POLLUTION PREVENTION AND CONTROL ACT 1999
POLLUTION PREVENTION AND CONTROL (ENGLAND AND WALES) REGULATIONS 2000

PERMIT OF PROCESS

THIS IS TO CERTIFY that the textile and fabric coating and finishing process

at: **DUNLOP BESTOBELL**
ASHBY ROAD, SHEPSHED, LEICESTERSHIRE, LE12 9EQ
(shown outlined red on the attached map, Figure 1/30)

National Grid Ref:: SK 476184

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: DUNLOP AEROSPACE LIMITED, TRADING AS DUNLOP BESTOBELL
Registered Office: Atlantic house, Aviation Park West, Bournemouth International Airport, Christchurch, Dorset, BH23 6EW

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 24 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.008/94	dated 9 December 1994
	Variation Notice Ref.015/98	dated December 1998
	Variation Notice Ref.005/01	dated 9 May 2001
	Variation Notice Ref.005/03	dated 21 May2003
	Variation Notice Ref.039/06	dated 28 June 2006

Signed on behalf of Charnwood borough Council

……..

Beverley Green, Specialist Environmental Health Officer Dated 28 June 2006
(the delegated officer for the purpose)

Counter-signed……Ann Green, Specialist Environmental Health Officer
Directorate of Housing and Health, Environmental Health Southfields, Southfield Road, Loughborough LE11 2TX

DUNLOP BESTOBELL, ASHBY ROAD, SHEPSHED, LOUGHBOROUGH

1.0 Process Description

1.1 Purpose

The purpose of the process is to produce rubber components in typically small batch quantities to customers' requirements and this involves coating fabric with rubber compounds.

1.2 Plant Detail

The site is located on Ashby Road, Shepshed, as shown in Figure 1/30

The principal emissions are of volatile organic compounds (VOCs) and particulates from the preparation, application and curing of coatings. The locations of the process operations are shown in Figure 2/30 and are listed below. Some of the process operations do not involve solvent emissions. Table 1 lists the exhaust ventilation points, the relevant stack height in metres and stack velocity in metres per second. The LEV codes in the first column of Table 1 relate to the codes shown in Figure 2/30.

Solvent Stores	Ventilated from solvent store to atmosphere.
Coating Preparation (in Tower Coating Room)	Extraction to atmosphere
Coat Fabric-cured (in Tower Coating Room)	Vertical tower coater curing at 125° - 180°C Extraction to atmosphere
Coat Fabric-uncured (in Tower Coating Room)	Vertical tower coater operating at 30° - 80°C Extraction to atmosphere
Coating Table-uncured (in Tower Coating Room)	Extraction to atmosphere
Coating Preparation (in Isotex Spreader Room)	Extraction to atmosphere
Coat Fabric- cured (in Isotex Spreader Room)	Horizontal Isotex Spreader curing at 100° - 150°C Extraction to atmosphere
Coat Fabric-uncured (in Isotex Spreader Room	Vertical tower coater operating at 30° - 80°C Extraction to atmosphere
Coating Preparation (in Werder Mathis (WM) Spreader Room)	Extraction to atmosphere
Coating Fabric –cured (in Werder Mathis (WM) Spreader Room)	Horizontal Werder Mathis Spreader curing at 100°C – 150 °C Extraction to atmosphere
Coat – Fabric – uncured (in Werder Mathis (WM) Spreader Room)	Horizontal spreader operating at 30°C- 90°C Extraction to atmosphere

Cut Fabric	
Calender	
Mould	
Fabricate	Extraction to atmosphere
Post Cure	Discharge to atmosphere
Finish	Dust Filtration extraction for buffing operations, 99% efficient

Table 1 Exhaust Ventilation Points

LEV No	Process	Type of Emission	Stack Heights M	Area Department Cell
10	Oven Test & Post Cure	Particulate	7	Lab
11	Oven Test & Post Cure	Particulate	6.5	Lab
14	Powder Weighing	Dust Filter System	2.4	Supply Cell
16	Milling	Dust Filter System	2.4	Supply Cell
40	Mixing	Dust Filter System	2.4	Supply Cell
49	Post Cure Oven	Particulate	5	Aircraft Seals
50	Post Cure Oven	Particulate	5	Aircraft Seals
52	Laser Cutting	Particulate	6.5	Aircraft Seals
57	Post Cure Oven	Particulate	6	Bestobell Moulding
60	Post Cure Oven	Particulate	6.5	Bestobell Moulding
69	Coating Tower	VOC	7.5	Supply Cell
74	Metal Prep	VOC	5.5	Aircraft Seals
76	Post Cure Oven	Particulate	6	Polymer Mouldings
77	Post Cure Oven	Particulate	6	Polymer Mouldings
78	Post Cure Oven	Particulate	10	Polymer Mouldings
80	Post Cure Oven	Particulate	6	Polymer Mouldings
81	Post Cure Oven	Particulate	6	Polymer Mouldings
82	Post Cure Oven	Particulate	6	Sampling
102	Post Cure Oven	Particulate	6	Sampling
103	Plaster Moulding	Dust Filter System	2.4	Silastics
104	Coating Tower (Aqueous)	Steam	6	Supply Cell
105	Post Cure Oven	Particulate	6.5	Boeing
106	Post Cure Oven	Particulate	8	Boeing
107	Wax Melt Oven	Particulate	5	Boeing
108	Post Cure Oven	Particulate	6.5	Silastics
109	Post Cure Oven	Particulate	5	Silastics
110	Post Cure Oven	Particulate	6	Silastics
111	Organic Polymer Spreading (WM)	VOC	6.5	Organic Polymer Mixing
112	Post Cure Oven	Particulate	6	Bestobell Moulding
113	Post Cure Oven	Particulate	8	Bestobell Moulding

114	Post Cure Oven	Particulate	8	Bestobell Moulding
115	Post Cure Oven	Particulate	7	Hose Build
116	Hose Build Extraction	VOC	7	Hose Build
117	Sticking Bench (NIU)	VOC	7.5	
118	Isotex Spreading	VOC	7.5	Organic Polymer Mixing
119	Paint Spray Booth	VOC	9	Organic Polymer Mixing

NIU stands for Not in Use at present

1.3 **Plant Operation**

The coating of fabrics with rubber material may be conducted on site at Dunlop Bestobell by either of the following coating processes: -

i) Solution dipping - Fabric material passed through trough of solvated coating material. Required thickness achieved via coating material viscosity control or multiple passes. The equipment used for this process is known as the Coating Tower.

ii) Knife over roller spreading - Application of a solvated rubber coating material via steel blade, coating thickness controlled by distance between roller and coating blade as fabric/rubber passes between the two. The equipment used for this process is known as the Isotex Spreader. (This is used predominantly for the application of silicone rubbers) and the Werder Mathis (WM) spreader (used predominantly for application of Organic Polymers)

iii) Calendering - A thin layer of non-solvated rubber is applied to the fabric substrate by passing it through steel rollers. Three vertically stacked rollers are used for this process, with the gap between the upper/middle and middle/lower used to control the coating thickness applied.

Coated materials may be produced either in the un-vulcanised or vulcanised state using all of the above stated processes dependant upon end usage requirements.

1.3.1 **Fabrics and Materials Storage**

Fabrics are kept in a store. Materials used for their manufacture are typically polyamide, polyester, aramid glass, ceramic and cotton.

Coating compounds are stored either as received or mixed in an area adjacent to the applicable coating equipment. They are either based upon silicone or Organic polymers. Solvent in which the coating materials are dissolved to enable application to the selected fabric, are stored in a separate building.

1.3.2 **Coating Preparation**

Coating materials used may be proprietary materials purchased in appropriate containers or prepared in the applicable coating room by dissolving the coating rubber compound in solvent (usually Toluene, MEK, MIBK, acetone or a petroleum fraction) within an extracted mixing machine adjacent to the coating equipment. The viscosity of the rubber coating material required and ultimate solvent content is dictated by the process selected to coat the fabric material.

1.3.3 **Coat fabric- cured**

Solution dipped & Knife over roller spread processes: -
Coated fabric is cured in a heated chamber (either vertically for Solution dipped material or horizontally for Knife over roller spread.)
For solution dipped material, the fabric passes through a trough of coating material and is then lifted through a vertical air-purged oven operating at 125-180 °C. After passing through the oven (up and down) the coated fabric may be coated again to increase the final thickness during the single pass through the oven. The coated fabric can then be used in further manufacturing processes or sold in cut sheet or roll form.

For Knife over roller spread material, the fabric passes through a roller/knife blade set-up, with the coated material being passed through a horizontal air-purged oven, operating at 100-150 °C.
In this process, the fabric is coated one side only per pass, with coating thickness being controlled by material viscosity and knife/roller gap. After passing through the oven, the coated fabric may be coated again to increase the final side thickness or turned to coat the opposite side. The coated fabric can then be used in further manufacturing processes or sold in cut sheet or roll form.

1.3.4 **Coat Fabric- uncured**

These processes are identical to those described in 1.3.3 except that the applied coating is not cured. To achieve this the heating ovens are operated at a low temperature (30-80°C). The coated fabric is then used during the following manufacturing chain by incorporation (fabrication) into components, and later cured as part of the final product. The coating ovens and coating preparation equipment are extracted to atmosphere via a common extraction duct. The plant is used intermittently on a daily basis.

Adjacent to the Coating Tower is a coating table, which is predominately used for the preparation of small quantities of coated material which is to be manually painted or dip coated. This process is employed where the required quantity is not economically viable to produce by other automated coating methods due to m.o.q. restriction of the process. This unit has a hood and lip type extraction which are independently extracted to atmosphere. This plant is used intermittently, not daily, and not on a continuous basis.

1.3.5 **Cut Fabric**

Non-coated textiles and coated fabrics produced in 1.3.3 and 1.3.4 are cut by hand, machine or rotating knife into pieces or rolls of a configuration that the product design requires.

1.3.6 **Calender**

On the Calender machine, coated and non-fabrics are coated with uncured silicone rubber to the desired thickness. This is a low temperature operation and no solvated materials are used in this process. Calendered fabrics are either stacked or rolled with a polyethylene inter-leave layer to prevent sticking of adjacent layers and then stored until required for further processing.

After calendering, some strips are passed through a small hot air vulcanisation unit (HAV) to cure the coated material applied during the calendering process.

1.3.7 **Mould**

Many of the components produced from the treated fabrics are finally formed in heated moulds. Components are fabricated within the mould cavity from layers of silicone rubber and coated fabric to produce a product of the designed physical characteristics.

The mould is heated to effect part vulcanisation to a degree that will enable a component to be removed and retain the desired shape, this being further processed and finally given an extended oven cure to complete vulcanisation (see 1.3.9)

Moulds and presses are used on an intermittent basis as production demands. There are some 10,000 moulds from which production is selected.

1.3.8 **Fabricate**

Calendered fabrics are used to produce components by hand fabricating on a former and curing in hot air ovens. Typical products are hoses, ducts and tapes, but other complicated shapes are produced in this way. Some may incorporate coated fabrics that are not produced at Dunlop Bestobell, Shepshed, but are bought in for specific applications and may be based on polymers other than silicone rubber.

Ovens used for curing fabricated components are extracted to atmosphere to discharge any VOCs produced. These peak for a short period at the beginning of the cure and diminish rapidly during the typical 1-2 hour cure cycle.

These are intermittent processes, conducted upon a daily basis .

1.3.9 **Post Cure**

To achieve the best material properties and product dimensional stability, the majority of parts are given a final post cure during which any residual VOCs are removed. Ovens sufficiently large enough to accommodate the multiplicity of parts produced are used on an intermittent basis and are discharged to atmosphere. The level of discharge rapidly diminishes during the post curing cycle.

Ovens are loaded on a batch basis typically on a daily basis.

1.3.10 **Finish**

Most parts require some finishing operation in order for them to meet the drawing requirements. Finishing usually requires some scissor cutting or buffing operation. All buffing machines are connected to dust filtration extraction (DCE type) equipment with operation efficiencies of 99%.

1.3.11 **Process Waste**

Waste powders and solvents are collected and disposed of by licensed contractors.

2.0 Non-VOC Emissions

2.1 The following non-VOC emission limit shall apply.

Substance	Source	Emissions Limit	Monitoring Frequency	Monitoring Method
Particulate matter	All process activities	50mg/Nm^3 as 30 minute mean for contained sources	Annual	Manual extractive testing. See paragraphs 5.23,5.24,5.25 and 5.26 of PG6/8(04)
Isocyanates	All process/activities using isocyanates	0.1mg/Nm^3 as 30 minute mean for contained sources excluding particulate and expressed as NCO	Every three years	Manual extractive testing. See paragraphs 5.23,5.24,5.25 and 5.26 of PG6/8(04)

2.2 All pollutant concentrations shall be expressed at reference condition 273k, 101.3kpa without correction for water vapour content.

2.3 Calibration and compliance monitoring shall meet the following requirements as appropriate.

No result shall exceed the emission concentration limit specified in the above table except where either: -

a) Data is obtained over at least 5 sampling hours in increments of 30 minutes or less, or
b) At least 20 results are obtained where sampling time increments of more than 30 minutes are involved
   And in the case of a) or b)
c) No daily mean of all 30 minutes mean emissions concentrations shall exceed the specified emission concentration limits during normal operation (excluding start-up and shut-down)
   and
d) No 30 minute mean emission concentration shall exceed twice the specified emission concentration limits during normal operations (excluding start-up and shut-down)

2.4 The introduction of dilution air to achieve the emissions concentration limits specified in condition 2.1 above shall not be permitted.

2.5 The frequency of particulate testing shall be increased for example, as part of commissioning of new or substantially changed activities, or where emission levels are near to or approach the emission concentration limits given above.

2.6 Adequate facilities for sampling shall be provided on vents and ducts and the sampling points shall be designed to comply with British or equivalent standards.

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

2.8 Non-continuous emissions monitoring of particulate matter shall be carried out according to the main procedural provisions of BS ISO 9096:2003, with averages taken over operating periods excluding start-up and shutdown.

2.9 Emission monitoring of isocyanates shall be carried out in accordance with HSE occupational method MDHS 25/3 or Draft EPA method 207-1.

3.0 VOC Emissions

3.1 In order to reduce VOC emissions from the installation, two compliance options are available, these are:

i), implementation of a solvent reduction scheme to reduce emissions from the installation to a Target Emission

ii), Emission and Fugitive Limits

Reduction Scheme

You have indicated that your compliance option is the solvent reduction scheme.

3.2 The company shall therefore submit to Environmental Protection at Charnwood Borough Council, no later than 31 October 2007, an emission reduction plan for the site. The plan shall include in particular :-

- decreases in the average solvent content of the total input; and/or
- increased efficiency in the use of solids.

to achieve a reduction of the total emissions from the installation.

3.3 The Target Emission shall be calculated as follows:

a) Total mass of solids in the quantity of coatings consumed in the activity in the inventory period (12 months).

b) The target emission over the same period is equal to: -

the result of paragraph (a) x I

3.4 Compliance with the reduction scheme is achieved if the annual actual solvent emission is less than or equal to the target emission. Where the annual actual solvent emission is:

Actual solvent emission = $I_1 - O_6 - O_7 - O_8$

This Target emission to be achieved by 31 October 2007

(For further information, together with a spreadsheet to help record the data collected, see AQ 30(04) "Determination of compliance with Reduction Scheme" available on the Defra web site at): -

http://www.defra.gov.uk/environment/airquality/lapc/aqnotes/index.htm

3.5 The assessment of compliance using the solvent reduction scheme shall be undertaken a year in arrears. Any proposal, which would introduce a conventional high solvent coating system or replace a low or no solvent coating system or introduce a high solvent product into a process where it was not in use before, shall be approved by the local authority prior to installation.

Determination of Solvent Consumption

3.6 A determination of the organic solvent consumption, the total mass of organic solvent inputs minus any solvents sent for reuse/recovery off-site, shall be made and submitted to Environmental Protection at Charnwood Borough Council annually, preferably to coincide with stocktaking requirements. This shall be in the form of a mass balance in order to determine the annual actual consumption of organic solvent (c).

Where: $C = I_1 - O_8$

I_1 Is the Total quantity of organic solvents, or their quantity in preparations purchased which are used as input into the process/activity (including organic solvents used in the cleaning of equipment).

A calculation of the purchased organic solvent Input ($\mathbf{I}_1$) to the process/activity, is carried out by recording:

(I) The mass of organic solvent contained in coatings, diluents and cleaners in the initial stock (IS) at the start of the accounting period; plus

(ii) The mass of organic solvent contained in coatings, diluents and cleaners in the purchased stock (PS) during the accounting period.

(iii) Minus the mass of organic solvent contained in coatings, diluents and cleaners in the final stock (FS) at the end of the accounting period.

Total Organic Solvent Input ($\mathbf{I}_1$) = IS + PS – FS

Solvent Management Plan

3.7 A solvent management plan (SMP) shall be produced to determine the actual emissions annually;

The SMP shall be prepared using the standard definitions and calculations in PG6/08 (04) figure 5.1.

A summary of these calculations is given below:-

Inputs of Organic Solvent in the time frame over which the mass balance is being calculated (I).

$\mathbf{I}_1$ Is the quantity of organic solvents, or their quantity in preparations purchased which are used as input into the process/activity (including organic solvents used in the cleaning of equipment, but not those used for the cleaning of the products).

Outputs of Organic Solvents in the time frame over which the mass balance is being calculated (O).

$\mathbf{O}_6$ Is Organic solvent contained in collected waste

$\mathbf{O}_7$ Is Organic solvent contained in preparations, which are sold or are intended to be sold as commercially valuable product**.**

$\mathbf{O}_8$ Is Organic solvent contained in preparations recovered for reuse but not as input into the process/activity, as long as not counted under O_7 .

3.8 The Solvent Management Plan shall be used to design and implement a programme to monitor and record the consumption of coatings/organic solvents used, against product produced. Using this information opportunities for reducing solvent usage shall be identified, assessed and where appropriate implemented.

4.0 Risk Phrase Materials

4.1 Designated risk phrase materials with risk phrases R45, R46, R49, R60, R61 shall be either replaced, controlled and or limited, as set out below, within the timescales given below:-

Row	Designated Risk Phrase Materials with risk phrase R45,R46,R49,R60,R61	
1	Requirements Replace as far as possible by less harmful substances or preparations	Monitoring /timescales Within the shortest possible time
	Control under contained conditions as far as technically and economically feasible to safeguard public health and the environment.	By 31 October 2007
	Limit – where the sum of the mass flows of all the discharges of all the compounds causing the risk phrase labelling is greater or equal to 10 g/h a limit of 2 mg/Nm^3 for the mass sum of the individual compounds shall apply	Annual manual extractive testing See 5.23, 5.24,5.25,5.26, 5.27 and SED Box 8 of PG 6/8(04) Compliance by 31 October 2007
	Halogenated VOC with risk phrase R40	
2	Requirements Control under contained conditions as far as technically and economically feasible to safeguard public health and the environment	Monitoring/timescales By 31 October 2007
	Limit – where the sum of the mass flows of all the discharges of all the compounds causing the risk phrase labelling is greater or equal to 100g/h, a limit value of 20 mg/Nm^3 for the mass sum of the individual compounds shall apply	Annual manual extractive testing See 5.23, 5.24,5.25,5.26, 5.27 and SED Box 8 of PG 6/8 (04) Compliance by 31 October 2007

4.2 No new materials with a designated risk phrase R45, R46, R49, R60 and R61 shall be introduced into this process/ activity without the prior notification and permission of an Authorised Officer from Charnwood Borough Council.

5.0 Monitoring, investigation and recording

5.1 The results of all periodic monitoring and inspections shall be recorded in a log book. The log book should be retained by the operator for a period of two years and made available for examination by the local enforcing authority. Adverse results shall be investigated immediately and in all cases shall be recorded in the log book. The operator shall ensure that the cause has been identified and corrective action taken, and this action is recorded in the log book.

5.2 The results of all non-continuous emission testing shall be forwarded to Environmental Protection at Charnwood Borough Council within 8 weeks of the completion of sampling.

5.3 The local enforcing authority shall be advised at least 7 days in advance of any periodic monitoring exercise to determine compliance with emission limit values of the provisional time and date of monitoring, pollutants to be tested and the methods to be used.

5.4 The reference test method for non- continuous particulate monitoring of emissions in chimneys or ducts is that of British Standard BS. ISO 9096:2003. Tests shall be carried out to the main procedural requirements of the standard.

5.5 In the event of any adverse results from any monitoring activity in relation to the limits specified in condition 2.1 the Operator shall investigate as soon as the results are obtained/received. The Operator shall:

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

5.6 In the case of abnormal emissions, or malfunctions or breakdown leading to abnormal emissions the Operator shall:

- Investigate immediately and undertake corrective action

- Adjust the process or activity to minimise those emissions and
- Promptly record the events and actions taken
- Notify the Regulator without delay, if the emission is likely to have an effect on the local community.

5.7 All emissions to air, other than steam or water vapour, shall be colourless and free from persistent visible emissions.

5.8 All emissions to air shall be free from droplets.

5.9 All emissions shall be free from offensive odour outside the process boundary, as perceived by the Regulator.

5.10 Emissions from combustion processes shall in normal operation be free from visible smoke and in any case shall not exceed the equivalent of Ringelmann Shade 1, as described in British Standard BS 2742 : 1969.

5.11 Visual and olfactory assessments of emissions shall be made at least once a week at the boundary of the property. Remedial action shall be taken immediately in the case of abnormal emissions. A record of the assessment shall be entered into a logbook required to be kept under 5.1 above.

6.0 Process Controls

VOC Control – handling and storage

6.1 The receipt, handling and storage of organic solvents shall be carried out so as to minimise the emission of volatile organic compounds to air.

6.2 All vessels or containers containing materials with an organic solvent content shall be lidded or enclosed when not in use.

6.3 All mixing, emptying and transfer of coatings or raw materials containing VOC's shall be undertaken in covered or closed mixing vessels.

6.4 Storage areas for drums containing solvent shall be bunded. The bunds shall completely surround the store, be impervious, resistant to the liquids in storage, and be capable of holding 110% of the largest storage tank.

VOC Control – cleaning (including surface cleaning)

6.5 The operator shall periodically review (at least once every 2 years) cleaning operations at the installation to identify opportunities for reducing VOC emissions. The results of this review, justification for the choices made together with timescales to implement any changes identified, shall be submitted to the Local Authority.

6.6 The cleaning of plant and equipment shall be carried out in such a way that emissions of volatile organic compounds to air are prevented or controlled.

6.7 HVLP guns and application equipment shall be cleaned in a cold cleaning system which is lidded and provided with a solvent collection container to prevent the emission of volatile organic compounds in the air

6.8 Cleaning techniques such as water based (without mechanical, chemical or thermal enhancement) or organic solvents which are significantly less volatile should be used wherever practicable.

6.9 Where fixed equipment is cleaned *in situ*, it should be kept enclosed during the cleaning operation.

6.10 Where equipment is cleaned off-line, it should be cleaned in enclosed cleaning machines wherever possible. Enclosed cleaning systems should be sealed to prevent emissions whilst in operation, except purging at the end of the cleaning cycle. If this is

not practicable, emissions should be contained and vented to suitable arrestment equipment to meet the requirements of 4.9 above.

6.11 Where manual cleaning is unavoidable:-

i) Cleaning solvents should be kept in enclosed containers whilst not in active use.

ii) Wiping cloths or brushes should be either pre-impregnated or, using a piston type dispenser or similar device, be impregnated with cleaning solvent in a controlled manner.

iii) Used wiping cloths or brushes should be stored in enclosed containers pending recovery or disposal.

VOC Control – Operational

6.12 Devise and implement a programme to monitor and record the consumption of coatings/organic solvents against product produced, to identify ways of minimising the use of organic solvent/coatings.

This condition shall apply from 31 October 2007

6.13 Emissions from all coating application areas shall be adequately contained by local exhaust ventilation.

VOC Control-Waste

6.14 All potentially odorous waste materials shall be stored in suitable enclosed containers to meet the requirement of condition 4.9 of this Permit.

6.15 Prior to disposal empty containers and drums shall be closed to minimise emissions. These containers shall be labelled, so that all that handle them are aware of their contents and hazardous properties.

6.16 Prior to disposal, used wipes or other items contaminated with organic solvent shall be placed in a suitably labelled metal bin fitted with a self-closing lid.

Spillage Control

6.17 A supply of absorbent material shall be held on site for use in the event of spillage of organic solvents. Such spillages shall be cleaned up immediately and the collected material shall be held in an enclosed container pending removal from site.

Dust Control

6.18 Stocks of dusty or potentially dust materials shall be stored in such a manner as to prevent emissions of particulate matter to the air. All such materials shall be stored in covered containers or sealed bags.

6.19 dry sweeping of dusty materials shall not be permitted.

6.20 Particulate emissions from weighing machines, and where necessary mixing vessels, shall be vented to bag filters, to meet the requirements of conditions 2.1 of this Permit.

7.0 Chimneys, Vents and Process Exhausts

7.1 Flues and ductwork shall be adequately insulated to minimise the cooling of waste gases and prevent liquid condensation on internal surface.

7.2 Flues and ductwork shall be inspected and cleaned as necessary to prevent accumulation of materials.

7.3 Process stacks shall not be fitted with any restriction at the final opening such as a plate, cap or cowl. However, a cowl fitted at the chimney exit to increase efflux velocity is permitted. All discharge points should be vertically upwards

7.4 Stack heights shall not be less than those listed for each LEV point in Table 1 of this permit.

7.5 No alterations in height above ground level shall be made to the final discharge point of any chimney, vent or other process exhaust without the prior written agreement of the Local Authority.

7.6 No additional chimneys, vents or process exhausts shall be provided without the written consent of the Local Authority.

8.0 Management

8.1 A written management plan or contingency arrangements shall be maintained in order to deal with plant failure, emergency or breakdown which would have an effect on emissions to atmosphere.

8.2 A high standard of housekeeping shall be maintained.

8.3 Essential spares and consumables, particularly those subject to continual wear, shall be held on site when the supplier is not able to provide items from stock within one working day, so that spray booth breakdowns can be rectified rapidly.

8.4 Staff at all levels shall receive the necessary formal training and instructions in their duties relating to control of the process and emissions to air. Particular emphasis shall be given to;

- Awareness of their responsibilities under this permit in dealing with conditions likely to give rise to VOC emissions, such as in the event of spillage;
- Minimising emission on start up and shut down
- Action to minimise emissions during abnormal conditions

8.5 A statement of training requirements for each operational post and a training record shall be kept for each person whose actions may have an impact on the environment. These documents shall be kept available for inspection by representatives from Charnwood Borough Council.

8.6 Effective preventative maintenance shall be employed on all aspects of the process including all plant, buildings and the equipment concerned with the control of emissions to air. In particular:

- A Written maintenance, inspection and replacement programme for all aspects of the process shall be prepared, implemented and maintained and it shall be made available for inspection by representatives from Charnwood Borough Council.
- A written record of all maintenance carried out shall be made available for the inspection by the regulator.

8.7 The activity shall operate in accordance with an effective management system. This shall include a commitment to achieving compliance with the permit conditions and ensuring LAPC considerations are taken account of in the day-to-day running of the process. It may include establish objective for improved environmental performance by setting targets, measuring progress and revising the objective according to results. The system shall include managing risks under normal operating conditions and in accidents and emergency situations.

EXPLANATORY NOTES

These notes do not comprise part of Permit Serial No.030 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 2.1 to 8.7 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.