

PERMIT 102



**POLLUTION PREVENTION AND CONTROL ACT 1999
 POLLUTION PREVENTION AND CONTROL (ENGLAND AND
 WALES) REGULATIONS 2000
 PERMIT OF PROCESS**

THIS IS TO CERTIFY THAT the manufacture of timber and wood-based products
 at: **ARTFORM INTERNATIONAL LTD, BISHOP MEADOW ROAD,
 LOUGHBOROUGH, LE11 5TH**

National Grid Ref: SK523213

has been duly permitted in accordance with Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 subject to the conditions outlined in this document.

Name of Operator: ARTFORM INTERNATIONAL LTD
**Registered Office BISHOP MEADOW ROAD, LOUGHBOROUGH,
 LEICESTERSHIRE, LE11 5TH**

This Permit shall apply only to the premises occupied by the applicant, as specified and described in the Application for Permit submitted to the Borough of Charnwood. This Permit, consisting of 13 pages, shall be subject to replacement, variation or amendment, as may be considered appropriate by the Borough of Charnwood at any time, according to provisions of Regulations 12, 15, and 17 of the Pollution Prevention and Control (England and Wales) Regulations 2000

The conditions contained herein shall apply from the date of the Permit unless otherwise stated.

- Refer to Variation Notice Ref: 11/03 dated 24 October 2003
- Refer to Variation Notice Ref: 45/06 dated 25 July 2006
- Refer to Variation Notice Ref: 09/07 dated 22 February 2007

Signed on behalf of Charnwood borough Council
 Beverley Green, Specialist Environmental Health Officer
 (the delegated officer for the purpose)

Dated 22 February 2007 Counter-signed
 Ann Green

Directorate of Housing and Health, Environmental Health Southfields, Southfield Road, Loughborough
 LE11 2TX

PERMIT 102

**ARTFORM INTERNATIONAL LTD, BISHOP MEADOW ROAD,
LOUGHBOROUGH****I.0 Process Description****I.1 General Purpose of the Process****Purpose**

The purpose of the process is the processing of timber by sawing, planing and routing.

This process is included in Schedule I, Chapter 6, Section 6.6, Part B of the Pollution Prevention and Control (England and Wales) Regulations 2000.

I.2 Plant Detail

The premises are situated on Bishop Meadow Road, Loughborough as shown on Plan Ref. 1/102. The site layout is shown on the attached Plan Ref. 2/102.

The following plant is used in timber processing in the wood shop area:-

- CNC Routers
- Panel saws
- Manual Routers

Dust collection is achieved via an S and D chain filter unit.

I.3 Plant Operation**a) Raw Material**

MDF is purchased in packs of sheets. Thicknesses vary but the most common sizes are 9, 12, 15, 18 and 25mm.

The packs (weights of between 1 and 1.6T) are unloaded by fork lift truck in the yard/goods area (area A on plan 3/102) and loaded into the racking (area B on plan 3/102)

PERMIT 102

There are on average 30-35 shelf bays in use for this raw material storage covering approx. 525 m².

b) Machining Process

Packs of MDF are moved by fork lift truck to either the CNC Routers (area C on plan 3/102). Either cut panels or components are then produced at these machines. Further operations may be required on smaller panel saws and manual routers (area E on Plan 3/102).

Machined components are stored and when required are moved to the assembly area (area G on plan 3/102).

c) Wood Assembly Process

The component parts are joined together (area G on plan 3/102) to produce carcasses.

Pinning, screws, gluing, stapling and dowels carcass press are used to achieve this.

d) Dust Collection System

An S & D chain filter unit positioned inside the factory (area F on plan 3/102) housing 2300 sq ft of 350 gram polyester needle felt is used to collect the dust from the machining processes. A series of fans totalling approx. 14500 cfm connected to ductwork which in turn collects directly from the processing machines listed in 1.2 above, feeds dust into the filter unit.

The collected dust is then blown via a single 3800 cfm fan into one of two purpose-built filtered skips (area G on plan 3/102). The skips are sealed and house 16m².of filter material (again 350 gram polyester needle felt

e) Removal of Waste from Site

Artform have a contract with Biffa to collect and dispose of the wood process waste. In practice this means usually twice-weekly collections

PERMIT 102

swapping one 'filtered skip' for the other (area G on plan 3/102). The waste is disposed to landfill.

f) Emission Point

The actual emission point of air from the dust collection system is at the sock filters fitted to the filtered skips.

g) Maintenance and Control Systems

The following systems are in place to ensure the correct function and operation of the equipment:-

- 12 monthly LEV examination of the dust collection system by an approved outside contractor.
- 6 monthly service of the S & D chain filter unit by S & D Extraction.
- Daily-logged check of the integrity of the filtered skip and feeding pipe work (once in each day and night shift).
- Regular leak check of ductwork and equipment (weekly)
- Contact trip switch, which will automatically shut down the extraction unit in the event of a system failure.

The process flow is summarised on plan ref. 4/102

PERMIT 102

2.0 Monitoring Sampling and Measurement of Emissions

- 2.1 A visual inspection of external emission points, including, the wood particle extraction point, arrestment and storage system(s) shall be made on start-up of each shift for detecting leakage or abnormal emissions. An electrical trip switch fitted to the filter system shall shut down the system in the event of a break down. The extraction system cannot be used until the leak or abnormal emission has been rectified.
- 2.2 The operator shall keep a record of the following matters:
- (a) A list of key arrestment plant and a written procedure for dealing with its failure, in order to minimise any adverse effects.
 - (b) Inspections carried out under Condition 2.1
 - (c) Any maintenance or repair carried out on the systems specified in Condition 3.1.
 - (d) Any failure or malfunction or abnormal emission from the systems specified in Condition 3.1, the cause, and any remedial action taken.
- 2.3 The operator shall keep a record of the daily checks carried out on monitoring equipment required by condition 2.1 including an indication of whether or not the equipment is functioning correctly and any steps taken to ensure correct functioning.
- 2.4 The records required to be kept by condition 2.2 shall be kept by the operator on the premises and be made available for inspection by an authorised Officer of Charnwood Borough Council. The said records shall be kept for a period of not less than two years from the respective date of each event in relation to which the record was made. The said records will include the date and time of events required to be recorded and the name of the person completing the record.
- 2.5 The records required to be kept by condition 2.3 shall be kept in the same manner and for the same periods as specified in condition 2.4.
- 2.6 All emissions to air (other than steam or condensed water vapour) shall be free from droplets, persistent mist and fume.
-

PERMIT 102

- 2.7 When visible dust emissions are observed or when any malfunction or breakdown likely to lead to an escape of dust is found, then:
- (a) An immediate investigation shall be carried out.
 - (b) Prompt remedial action shall be taken.
 - (c) The observation, finding, result of investigation and remedial action taken shall be entered in the log book required by condition 2.2, and
 - (d) If the remedial action is not immediately effective then action to mitigate any effects shall be taken
- 2.8 Charnwood Borough Council shall be informed immediately by telephone if:
- (a) There is an emission that is likely to have an effect on the local community; or
 - (b) In the event of the failure of key arrestment plant, for example, bag filtration plant.

PERMIT 102

3.0 Process Controls

- 3.1 (a) All plant and machinery on which wood is sawn, drilled, sanded, shaped, turned or planed shall be fitted with efficient mechanical means for the extraction of wood particles.
- (b) All particulate matter extracted in accordance with condition 3.1(a) shall be transported, collected and stored by a mechanical system which is completely enclosed except at its final outlet.
- (c) The final discharge of the system shall be through a filter system such that particulate matter is efficiently removed from the air so discharged.
- 3.2 Arisings of wood waste must be stored in screened storage areas to prevent wind whipping, to the satisfaction of Charnwood Borough Council.
- 3.3 All wood dust arising on the premises must be stored in silos or other totally enclosed containers.
- 3.4 All containers for waste wood dust arising on the premises shall be fitted with fabric filters and side windows.
- 3.5 Wood waste shall be removed from site in totally enclosed containers to prevent the escape to air of particulate matter. No secondary transfer of waste shall be undertaken
- 3.6 A filter maintenance programme showing the timetable for replacement of filter media shall be prepared and submitted to Charnwood Borough Council. Filter media shall be replaced as necessary to ensure no visible emissions from the process and details of the replacement shall be recorded in the log required to be kept under 2.2 above.

PERMIT 102

4.0 Chimneys, Vents and Process Exhausts

- 4.1 The final discharge point from particulate matter arrestment plant provided for the purposes of complying with condition 3.1(c) must be at low level to the satisfaction of Charnwood Borough Council.
- 4.2 Process vents must not be fitted with any restriction at the final opening such as a plate, cap or cowl except where such a restriction has been specifically agreed in writing by Charnwood Borough Council.

PERMIT 102

5.0 General

- 5.1 Effective control of emissions requires the maintenance and proper use of equipment, and the proper supervision of process operations. Adequate preventive maintenance shall be employed on all plant and the equipment concerned with the control of emissions to the air.
- 5.2 A written maintenance programme shall be provided to Charnwood Borough Council with respect to pollution control equipment and a record of such maintenance shall be made available for inspection.
- 5.3 Essential spares and consumables, particularly those subject to continual wear, shall be held on site or be available at short notice.
- 5.4 Staff at all levels should receive the necessary formal training and instruction in their duties relating to control of the process and emissions to air. Particular emphasis should be given to:
- i. awareness of their responsibilities under this permit, with reference to bag breakages, arrestment plant failure, bag filter inspection procedures and start-up and shut procedure,
 - ii. minimising emissions on start up and shut down,
 - iii. action to minimise emissions during abnormal conditions.
- 5.5 Maintain a statement of training requirements for each operational post and keep a record of the training received by each person whose actions may have an impact on the environment. These documents shall be made available for inspection by representatives from Charnwood Borough Council on request.
- 5.6 A high standard of housekeeping shall be practised at all times.
- 5.7 All spillages shall be cleared as soon as possible by vacuum cleaning, wet methods or other appropriate techniques. Dry sweeping of dusty spillages is not permitted.

EXPLANATORY NOTES

These notes do not comprise part of Permit Serial No.102 but contain guidance relevant to the Permit.

1. You should note that Regulation 12(10) of the Regulations provides that in relation to any aspect of the process not regulated by conditions 1.1 to 5.7 the best available techniques ('BAT') shall be used for the purpose of preventing or, where that is not practicable, reducing emissions into the air.

Section 3(7) of the Regulations describes 'BAT' as meaning the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent and, where that is not practicable, generally to reduce emissions and the impact on the environment as a whole.

2. This Permit is issued under the Pollution Prevention and Control (England and Wales) Regulations 2000. The responsibility you have under legislation for Health, Safety and Welfare in the workplace remains in force. In addition, the Permit does not relieve you of your obligations to obtain planning permission, hazardous substances consent, discharge consent from the Environment Agency Building Regulations approval, or a Waste Disposal Licence.
 3. Any proposed 'change in operation' in the process (within the meaning of Regulation 2(1)) shall be notified to Charnwood Borough Council as required by Section 16(1) of the Regulations.
-