PERMIT REFERENCE: PPC 045
Burbidge and Sons Ltd

Pollution Prevention and Control Act 1999
Pollution Prevention and Control (England and Wales) Regulations 2000 as amended

| Process Address       | Awson Street
<table>
<thead>
<tr>
<th></th>
<th>Coventry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Type</td>
<td>Coating</td>
</tr>
</tbody>
</table>
| Current Operator      | Burbidge and Sons Ltd
|                      | Burnsall Road
|                      | Canley   |
|                      | Coventry |
|                      | CV5 6BS  |
| Previous Operator     | n/a      |
| Date of Application   | 1st April 2004 |
| Date Permit Issued    | 8th March 2005 |
Coventry City Council ("the Council") in accordance with Section 10(2) of the Pollution Prevention & Control (England and Wales) Regulations 2000 ("The Regulations"), hereby permits:

Burbidge & Son Ltd

Whose registered office is:

Burbidge & Son Ltd
Burnsall Road
Canley
Coventry
CV5 6BS
Registered in England, No: 376700

to operate a Part B installation involving a coating activity, as prescribed in Section 6.4 Part B of Schedule 1 to The Regulations, at:

Burbidge & Son Ltd
Awson Street
Coventry

The permit is subject to the conditions specified in this document consisting of 12 pages and comprising documents A, B and C, plans PPC/045/A, PPC/045/B and Appendix 1.

Signed.......................................................

Alan Bennett, Head of Environmental Health
A person authorised to sign on behalf of the Council

Dated …….8/03/05.................................
**SCOPE**

The installation comprises not just any relevant unit carrying out a Part B activity listed in Schedule 1 to the Regulations, but also directly associated activities which have a technical connection with that activity and which could have an effect on pollution.

All pollutant concentrations shall be expressed at reference conditions of 273K and 101.3kPa, without correction for water vapour content.

Technical Guidance documents used in the preparation of this document:

- Secretary of States Guidance Note PG6/33(04) – Wood Coating

**LEGISLATION**

2. Pollution Prevention and Control Regulations 2000 as amended, schedule 1 as amended
BRIEF DESCRIPTION OF THE INSTALLATION REGULATED BY THIS PERMIT

Definitions referred to in this permit

- **Activity** is an industrial activity forming part of an installation. Different types of activity are listed within Schedule 1 of the PPC Regulations and are broadly broken down into industrial sectors. Other “associated” activities may also form part of an installation.

- **Installation** comprises not just any relevant unit carrying out a B activity listed within Schedule 1 to the PPC Regulations, but also directly associated activities which have a technical connection with a schedule 1 activity and which could have an effect on pollution.

- **Operator** is the person (eg a company or individual) who has control over the operation of an installation.

- **Volatile organic compound (VOC)** shall mean any organic compound having at 293K a vapour pressure of 0.01 kPa or more, or having a corresponding volatility under the particular conditions of use.

- **Organic solvent** shall mean any VOC which is used alone or in combination with other agents, and without undergoing a chemical change, to dissolve raw materials, products or waste materials, or is used as a cleaning agent to dissolve contaminants, or as a dissolver, or as a dispersion medium, or as a viscosity adjuster, or as a surface tension adjuster, or a plasticiser, or as a preservative.

- **Stack** includes structures and openings of any kind from or through which substances may be emitted to air.

- **Duct** includes enclosed structures through which gaseous substances may be conveyed.

- **Process vent** includes open terminations of ducts.

- **Authorised Officer** shall mean an officer authorised to carry out duties under the Pollution Prevention and Control Act 1999 and subordinate regulations

- **Logbook** shall mean any electronic or paper means of storage of the required information as agreed by the regulator

- **Local Authority** shall mean Coventry City Council

- **"m"** means metre

- **"m/s"** means metres per second

The general location of the Permitted Process is shown on the attached plan PPC/045/A in addition to the Installation boundary that is marked in red. The internal layout of the premises is shown on the attached plan PPC/045/B.

**Description of Installation**

This permit is for the bonding and coating of wood components.

- The process begins with the delivery and storage of lacquers, primers, stains, adhesives and diluents which prior to use are kept in the store.

- Wooden components are then sprayed with the relevant product. The spraying is undertaken in either 1 of 5 spray booths fitted with dry backed filtration equipment or on an automatic spray line. Spraying in the booths is
done using high volume low pressure spray guns and those sprayed on the automatic line are processed using assisted airless guns followed by the curing of components by ultraviolet in an ecolight oven.

**Table 1**
List of Process Areas within the Installation and Associated Emission Points, Pollutants of Concern and Abatement Plant Required

<table>
<thead>
<tr>
<th>Row Number</th>
<th>Area/Machinery Identification</th>
<th>Pollutants Emitted</th>
<th>Emission Limit in Permit</th>
<th>Abatement Plant Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Spray Booths 1 to 5.</td>
<td>Particulates, Volatile Organic Compounds</td>
<td>Total Particulate Matter – 50mg.m³, Volatile Organic Compounds – 50mg/m³</td>
<td>Dry Filtration</td>
</tr>
<tr>
<td>2</td>
<td>Automatic Spray Line - Stain Cabs</td>
<td>Particulates, Volatile Organic Compounds</td>
<td>Total Particulate Matter – 50mg.m³, Volatile Organic Compounds – 50mg/m³</td>
<td>Dry Filtration</td>
</tr>
</tbody>
</table>
DOCUMENT B

CONDITIONS

All conditions shall have immediate effect unless stated otherwise.

1.0 EMISSION LIMITS AND CONTROLS

1.1 All emissions to air, other than steam or water vapour should be colourless and free from persistent mist. All emissions to air should be free from persistent fume and free from droplets.

1.2 The following concentrations of emissions to atmosphere shall not be exceeded;
   (a) Total Particulate Matter from spray booths 1 to 5 and the Automatic spray line 50mg/m$^3$
   (b) Volatile organic compounds from spray booths 1 to 5 and the Automatic spray line expressed as total carbon excluding particulate matter as a 30-minute mean 50 mg/m$^3$

1.3 The introduction of dilution air to achieve the emission concentration limits specified in Clause 1.2 above is not permitted.

1.4 There shall be no emissions of particulate matter noticeable beyond the installation boundary.

2.0 MONITORING, SAMPLING AND MEASUREMENT OF EMISSIONS

2.1 Emissions from the spray booths and automatic spray line shall be tested at least once a year for particulates and once every two years for volatile organic compounds to demonstrate compliance with clauses 1.2.

2.2 A detailed record shall be kept of all organic solvents used in the prescribed processes. This shall include cleaning solvent usage, diluent solvent usage and solvents contained within coatings used. This inventory shall be forwarded to the local Authority at least once every twelve months and shall include a determination for the total organic solvent usage for that period.

2.3 The enforcing authority shall be informed at least 7 days in advance of any periodic monitoring exercise carried out to comply with clause 1.2 above. Notification shall include the provisional date of monitoring, the methods to be used and pollutants to be tested for.

2.4 The results of all periodic monitoring and inspections shall be recorded in a log book which shall be retained on site for a minimum of two years after the date of the last entry, and made available on demand by the enforcing authority inspector.
2.5 Adverse results from periodic monitoring and inspections shall be investigated immediately and corrective action instigated. Details of such action shall be recorded in the log book.

2.6 The enforcing authority shall be informed within 7 days of any emission concentration that exceed the limits specified in clause 1.2 above. If any emission concentration is more than twice the limit the enforcing authority shall be informed immediately or at least within one working day.

2.7 The results of all periodic monitoring shall be forwarded to the enforcing authority within 8 weeks of the completion of the exercise.

3.0 OPERATIONAL CONTROLS

3.1 The cleaning of spray guns and other equipment shall only be carried out in the enclosed gun wash machine that is vented into spray booth number 1. This should only be undertaken while the spray booths are in proper working order.

3.2 Spray gun testing, following cleaning shall only be carried out in the spray booths. This shall only be undertaken while the spray booths are in proper working order.

3.3 Spraying shall only be carried out in the spray booths and these must be in proper working order.

3.4 The manometers serving spray booths 1, 2, 3, 4 and 5 shall be checked on a daily basis and the results recorded on the log sheet to ensure that the dry particulate filters are operating effectively.

3.5 All full, partially full and nominally empty containers which hold or have held materials which contain organic solvents must be stored in the store room, as shown on plan PPC/045/B, and have lidded containers.

4.0 STACKS, DUCTS AND PROCESS VENTS

4.1 Emissions from the spraying of coatings in spray booths 1, 2, 3, 4 and 5 shall only be emitted to atmosphere via the dry backed filter system.

4.2 Emissions from the spraying or curing of coatings from the automatic line shall be emitted to the air via the proper process exhaust.

4.3 The height of the final discharge points from spray booths 1 to 5, and the automatic line shall be a minimum of 3m above the roof ridge. The efflux velocity shall be at least 15 m/sec.

4.4 Process vents shall not be fitted with any restriction, such as a cap, cowl, or plate, at their final opening.

5.0 GENERAL OPERATIONS
5.1 The operator shall undertake regular cleaning and preventative maintenance including inspection and repair/replacement on all plant and equipment concerned with the emission, capture, transport and control of emissions to atmosphere. Where necessary manufacturers guidelines shall be used to determine the regularity of maintenance. Records of preventative maintenance including inspections and any works undertaken shall be kept on site and made available to the local authority inspector on request.

5.2 Spares and consumables for plant and equipment used in the installation in particular that subject to continual use or wear shall be held on site or shall be available at short notice. Such plant or equipment shall not be used unless that plant or equipment is capable of working in accordance with the conditions of this permit.

5.3 Staff at all levels shall receive the necessary training and instruction in their duties relating to control of the activities and emissions to air. Records shall be kept which details all relevant training provided to staff, and these records shall be kept for a minimum of 2 years.

5.4 Any malfunction of plant or spillage of solvent based materials shall be remedied as soon as possible and process operations altered whilst the necessary work is undertaken.

5.5 Any incident likely to give rise to adverse atmospheric emissions or emissions that may have an impact on the local community shall be notified to the local authority immediately, and the details of incident including remedial action taken recorded in the process log book.

5.6 The operator shall make available on demand and without charge any of the records required to be kept by this permit.

5.7 If there is any intention to change any aspect of the prescribed installation from the description contained in the beginning of this permit, or any other aspect which may affect the substances or concentration or amount of substances being emitted to atmosphere, the operator shall notify the regulator of the proposed changes at least 4 weeks in advance before the changes take place.

6.0 COMPLIANCE WITH SOLVENT EMISSIONS REGULATIONS

6.1 The operator shall identify products or materials that are/contain risk phrased substances/materials R45, R46, R49, R60 and R61 and formulate and implement a timetable to replace, control and limit designated risk phrase materials as soon as possible, as defined and agreed by the Local Authority.

6.2 Compliance with the Solvent Emissions Regulations 2004 shall be demonstrated in one of the following ways:

1. The use of a solvent reduction scheme to demonstrate the achievement of a target emission. The emission targets are as follows:
### Table: Target Emission by 31/10/07

<table>
<thead>
<tr>
<th>Consumption</th>
<th>Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 – 15 tonnes solvent</td>
<td>Total Mass of Solids X 1.6</td>
</tr>
<tr>
<td>consumption</td>
<td></td>
</tr>
<tr>
<td>15 tonnes or more solvent</td>
<td>Total Mass of Solids X 1</td>
</tr>
<tr>
<td>consumption</td>
<td></td>
</tr>
</tbody>
</table>

Notification that the operator wishes to implement the solvent reduction scheme shall be submitted to the local authority by 31st October 2005.

Or

2. By meeting the following stack VOC emission limit:

<table>
<thead>
<tr>
<th>Emission limits</th>
<th>Type of monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>150mg/Nm³ (for processes consuming 5-15 tonnes of solvent per annum)</td>
<td>Annual manual extractive testing</td>
</tr>
<tr>
<td>50mg/Nm³ (for processes consuming more than 15 tonnes of solvent per annum)</td>
<td>Annual manual extractive testing</td>
</tr>
</tbody>
</table>
RESIDUAL DUTY

In relation to any aspect of the process not regulated by specific conditions in this permit, then Best Available Techniques shall be used:

For the purposes of the Pollution Prevention and Control (England and Wales) Regulations 2000, “best available techniques” means 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 practicable, generally to reduce emissions and the impact on the environment as a whole; and for the purpose of this definition –

a) “available techniques” means those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, in the economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the operator;

b) “best” means, in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole;

c) “techniques” includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.
SUPPLEMENTARY NOTES

These notes do not comprise part of the Permit PPC/045, but contain guidance relevant to the Permit.

Inspections and Powers of Entry
Regular inspections will be carried out by officers of the Council (the Local Authority Inspectors) to check and ensure full compliance with the Permit conditions and residual duties. These inspections may be carried out without prior notice.

Under section 108(6) of the Environment Act 1995 authorised Local Authority Inspectors have been granted powers of entry into any premises for the purposes of discharging relevant duties.

Reviews
The Local Authority has a statutory duty to review the permit at least once every 6 years or in the following circumstances set out in regulation 15 of the Pollution Prevention and Control regulations 2000:

a) The pollution from the installation is of such significance that the existing emission limit values for the permit need to be revised or new emission limit values need to be included in the permit
b) Substantial changes in BAT make it possible to reduce emissions from the installation or mobile plant significantly without imposing excessive costs; or
c) Operational safety of the activities carried out in the installation or mobile plant requires other techniques to be used

Health and Safety
This Permit is given in relation to the requirements of the Pollution Prevention and Control (England and Wales) Regulations 2000. It must not be taken to replace any workplace responsibilities the operator has under Health & Safety legislation. Whenever emission limits quoted in this Permit conflict with occupational exposure limits set under the Health and Safety at Work Act 1974 to secure the health, safety or welfare of persons at work, the tighter limit should prevail.

Installation must be operated in order to protect persons at work as well as the environment. In achieving conditions in this Permit the operator must not adopt any course of action that would put at risk the health, safety or welfare of persons at work.

Other Statutory Requirements
This Permit does not detract from any other statutory requirement, such as the need to obtain planning permission, hazardous substances consent, discharge consent from the Environment Agency, building regulations approval, or a waste disposal licence.

This Permit does not authorise a contravention of any other enactment or any order made, granted or issued under any enactment, nor does it authorise a contravention of any rule or breach of any agreement.

The Operator is advised to consult the relevant Planning Department regarding changes that may be required as a result of this Permit (e.g. stack heights) as they may require planning permission.
Transfer of Permits
Where the operator of an installation wishes to transfer, in whole or in part, his permit to another person, the operator and the proposed transferee shall jointly make an application to the regulator to effect the transfer. Such an application shall be accompanied by the permit and any fee prescribed in respect of the transfer.

In the case of partial transfer, where the original operator retains part of the permit, the application must make clear who will retain control over the various parts of the installation. The application must include a plan identifying which parts of the site and which activities the operator proposes transferring.

The local authority will then determine whether to allow the transfer within a two-month period, unless the local authority and the applicants agree a longer period. Where the local authority approves the transfer, the transfer will take effect from the date requested by the operator or a date that may be agreed by the local authority and the applicants.

Variation to Permits
Variation to permits may be initiated either by the local authority or the operator, either in response to changes in the operation of an installation or if new conditions are needed to deal with new matters. Variations may be required in response to the following.

- Change of operation of the installation. (The operator shall notify the local authority under Section 16(1) of the Regulations.)
- In response to the findings of a periodic review of conditions.
- In response to the findings of an inspection.
- New or revised sector guidance notes

The operator should apply to the Local Authority in order to vary a permit under regulation 17 of the Regulations. The application must be in writing and, in accordance with Part 1 of Schedule 7 to the Regulations contain:

- The name, address and telephone number of the operator.
- The address of the installation.
- A correspondence address.
- A description of the proposed changes.
- An indication of the variations the operator would like to make.
- Any other information the operator wants the authority take account of.

Substantial Change
A substantial change means, in relation to an installation, a change in operation, which in the opinion of the local authority may have significant negative effects on human beings or the environment.

Where the local authority deems that a proposed variation constitutes a substantial change, the operator will be informed of the process to follow.

Noise
This Permit does not include reference to noise. Statutory noise nuisance is regulated separately under the provisions of Part III of the 1990 Act.

Appeals
An Appeal can be made against the conditions in, or variations to this Permit as per Part IV of the Regulations. Appeals are made to the Planning Inspectorate who acts on behalf of the Secretary of State. Appeals against conditions within a Permit must
be submitted within 6 months of the date of issue of the permit. Appeals against variation notices must be submitted within 2 months of the date of issue of the notice. Appeals should be despatched on the day they are dated and sent to:

The Planning Inspectorate
Environmental Appeals Administration
Room 4/19 – Eagle Wing
Temple Quay House
2 The Square
Temple Quay
BRISTOL
BS1 6PN

HMSO Publications
All HMSO publications can be ordered by telephone on Tel: 0870 600 5522,
Fax: 0870 600 5533 or e-mail: book.orders@tso.co.uk

Emission Monitoring Protocol
The documented procedure by which reliable and comparable results are obtained from measurements at source is known as a Protocol.

Protocols ensure that the sampling procedures are carried out correctly and that the results obtained accurately characterise the process.

The main components of a Protocol are as follows:-
1. Calibre and quality of the sampling team.
2. A reference measurement method (standard methods may not always be available)
3. A standard methodology setting out:
   • health and safety considerations
   • pollutants of interest
   • plant operating conditions required
   • selection and location of sampling position
   • sampling characteristics (e.g. isokinetic etc) and techniques
   • sampling frequency
   • sampling duration
   • number of samples
   • type (including make and model), condition and suitability of sampling equipment
   • required accuracy
   • variability of emissions
   • analytical methods including laboratory competence and NAMAS accreditation certificate copy for each pollutant of interest
   • analytical precision
   • procedures to be adopted if standard methods unavailable
   • calibration certificate(s) for sampling equipment
   • Quality Control and Quality Assurance procedures
   • Presentation of results and associated information.