NORTH EAST LINCOLNSHIRE COUNCIL

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Permit with introductory note

Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended)

Installation address

Bennetts & CO (Grimsby) Ltd
Estate Road No.6
South Humberside Estate
Grimsby
DN31 2TG

Permit Reference: 200500003

Contact Details:

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Introductory note

This introductory note does not form a part of the Permit

The following Permit is issued under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended) (S.I.2000 No. 1973) ("the PPC Regulations") to operate an installation carrying out one or more of the activities listed in Part B to Schedule 1 of those Regulations, to the extent authorised by the Permit.

The permit includes conditions that have to be complied with. It should be noted that aspects of the operation of the installation which are not regulated by those conditions are subject to the condition implied by Regulation 12(10) of the PPC Regulations, that the Operator shall use the best available techniques for preventing or, where that is not practical, reducing emissions from the installation.

Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

Brief description and installation regulated by this permit

Process for the manufacture of timber and wood based as prescribed under Section 3.1A of schedule 1of the Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended)
Timber is brought into the mill on a side loader lift tractor from the storage areas, either open stacking or indoor storage. It is then lowered on to bearers by the side of the band or circular saw, wood is manually fed through the saws.
All sawdust created by the use of all cutting machines (saws, cutter heads, planning machines) is collected by a central extraction system and piped into a cyclone for collection and subsequent distribution directly into large containers ready for collection from the site.

Superseded Licences/Consents/Authorisations relating to this installation		
Holder	**Reference Number**	**Date of Issue**

Confidentiality

The Permit requires the Operator to provide information to North East Lincolnshire Council. The Council will place the information onto the public registers in accordance with the requirements of the PPC Regulations. If the operator considers that any information provided is commercially confidential, it may apply to North East Lincolnshire Council to have such information withheld from the register as provided in the PPC Regulations. To enable North East Lincolnshire Council to determine whether the information is commercially confidential, the Operator should clearly identify the information in question and should specify clear and precise reasons.

Variations to the permit

This Permit may be varied in the future. If at any time the activity or any aspect of the activity regulated by the following conditions changes such that the conditions no longer reflect the activity and require alteration, the Regulator should be contacted.

Surrender of the permit

Where an Operator intends to cease the operation of an installation (in whole or in part) the regulator should be informed in writing, such notification must include the information specified in regulation 20(3) of the PPC regulations.

Transfer of the permit or part of the permit

Before the Permit can be wholly or partially transferred to another person, a joint application to transfer the Permit has to be made by both the existing and proposed holders, in accordance with Regulation 18 of the PPC Regulations. A transfer will be allowed unless the Authority considers that the proposed holder will not be the person who will have control over the operation of the installation or will not ensure compliance with the conditions of the transferred Permit.

Responsibility under workplace health and safety legislation

This Permit is given in relation to the requirements of the PPC regulations. It must not be taken to replace any responsibilities you may have under Workplace Health and Safety legislation.

Appeal against permit conditions

Anyone who is aggrieved by the conditions attached to a Permit can appeal to the Secretary of State for the Environment, Food and Rural Affairs. Appeals must be made in accordance with the requirements of Regulation 27 and Schedule 8 of the PPC regulations.

Appeals should be received by the Secretary of State for Environment, Food and Rural Affairs. The address is as follows:

The Planning Inspectorate
Environmental Appeals Administration
Room 4/19 – Eagle Wing
Temple Quay House
2 The Square, Temple Quay
BRISTOL
BS1 6PN
Tel: 0117 372 8812
Fax: 0117 372 6093

Please Note

An appeal brought under paragraph (1) (c) or (d) in relation to the conditions in a permit will not suspend the effect of the conditions appealed against; the conditions must still be complied with.

In determining an appeal against one or more conditions, the Act allows the Secretary of State in addition to quash any of the conditions not subject to the appeal and to direct the local authority either to vary any of these other conditions.

End of introductory note

Permit issued under the Pollution Prevention and Control Regulations 2000

Permit : 200500003

Permit Number

North East Lincolnshire Council (the Regulator) in exercise of its powers under Regulation 10 of the Pollution Prevention and Control Regulations 2000 (S.I. 2000 No. 1973) hereby permits.

Bennetts & Co (Grimsby) Ltd ("the operator"),

Whose registered office is

Bennetts & Co (Grimsby) Ltd
Estate Road No6
South Humberside Estate
Grimsby
DN32 2TG

To operate an installation at

Bennetts & Co (Grimsby) Ltd
Estate Road No6
South Humberside Estate
Grimsby
DN32 2TG

to the extent authorised by and subject to the conditions of this Permit and within the boundary identified in condition A

Signed

Tony Neul
Authorised to sign on behalf of
North East Lincolnshire Council

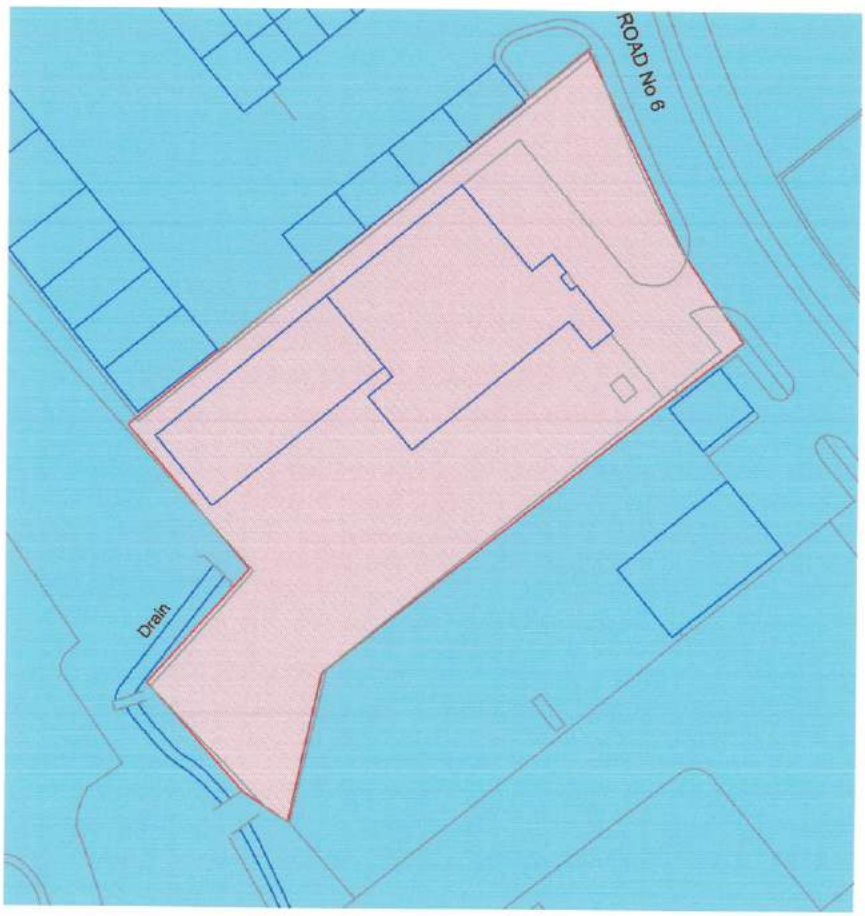
Dated

20/6/05

CONDITIONS

Extent and limit of the installation

A The operator is authorised to carry out the activities and/or associated as specified and within the boundary shown in red on the plan below:-



DESCRIPTION OF AUTHORISED PROCESS

Process for the manufacture of timber and wood based as prescribed under Section 3.1A of schedule 1of the Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended)
Timber is brought into the mill on a side loader lift tractor from the storage areas, either open stacking or indoor storage. It is then lowered on to bearers by the side of the band or circular saw, wood is manually fed through the saws.
All sawdust created by the use of all cutting machines (saws, cutter heads, planning machines) is collected by a central extraction system and piped into a cyclone for collection and subsequent distribution directly into large containers ready for collection from the site.

The extraction system is manufactured by Ivent Air of Bridlington. The system is fully automatic.

5 Emission limits, monitoring and other provisions

Row	Total particulate matter	Emission limits / provisions	Type of monitoring	Monitoring frequency
1	Whole Site	No visible emission	Visual observations Particular attention should be paid to areas where vehicles are filled with wood waste and wood dust.	On start-up, and on at least two more occasions during the working day
2	Arrestment plant (not cyclones) designed with exhaust flow rate >300 m^3/min	No visible emission	Visual observations	On start-up, and on at least two more occasions during the working day.
3	Arrestment plant (not cyclones) designed with exhaust flow rate <300 m^3/min	No visible emission	Visual observations	At least daily
4	Cyclones	No visible emission	Continuous indicative monitoring devices with visual and audible alarms which activate on cyclone malfunction and which indicate e.g. blockages. (Data logging should not normally be necessary).	Continuous to show arrestment equipment is functioning correctly.
5	Combustion processes (refer to paragraph 5.4)	No visible smoke and not exceed Ringlemann Shade 1 as described in BS 2742:1969	Visual observations	On start-up, and on at least two more occasions during the working day

Row	Droplets, persistent mist and fume	Emission limits / provisions	Type of monitoring	Monitoring frequency
6	All emissions to air (other than steam or condensed water vapour) (refer to paragraph 5.4)	no droplets, no persistent mist, and no persistent fume	Visual observations	On start-up, and on at least two more occasions during the working day

Monitoring, investigations and recording

5.2 The operator will keep records of inspections, tests and monitoring, including all non-continuous monitoring, inspections and visual assessments. The records should be:

- Kept on site
- Kept by the operator for at lease two years; and
- Made available for the regulator to examine

Information required by the regulator

5.3 The operator will provide a list of key arrestment plant and should have a written procedure for dealing with its failure, in order to minimise any adverse effects.

- The operator will notify the regulator at least 7 days before any periodic monitoring exercise to determine compliance with emission limit values. The operator should state the provisional time and date of monitoring, pollutants to be tested and the methods to be used.

- The results of non-continuous emission testing will be forwarded to the regulator within 8 weeks of the completion of the sampling.

- Adverse results from any monitoring activity (both continuous and non-continuous) will be investigated by the operator as soon as the monitoring data has been obtained / received. The operator will:

    - Identify the cause and take corrective action
    - Record as much detail as possible regarding the cause and extent of the problem, and the action taken by the operator to rectify the situation
    - Re-test to demonstrate compliance as soon as possible; and
    - Notify the regulator

Visible emissions

5.4 Visible emissions will be limited and monitored as follows. Abnormal emissions require action as described in paragraph 5.5

- Emissions from combustion processes will in normal operation be free from visible smoke and in any case should not exceed the equivalent of Ringelmann Shade 1 as described in British Standard BS 2742: 1969. All reasonably practicable steps should be taken to minimise the duration and visibility of emissions during start-up and shut down, and changes of fuel or combustion load.

- Visual assessments of external emission points will be made on at least three occasions throughout the day (if no illumination, this should be done during day light hours). One of these assessments should be carried out at the start-up of the plant, and if there are multiple shifts involving start up it is preferable that the 3 visual assessments are all undertaken at start-up. These assessments are not likely to be needed where continuous indicative monitors are installed in accordance with paragraph 5.7. The time, location and result of these assessments should be recorded.

- Visual assessments of fugitive sources of dust emissions should be made at start up and on at least two occasions during the day.

- Where, in the opinion of the regulator, there is evidence of airborne dust / particulate matter from the process off the site, the operator should make their own inspection and assessment, and where necessary undertake ambient monitoring with the aim of identifying those process operations giving rise to the dust/ particulate matter.

  The monitoring may either be by a British Standard method or by a method agreed with the regulator. In these situations, determination of wind direction may be required. Once the source of the emission is know, corrective action should be taken without delay.

  - All releases to air, other than condensed water vapour, will be free from persistent visible emissions.

  - All emissions to air will be free from droplets.

Abnormal events

5.5 In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions the operator will:

- Investigate and undertake remedial action **immediately**
- Adjust the process or activity to minimise those emissions; and
- Promptly record the events and actions taken

The regulator will be informed without delay:

- If there is an emission that is likely to have an effect on the local community; or

- In the event of the failure of key arrestment plant, for example, bag filtration plant or cyclones (where cyclones remain acceptable)

Continuous monitoring

5.6 Continuous indicative monitoring can be used as a management tool. In conjunction with continuous recording it identifies any trends in emissions, for example, that emissions are gradually increasing, which may indicate a need for maintenance. It can also be used with or without continuous recording to trigger an alarm when there is a sudden increase in emissions; for example, if arrestment plant fails. For a given concentration of particulate matter, the outlet level varies with the instrument. It should be noted that not all minors provide a linear response to an increase in particulate matter. The monitor should be set up to provide a baseline output when the plant is know to be operating under the best possible condition; i.e. such that emissions are fully compliant with the requirement – no visible emission. The alarms are activated in response to any significant increase in particulate loading above the baseline, so that warning of the changed state is given before an unacceptable emission occurs.

5.7 Where continuous monitoring is required, it will be carried out as follows:-

- All continuous monitoring readings will be on display to appropriately trained operating staff.
- Instruments will be fitted with audible and visual alarms, situated appropriately to warn the operator of arrestment plant failure of malfunction.
- The activation of alarms will be automatically recorded.
- All continuous monitors will be operated, maintained and calibrated (or referenced) in accordance with the manufacturers' instructions, which should be made available for inspection by the regulator. The relevant maintenance and calibration (or referencing) will be recorded.
- All new continuous monitoring equipment should be designed for less than 5% downtime over any 3 month period.
- All continuous indicative monitoring instruments will be checked daily, for example by zero checking and confirmation of continued satisfactory operation. Regulators should consider whether it is appropriate in cases where continuous indicative monitoring is required, to specify continuous recording.

Arrestment plant maintenance

5.8 Fabric Filters

- A filer maintenance programme showing the timetable for replacement of filter media should be submitted to the regulator for approval.

- Where process exhausts are fitted with a suitable continuous indicative monitoring device attached to data logging equipment the data can be used as an alternative to the filter maintenance programme to instigate the replacement of filter media.

- Filter media should be replaced as follows:

  (a) as necessary to ensure no visible emissions from the process; and

  (b) in accordance with the approved filter maintenance programme or if data logging equipment is being used when the results show an unacceptable deterioration in filter media efficiency.

- Details of filter media replacement should be recorded (refer to paragraph 5.2)

Table 3: Filter maintenance programme

Row	Arrestment plant exhaust flow rate design capacity	Inspection and replacement frequency
1	Where arrestment plant is designed with exhaust flow rate >300m³/min	• Visual assessments of emission points on start-up, and on at least two more occasions during the working day (Table 2, Row 2) and visual inspection of the arrestment plant at least once a month. • Routine replacement of filter media every 4 years (Note 1) unless continuous indicative monitoring provides evidence that such regular replacement is unnecessary, in which case replacement of defective filter media as found necessary and supported by the monitoring evidence.
2	Where arrestment plant is designed with exhaust flow rate <300m³/min	• Visual assessments of emission points at least daily (Table 2, Row 3) and visual inspection of the arrestment plant at least once a month. • Replacement of defective filter media as necessary • Routine replacement if filter media every 4 years (Note 1)

Cyclones

5.9 The use of cyclones should only be permitted in accordance with paragraph 6.3 (refer to Table 2 for emissions limits / provisions and monitoring provisions).

Varying monitoring frequency

5.10 The monitoring that is required is to demonstrate correct functioning of the arrestment plant. In this context it is not appropriate that reduced monitoring be applied.

5.11 Exhaust flow rates should be consistent with efficient capture of emissions, good operating practice and meeting the requirements of the legislation relating to the workplace environment.

5.12 The frequency of testing should be increased, for example, as part of the commissioning of new or substantially changed processes, or where emission levels are near to or approach the emission concentration limits.

6. Control Techniques

Summary of best available techniques

6.1 The following table provides a summary of the best available techniques that can be used to control the process in order to meet the emissions limits and provisions in Section 5. Provided that it is demonstrated to the satisfaction of the regulator that an equivalent level of control will be achieved, then other techniques may be used.

Table 4: Summary of control techniques

Release source	Substance	Control techniques
Whole train of process equipment	Particulate matter	Containment policy i.e. containment at source (refer to paragraph 6.4)
Machining operations i.e. sawing, drilling, sanding, shaping, turning		Arrestment plant – bag filters (usually preferred – refer to Table 1 and paragraph 6.3) - cyclones
Transfer and handling of wood dust and wood particles		Containment - pneumatic or enclosed handling systems - enclosed containers - enclosed transfer points
Trailers and other transport		Containment - enclosed trailers - correct management of vehicle filling operations - minimise vehicle movement where possible
External operations, e.g. - debarking - arrestment outlets - conveyors - loading and unloading operations - conveyor drop points		Appropriate sitting and site layout - away from residential areas - away from other sensitive locations - reduce drop heights to a minimum - screened storage areas

Techniques to control emissions from contained sources

6.2 Particulate matter i.e. wood dust and wood particles that may become wind-entrained should be collected and ducted to suitable arrestment plant. All arrestment plant should be designed to prevent visible emissions. (See Table 2)

Arrestment plant

6.3 Two types of arrestment plant commonly used in the timber / wood processing industry are:

- Fabric filters and
- Cyclones

In most circumstances fabric filters of an appropriate specification or a combination of cyclones in line with fabric filters, or cyclone-filters should be fitted in preference to cyclones as they are significantly more efficient for the control of emissions of wood particles.

However, as the moisture content of the material processed increases fabric filters will begin to clog, reducing both their efficiency and lifespan, and requiring more maintenance.

Cyclones may remain acceptable in the following scenarios:

(a) in circumstances when wood is processed for which the water content is above 20% of the solid content by weight, the particulate matter produced tends to be large wood particles and the high water content may damage filter fabric. In these circumstances cyclones are likely to remain acceptable, provided that no other timber is worked, or provided that only very minor amounts of such timber are worked on an occasional basis;

(b) In cases where arrestment plant only serves operations which produce emissions mainly comprising large particles; and

(c) In cases where a process is undertaken at a location well away from housing or other populated areas.

Techniques to control fugitive emissions

Materials handling

6.4 The transportation and handling of wood dust and wood particles should be carried out using pneumatic or enclosed handling systems. Such systems should be visually inspected regularly to identify damaged or worn ductwork and any build up of wood dust or wood particles around ducting, for example, on the floor, in gutters or on other equipment should be removed and the source of the fugitive emission repaired.

- Displaced and transport air from automated handling systems should be vented to suitable arrestment plant.
- Transfer points should be enclosed and ducted to suitable arrestment plant.
- When wood dust is moved using site transport, it should be held in enclosed containers.
- Silos for wood dust which are charged pneumatically should be vented to air through suitable arrestment plant, for example a fabric filter.

- Storage silos and fixed containers should be equipped with audible or visual high level alarms to warn of over filling. The correct operation and use of alarms should be checked at least once a week.

- Wood dust should be stored in silos or other enclosed containers.

- Loading of wood dust and wood particles onto vehicles prior to removal from site should be done in such a way as to minimise the escape to air of particulate matter.

- Waste should be removed from site in totally enclosed containers to minimise the escape to air of particulate matter. Where vehicles are filled directly from the arrestment plant, the extraction system should be turned off or a discharge pipe should be fitted with a two-way valve so that vehicles can be changed over without emissions occurring. Either vehicle should be fitted with side windows or, where these are not fitted, rotary or optical drop out sensors equipped with alarms to warn of over-filling should be used.

Spillage control

6.5 All spillages should be cleared as soon as possible by vacuum cleaning, wet methods, or other appropriate techniques. Dry sweeping of dusty spillages should not be permitted.

- A high standard of housekeeping should be maintained.

Air Quality

Ambient air quality management

6.6 In areas where air quality standards or objectives are being breached or are in serious risk of breach and it is clear from the detailed review and assessment work under Local Air Quality Management that the Part B process itself is a significant contributor to the problem, it may be necessary to impose tighter emission limits.

6.7 Process vents should not be fitted with any restriction at the final opening such as a plate, cap or cowl, with the exception when such a device forms an integral part of the correct operation of arrestment plant, for example, in the case of a cyclone.

Management

Management techniques

6.8 Important elements for effective control of emissions include:

- Proper management, supervision and training for process operations;
- Proper use of equipment
- Effective preventative maintenance on all plant and equipment concerned with the control of emissions to the air; and
- It is good practice to ensure that spares and consumables are available at short notice in order to rectify breakdowns rapidly. This is important with respect to arrestment plant and other necessary environmental controls. It is useful to have an audited list of essential items.
- Spares and consumables – in particular, those subject to continual wear – should be held on site, or should be available at short notice from guaranteed local suppliers, so that plant breakdowns can be rectified rapidly.

Appropriate management systems

6.9 Effective management is central to environmental performance; it is an important component of BAT and of achieving compliance with permit conditions. It requires a commitment to establishing objectives, setting targets, measuring progress and revising the objectives according to results. This includes managing risks under normal operating conditions and in accidents and emergencies. It is therefore desirable that processes put in place some form of structured environmental management approach, whether by adopting published standards (ISO 14001 or the EU Eco Management and Audit Scheme (EMAS) or by setting up an environmental management system (EMS) tailored to the nature and size of the particular process. Operators may also find that an EMS will help identify business savings.

Training

6.10 Staff at all levels need the necessary training and instruction in their duties relating to control of the process and emissions to air. In order to minimise risk of emissions, particular emphasis should be given to control procedures during start-up, shut down and abnormal conditions.

Training may often sensibly be addresses in the EMS referred to above.

- Training of all staff with responsibility for operating the process should include:
    - Awareness of their responsibilities under the authorisation / Permit, in particular, notification to regulator in accordance with paragraph 5.5, for example, bag breakage, arrestment plant failure, bag inspection procedures and start-up shut down procedures.
    - Minimising emissions on start up and shut down.
    - Action to minimise emissions during abnormal conditions.
- The operator should 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 should be made available to the regulator on request.

Maintenance

6.11 A written maintenance programme will be provided to the regulator with respect to pollution control equipment; and

- A record of such maintenance will be made available for inspection.

END OF PERMIT.