
<b>Telephone</b>	058 41417
<b>Fax</b>	058 42872

<b>IPC Registration Number</b>	<b>P0350-01</b>
--------------------------------	-----------------

## **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 is no previous environmental impact associated with the site.

### **2.2 Company background**

The company has been in operation since 1965 and employs approximately 11 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 Monday to Friday.

### **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 planing 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 IPC Licence requires no monitoring of emissions to waters/sewer.

##### **3.1.2 Emissions to Atmosphere**

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

##### **3.1.3 Waste Management**

The tonnages and EWC Codes for the waste materials listed in Schedule 1 (i) Wastes for disposal/recovery: See Table below. Due to the economical downturn, the quantity of process waste has significantly decreased in 2011.

**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
<b>General mixed municipal waste</b>	<b>20 03 01</b>	<b>No</b>	<b>864</b> <sup>Note 1</sup>	Landfill	Gortnadroma, Limerick	O'Meara Waste Disposal WCP-KK-10-545-01	O'Meara Waste Disposal facility – WFP-TS-10-0006-03
<b>Recyclable mixed municipal wastes</b>	<b>20 03 01</b>	<b>No</b>	<b>576</b> <sup>Note 1</sup>	Recovery / recycle	Luddemore, Limerick Ballylynch, Carrick-on-Suir, Co. Tipperary	O'Meara Waste Disposal WCP-KK-10-545-01	O'Meara Waste Disposal facility – WFP-TS-10-0006-03

Note 1: Waste is segregated at the transfer station at O'Meara Waste Disposal 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 recovery



### 3.2 Agency Monitoring and Enforcement

During 2011 the Agency carried out 1 site inspection on the 24/10/2011. 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
24 <sup>th</sup> October 2011	P035-01/nc12bc.docx	2	5

**Table 3-3 Details of EPA non-compliances and observations for 2011**

Date	Reference	Content
24/10/11	P035-01/nc12bc.docx	<p><b>Notification of Non-compliances/ Site Inspection Report</b></p> <ul style="list-style-type: none"> <li>o Bunding: An integrity test of each bund on-site was not carried out within two years of the previous test.</li> <li>o Septic Tank: A record of inspection of the septic tank on-site is not being maintained.</li> </ul> <p><b>Observations</b></p> <ul style="list-style-type: none"> <li>o Bunding: Build up of liquid in the back-up Protim tank bund and diesel was building up in a pump tray and had spread onto the floor in the boiler house, indicating a leak at the pump.</li> <li>o AER: Waste records were inaccurate, Environmental Management Objectives within the Environmental Management Plan should be updated and accurate.</li> </ul>

Date	Reference	Content
		<ul style="list-style-type: none"><li>○ Emergency Response Procedures: The phone number of the EPA listed in the emergency response procedure was out of date.</li><li>○ Waste: Pallets and metal drums were stored on-site separate to the pile of timber trimmings.</li><li>○ Previous site inspection report (P0350-01\sm13eok dated 23/04/10) was not adequately responded to.</li></ul>

**Response to Non-compliances as specified in the Site Inspection Report**

- Bunding: An integrity test of each bund on-site was not carried out within two years of the previous test.

Bund integrity testing was carried out by Environmental Efficiency Consultants on 20-06-2012. All bunds passed the water-tightness test. The results are tabulated in Table 7-2. The report detailing the results of the test is Document 1121-06 v2.00.

- Septic Tank: A record of inspection of the septic tank on-site is not being maintained.

A record of inspection of the septic tank is being maintained by the licensee since this non-conformance was raised.

## 4. Energy and Water Consumption

### 4.1.1 Energy Consumption for 2011

**Table 4-1 Summary for energy consumption 2011**

Source	Consumption 2011	Units
Electricity	126,622	kWh
Auto diesel	39,253	Litres
Kerosene	1,451	Litres
Gas oil	3,526	Litres

### 4.1.2 Water Consumption for 2011

#### 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 4-2 Average daily water consumption per person**

Toilet	27 litres per person per day
Hand Wash	12 litres per person per day
Dish Wash	10 litres per person per day

Source: Global Action Plan Ireland

The number of employees in 2011 at Waterford Joinery was 11 personnel on site so an estimation of domestic water use per day using the figures in **Error! Reference source not found.** above would be 539 litres (0.54 m<sup>3</sup>) per day.

## 5. Environmental Incidents and Complaints

### 5.1.1 Environmental Incidents

There were no environmental incidents in the year 2011 as a result of activities originating at Waterford Joinery Ltd.

### 5.1.2 Complaints

There have been no complaints logged for 2011 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 2011**

No.	Licence Objectives	Target date	Progress
1	Ensure the proper segregation of waste and that all waste management practices are compliant with legislation and in agreement by the Agency.	Continuous	This is an on-going/continuous objective. The overall activity of the site has greatly reduced and thus the quantity of waste generated has also declined.
2	Revise and improve the sawdust management procedures on-site.	Ongoing 2012	The amount of sawdust has significantly decreased because of the reduction in activity. The sawdust is recycled as animal bedding at the moment.
3	Ensure the removal of the pile of timber trimmings every six months and outline to the Agency how this material will be used/disposed.	Ongoing 2012	The company was approached by 2 different sources interested in this material: i.e. one for using it as a fuel and one for using it as animal bedding. Thus this objective will be on-going for 2011.
4	Ensure appropriate storage of the glue wastes.	Ongoing 2012	All glues should be appropriately stored and disposed of.
5	Ensure the correct and designated storage of equipment around the site.	Ongoing 2012	Because of low level of trade, the instance of this is greatly reduced.
6	Carry out bund tests for all bunds	Achieved	Complete

## 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 2012, in order to reduce any environmental impacts and improve environmental practices.

**Table 6-2 Environmental Objectives and Targets for 2012**

<b>Objective reference number</b>	<b>Objective</b>	<b>Method</b>	<b>Target completion date</b>
<b>1</b>	<b>Septic Tank</b>	Maintain a record of inspection of the septic tank onsite	<b>Ongoing</b>
<b>2</b>	<b>Waste Records</b>	Improve the retention and management of waste records onsite including waste licences and permits of all waste contractors	<b>July 2012</b>
<b>3</b>	<b>Emergency Response Procedure</b>	Ensure Emergency Response Procedure is up to date including all emergency contact phone numbers	<b>August 2012</b>

### 4.3 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: Septic Tank
Objective Title	Maintain a record of inspection of the septic tank onsite
Target	Ongoing / Continuous
Responsibility	Sean McGrath

#### **Plan**

Steps	Who	Target
<ul style="list-style-type: none"> <li>Licensee to formulate an inspection procedure and inspection log specifically relating to the Septic tank</li> </ul>	Sean McGrath	July
<ul style="list-style-type: none"> <li>Licensee to designate personnel to undertake the inspection of the septic tank and brief designated personnel on requirements</li> </ul>	Sean McGrath	July
<ul style="list-style-type: none"> <li>Inspection to be undertaken at specified intervals and all inspections to be logged</li> </ul>	TBC	Ongoing
<ul style="list-style-type: none"> <li>Inspection logged to be reviewed bi-annually by Management</li> </ul>	Sean McGrath	December

<b>Objective Number</b>	OT2: Waste Records
<b>Objective Title</b>	Update copies of all waste licences and permits of all waste contractors employed by Waterford Joinery
<b>Target</b>	July and there after, on-going
<b>Responsibility</b>	Sean McGrath

### Plan

<b>Steps</b>	<b>Who</b>	<b>Target</b>
<ul style="list-style-type: none"> <li>Review of all waste contractors used by Waterford Joinery</li> </ul>	Sean McGrath	July
<ul style="list-style-type: none"> <li>Attain copies of waste collection permits and waste licences pertaining to all waste contractors</li> </ul>	Sean McGrath	July
<ul style="list-style-type: none"> <li>Permits &amp; licences to be reviewed annually to ensure they are up to date</li> </ul>	Sean McGrath	February 2013

Objective Number	OT3: Emergency Response Procedure
Objective Title	Ensure Emergency Response Procedure is up to date including all emergency contact phone numbers
Target	August
Responsibility	Sean McGrath

### **Plan**

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



## 7. Licence-Specific Reports

### 7.1 Boiler efficiency

The combustion efficiency determination of the Wanson boiler was carried out on the 20-06-2012 for the 2011 period. The following table summarises the results for this test.

**Table 7-1 Combustion efficiency results**

Parameter	Result
Temperature °C	25.0
CO ppm	41.0
CO <sub>2</sub> %	5.4
Excess Air %	186.0
Efficiency %	83.4
O <sub>2</sub> %	13.6

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 CO<sub>2</sub> in the flue gases is less than ca.13% for oil.

## 7.2 Bund Integrity Assessment

The assessment was carried out on 20-06-2012. All the above bunds 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**

<b>Bund Ref.</b>	<b>Description</b>	<b>Adequate size</b>	<b>Suitable construction</b>	<b>Water Tightness Test or Assessment Method</b>	<b>Water Tightness Test or Assessment Result</b>
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**

		PRTR#: P0350   Facility Name : Waterford Joinery Limited   Filename : P0350_2011.xls   Return Year : 2011	
		<a href="#">Guidance to completing the PRTR workbook</a>	
		<h1>AER Returns Workbook</h1>	
		Version 1.1.13	
<b>REFERENCE YEAR</b>		2011	
<b>1. FACILITY IDENTIFICATION</b>			
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			
	<b>No.</b>	<b>class_name</b>	
	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		
<b>AER Returns Contact Name</b>	Sean McGrath		
<b>AER Returns Contact Email Address</b>	waterfordjoinery@eircom.net		
<b>AER Returns Contact Position</b>	Commercial Manager		
<b>AER Returns Contact Telephone Number</b>	058 - 41417		
<b>AER Returns Contact Mobile Phone Number</b>			
<b>AER Returns Contact Fax Number</b>	058 - 42872		
<b>Production Volume</b>	0.0		
<b>Production Volume Units</b>			
<b>Number of Installations</b>	0		
<b>Number of Operating Hours in Year</b>	0		
<b>Number of Employees</b>	0		
<b>User Feedback/Comments</b>			
<b>Web Address</b>			
<b>2. PRTR CLASS ACTIVITIES</b>			
<b>Activity Number</b>	<b>Activity Name</b>		
50.1	General		
<b>3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)</b>			
Is it applicable?			
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 ?			

**Treatment and Transfer of Waste**

**5. ONSITE TREATMENT & OFFSITE T&O OF WASTE** (PRTFR: P0350) (Facility Name: Waterford Joinery Limited) (Filename: P0350\_2011.xls) (Return Year: 2011)

10/01/2012 16:

**Please enter all quantities on this sheet in Tonnes**

Transfer/Destination	European Waste Code	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Hsa.Waste: Name and Licence/Permit No of Next Destination Facility Hsa.Waste: Name and Licence/Permit No of Recover/Disposer	Hsa.Waste: Address of Next Destination Facility Mon.Hsa.Waste: Address of Recover/Disposer	Name and Licence / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery Disposal Site (HAZARDOUS WASTE ONLY)
					MIC/E	Method Used					
Within the Country	20 03 01	576.0	mixed municipal waste	R13	E	Volume Calculation	Offsite in Ireland	OTMeara Waste Disposal,W/CF-KK-10-545-01/ WFP-TS-10-0006-03	Baillyinch,Carriok-on-Suir,Co. Tipperary,Ireland		
Within the Country	20 03 01	864.0	mixed municipal waste	D1	E	Volume Calculation	Offsite in Ireland	OTMeara Waste Disposal,W/CF-KK-10-545-01/ WFP-TS-10-0006-03	Gortmadroma,,Limerick,,Ireland		