



<b>Operator</b>	<b>Furrows Ltd</b>
<b>Installation Address</b>	<b>Haybridge Road Wellington Telford TF1 2DF</b>
<b>Grid Reference</b>	<b>SJ6638 1149</b>
<b>Registered Office</b>	<b>The Shrewsbury Garage Benbow Business Park Harlescott Lane Shrewsbury SY1 3EQ</b>

Furrows Limited is hereby permitted by the Borough of Telford & Wrekin to carry on a vehicle refinishing activity under Section 7 and section 6.4 of Schedule 1 Part 2, of the Environmental Permitting (England & Wales) Regulations 2007, and other activities as listed and described below within the installation boundary marked red on the attached plan on page 13, and in accordance with the following conditions.

<b>Provenance</b>	<b>Relevant Dates</b>
Date Application Made (Deemed application)	01.04.04
Date 'Duly Made'	N/A
Date Permit First Issued	7.3.05
Date of Variations	10/9/09
Date of Latest Variation	10/9/09

This permit consists of 13 numbered pages



## **Description of the Installation**

The installation as a whole facilitates the repair and respraying of damaged road vehicles. The installation comprises the following elements:

- 1 – Vehicle Preparation Element
- 2 – The refinishing Activity
- 3 – Raw Material Storage Element
- 4 – Mixing Room Element
- 5 – Waste Storage Element
- 6 – Gun Cleaning Element

The main process steps within the installation are vehicle preparation, coating application, and raw material and waste storage.

The coating process operated at Furrows Limited is defined as the application of solvent borne coating to road vehicles using hand operated spray gun technology within purpose made certificated spray booths.

The vehicles are prepared by removing or repairing damaged bodywork and then preparing the surface of the vehicle using specialised sanding equipment. The vehicle is then 'masked' using paper and sticky tape to protect areas of the vehicle not intended to be coated, and the vehicle is then moved into the spray-bake booth.

The spray booths are purpose made for vehicle refinishing in that they have full extraction from the booth and also support a curing or 'baking' cycle after the coating has been applied. This 'bake' cycle serves to cure the coating and helps produce the desired finish.

All process steps encompassed within the coating activity are supported by specific equipment and material specifications, process controls, planned maintenance, quality assurance and product verification procedures.

As a whole the installation falls within Section 6.4 and Section 7 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended). It is therefore a defined SED activity as well as the other identified activities.

The following text divides the installation as described above into its constituent parts, both those scheduled activities under the above regulations and those non scheduled activities required to be permitted because of their





polluting potential and direct association and technical connection with the scheduled activities.

### **1 – Vehicle Preparation**

Damaged vehicles are brought into the workshop areas and the damaged panels removed or repaired as necessary. Damaged panels that are repaired are either removed from the vehicle and 'beaten out', filled using a specifically designed filling agent, or replaced with new. Once the filling material has cured and/or panels are replaced, or reassembled the vehicle is subjected to sanding down and surface preparation in order to provide a key for the coating to be applied. This may also include the use of small amounts of cleaning solvent.

All sanding down is carried out under within areas provided with local exhaust ventilation extraction (LEV). LEV minimises the emission of dust into the workplace by collecting dust and delivering it to a bagfilter unit situated inside the workplace. Finally the vehicles are masked off and then introduced into one of three spray booths.

Polluting emissions are of dust releases of which are controlled by capture and abatement using an internally sited bag filter. Residual emissions are considered to be fugitive.

### **2 – Vehicle Refinishing Activity.**

There are three separate spray booths within the installation, A prepared fully masked vehicle is introduced into the spray booth and the operator then applies the prepared coating material, this may be primers, top coats and clear coats (in that order) in single or twin pack formulation. The coating is applied by use of high volume low pressure (HVLP) or airless air assisted spray technology. After the coating has been properly applied the spray booth is heated to about 70 degrees Celsius and the paint is cured.

Particulate emissions from the spray booths are controlled by extraction air filters that collect any overspray. The booths are certificated by the manufacture and as such do not require to be monitored for particulate emissions.

The paint materials currently being applied are compliant coatings.

After use, the spray guns are cleaned using neat cleaning solvent, within the dedicated spray gun cleaner (element 6).

Polluting emissions are:



- i. Particles, releases of which are controlled by capture and filtration before emission to atmosphere.
- ii. VOCs, releases of which are unabated before dilution and dispersal in the atmosphere but the amounts controlled by compliance with targets set by the SED directive.

### **3 – Raw Material Storage element**

Coating materials and solvent are purchased and delivered to the site and are stored in the mixing room.

All deliveries take the form of dedicated coatings in no more than 5 litre tins. Solvent is delivered separately in maximums of 20 litres. The Raw material storage areas are fully bunded and impervious. Raw material is prepared and removed as and when required by spray booth operators.

Raw material storage element is part of the overall vehicle refinishing activity.

**Table 1. Quantities of Materials Used**

Raw Material	Usage (2004) (tonnes/annum)	Activity/Element
Paints (total)	1.25	2,3,4,5
Xylene	0.75	2,3,4,5
Gun Wash	0.25	6

### **4 – Mixing Rooms**

The mixing room is bunded to prevent escape of spillages. Specific formulations of coating are created according to the desired specification and are measured out on programmable scales to ensure consistency. Most mixing takes place in containers of no more than 5 litres. All solvent and coating materials are dispensed in a totally enclosed system to the mixing vessel. Rarely, coatings or solvents will be added to a mixture by hand.

The venting from the mixing room extracts through a dedicated emission stack

All materials mixed within the mixing room are compliant coatings as defined in paragraph 32 of the Secretary of State's guidance PG6.34(97) Vehicle Refinishing.

Mixing of paint is an element and part of the overall vehicle refinishing activity.



## **5 – Waste storage**

All waste materials associated with activities 1, 2, 3, 4, and 6 are stored in appropriate sealed drums or containers.

All liquid wastes containing VOC's are stored in the mixing room marked on plan PPC56/1 noted above within a bunded area capable of containing 110% of the volume of the largest container present.

Solid wastes from the installation are stored in the specified waste storage area marked on plan PPC 56/1.

Waste Storage is an element and part of the overall vehicle refinishing activity.

## **6 – Spray Gun Cleaning**

All spray guns used within the installation are cleaned as required within a dedicated machine that is fully enclosed. The machine is loaded with cleaning materials (some containing solvent) and the guns inserted. The machine is interlocked to prevent the dispensing of gun wash into the cleaning chamber whilst the access door is open. Emissions from the gun wash machine are extracted through a dedicated stack.

The gunwash itself is a Toluene Xylene mix labelled thinners. The mixture is not noted to be labelled as any of the R-phrases R40, R45, R46, R49, R60, or R61.

Spray Gun Cleaning is an element and part of the overall vehicle refinishing activity.



### Plant and Equipment

The following table lists the plant and equipment used within the installation.

**Table 2. List of plant and equipment concerned with the installation**

Plant or Equipment used	Activity/Element	Machine reference numbers	Abatement	Emission Points
Burntwood Eurocombi	2	1	Particulate filters. No VOC abatement	1
Burntwood Eurocombi	2	2	Particulate filters. No VOC abatement	2
Burntwood Eurocombi	2	3	Particulate filters. No VOC abatement	3
Particulate LEV	1	N/A	Dry Filter	Internal
Raw material storage	3, 4	N/A	None	Internal
Mixing Room	4	Programmable scales	None	4
Spray Guns	2, 6	Devilbiss Gti,	N/A	N/A
Spray Gun Cleaning Machine	6	N/A	None	A

### Plant concerned with preventing emissions to atmosphere

The emissions from activities 2, 3, 4 and 6 within the installation are ducted to emission stacks exhausting with direct release to atmosphere. Table 3 (below) identifies the production equipment that discharges to atmosphere via the identified emission stack. Equipment and emission stacks that emit direct to atmosphere are unabated emission points. Emissions that are vented internally to the installation are not listed and should be assumed to be fugitive emissions.



**Table 3 Abatement plant and Emissions**

Plant or Equipment used	Abatement Type	Machine reference numbers	Emission Points	Pollutants
Burntwood Eurocombi	Filtration & dispersion	1	1	Smoke, NOx, SOx, VOC, CO
Burntwood Eurocombi	Filtration & dispersion	2	2	Smoke, NOx, SOx, VOC, CO
Burntwood EXEL	Filtration & dispersion	3	3	Smoke, NOx, SOx, VOC, CO
Mixing Room	dispersion	N/A	4	VOC
Spray Gun Cleaning Machine	dispersion	N/A	5	VOC

Legend: VOC – Volatile Organic Compound, SOx – Oxides of Sulphur, CO - Carbon Monoxide, NOx – Oxides of Nitrogen





## Permit Conditions

### Non-VOC emissions

1. The following non-VOC emission limits shall apply:

Row		Source	Emission limits / provisions	Type of Monitoring	Monitoring frequency
1	Particulate matter	From spray booths	10 mg /Nm <sup>3</sup>	By guarantee supplied by the spray booth constructor (see B1.3 of the application)	None required
		[Abrasive blasting equipment and other sources (except spray booths)]	[50 mg/Nm <sup>3</sup> for contained sources]	Manual extractive Testing in accordance with BS6069: Section 4.3 1992	[in accordance with the written plan (see B1.7 of the application)]
2	Sulphur dioxide	All processes / activities	1% wt/wt sulphur in fuel	Certification by supplier on first delivery, using test method ASTM D86 distillation	None required
		All processes/ activities using gas oil as defined in the Sulphur Content of Certain Liquid Fuels Directive (1999/32/EC).	0.2% wt/wt sulphur in fuel (before 1/01/2008) 0.1% wt/wt sulphur in fuel (from 1/01/2008)		

All emissions shall be determined at the standard reference conditions of 273.15K and 101.3kPa, without correction for water vapour content.

2. The introduction of dilution air to achieve emission concentration limits shall not be permitted. Dilution air may be added for waste gas cooling or improved dispersion where justified, but this must not be considered when determining the mass concentration of the pollutant in the waste gases.

3. The operator shall implement a maintenance schedule a copy of which shall be made available to the regulator upon request.

4. Dusty wastes shall be stored in closed containers.

5. Dry sweeping of dusts and dusty wastes shall not be used.

6. The operator shall keep records of inspections, tests and monitoring in relation to the provisions of the table above. In such cases: current records





shall be kept on site and made available for the regulator to examine records shall be kept by the operator for at least two years

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

8. Within 8 weeks of the completion of monitoring activities, the results of non-continuous emission testing shall be forwarded to the regulator.

9. In the event of any adverse results from any monitoring activity in relation to the provisions of the above table, 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

10. In the case of abnormal emissions, or malfunction 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

### **VOC emissions**

11. Surface preparation and painting operations shall be carried out using only coating materials, which are placed on the market for use in vehicle refinishing bodyshops (as identified by a label on the container containing the following information -a description of the product by identification of the contents as a subcategory of Directive 2004/42/CE, the relevant VOC limit values in g/l as referred to in Annex II of Directive 2004/42/CE and the maximum content of VOC in g/l of the product in a 'ready to use' condition). For information, the individual bodyshop products that are covered by this permit are listed in Appendix 4 of Process Guidance Note 6/34b (06).



12. The products used in coating shall be prepared and applied in accordance with the suppliers' instructions. Under no circumstances shall the product be thinned with more than the supplier's stated quantity or percentage of thinner. For information, the maximum, application-ready VOC contents for individual categories of products are listed in Appendix 5 of Process Guidance Note 6/34b (06).

13. All paint spraying operations shall be carried out in a totally enclosed booth under negative pressure, to prevent fugitive emissions of VOCs.

14. Spray applied coatings shall be applied to passenger cars using one of the following methods:

- high volume low pressure (HVLV) (maximum atomisation pressure 67.5kPa) spraying equipment;
- air assisted airless spraying equipment;
- electrostatic spraying equipment; or
- a system capable of achieving a transfer efficiency of at least 65%, determined in accordance with the procedure set out in BS EN 13966-1:2003 Determination of the transfer efficiency of atomising and spraying
- equipment for liquid coating materials.

15. Spray applied coatings shall be applied to commercial vehicles using one of the techniques in Condition 2.4 or using airless spraying equipment.

16. All spray guns and equipment cleaning shall be carried out in an automatic, totally-enclosed equipment cleaning machine or any other equipment cleaning machine which can achieve comparable or lower emissions. The cleaning machine shall be provided with the minimum of exhaust ventilation that is necessary to prevent the fugitive emission of organic solvent vapour when the machine is opened for introduction or removal of equipment, or for the changing of cleaning solvent.

17. All spray gun testing and sprayout following cleaning shall be carried out in either an equipment cleaning machine with the extraction running or into a chamber which is provided with extraction which is running in accordance with a written procedure a copy of which shall be made available to the regulator upon request .





18. Cleaning solvents shall be dispensed by a piston type dispenser or similar contained device, when used on wipes.

19. Pre-impregnated solvent wipes shall be held within an enclosed container prior to use.

20. Solvent contaminated wipes and other wastes shall be handled in accordance with a written procedure a copy of which shall be made available to the regulator upon request.

21. Organic solvent containment and spillage equipment shall be readily available in all organic solvent handling areas.

22. All solvent containing coatings, thinners and related materials and equipment cleaning materials shall be stored in the containers in which they were supplied, with the lid securely fastened at all times other than when in Use within spillage collectors, of suitable impervious and corrosion-proof materials and capable of containing 110% of the largest container away from sources of heat

23. All solvent containing wastes shall be stored:

- in suitable sealed containers with a securely fastened lid, and labelled so that all that handle them are aware of their contents.
- within spillage collectors, of suitable impervious and corrosion-proof materials and capable of containing 110% of the largest container
- away from sources of heat

24. Cleaning operations involving organic solvents shall be reviewed every two years, to identify opportunities for reducing VOC emissions. This will include identification of cleaning steps that can be eliminated or alternative cleaning methods. The regulator shall be provided with a report on the conclusions of the review, within eight weeks of it being completed.

25. Spares and consumables, particularly those subject to continual wear shall be held on site, or shall be available at short notice from guaranteed suppliers, so that spraybooth and abrasive blasting plant breakdowns can be rectified rapidly.



26. Waste solvents and waste coatings shall be recycled off-site. Copies of receipts of waste materials sold for recycling shall be kept for three years.

**Visible and odorous emissions**

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

28. All emissions to air shall be free from droplets.

29. There shall be no offensive odour beyond the site boundary, as perceived by the regulator.

30. 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.

**General Conditions**

31. All emissions shall be emitted only from the following stacks:  
Booth number 1 & 2 (Burntwood Eurocombi), being 11.27 metres above ground level.

Booth number 3 stack (Burntwood Exel) is 10.32 metres above ground level.

32. Staff at all levels shall receive the necessary training and instruction.

33. A record of staff training and instruction shall be maintained by the operator and shall be available to the regulator on request.

34. A written record of all maintenance carried out in accordance with Condition 3 shall be made available for inspection by the regulator.

Signed.....

Date.....

Scientific Officer

Authorised by the Borough of Telford and Wrekin to sign in that behalf

Borough of Telford & Wrekin  
P.O. Box 214  
Civic Offices  
Telford



## Appendix 1 Plan 97/00001/V\_REF Installation Boundary, Emission Points and Waste Store



 <p><b>Furrows Ltd</b> Installation Boundary</p>	Scale	David 3rd July 2008	
	Drawn By:	John Wheller	
	Drawing No.	97/00001/V_REF	



### **ADDITIONAL NOTES**

**These notes do not comprise part of the permit, but contain guidance relevant to it.**

#### **Inspections**

Regular inspections will be made by officers of Telford & Wrekin Council (without prior notice), in order to check and ensure full compliance with this permit.

#### **BAT (Best Available Techniques)**

Article 2(11) of the IPPC Directive defines “best available techniques” as follows:

*“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”.*

- “techniques” shall include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned,
- “available” techniques shall mean those developed on a scale which allows implementation in the relevant industrial sector , under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the Member State in question, as long as they are reasonably accessible to the operator,
- “best” shall mean most effective in achieving a high general level of protection if the environment as a whole.

In determining the best available techniques, special consideration should be given to the items listed in Annex IV of the Directive.



**Health and Safety at Work and Other Statutory Requirements**

Compliance with this permit does not necessarily infer compliance with any other legislation.

**Other Statutory requirements**

This permit, in that it regulated only air pollution matters, does not absolve you of the responsibility of any other statutory requirement, such as any need to obtain planning permission, hazardous substances consent or Building Regulations approval from the Council. Discharge consents from the local sewerage undertaker or a waste disposal licence from the Environment Agency may still be required as will compliance with health and safety legislation.

**Notification of Operation Changes**

The operator may be liable to prosecution if they operate otherwise than in accordance with the conditions and plant described in this permit.

The operator should contact the regulator to discuss any proposed changes.

**Enforcement**

The operator will be liable to enforcement action where: -

1. the operator fails to comply with or contravenes any permit condition;
2. a change is made to the installation operation without prior notification of the change to the regulator;
3. intentional false entries are made in any record required to be kept under the conditions of the permit;
4. a false or misleading statement is made.

Any enforcement action is taken in accordance with the regulator's enforcement policy.



<http://www.telford.gov.uk/NR/rdonlyres/240C3F4A-8E36-4C12-8311-E4E57A3DF8CC/26214/MicrosoftWordEnvironmentalHealthandWellbeingEnf orc.pdf>

### **Annual Subsistence Charge**

A subsistence charge is payable on the 1<sup>st</sup> April each year. An invoice will be issued by the regulator providing further details of how to pay. The charges are based on a risk based system. Details of the risk assessment can be found at <http://www.defra.gov.uk/environment/ppc/localauth/fees-risk/risk.htm>

### **Appeal against Regulatory Action**

The operator can appeal against regulatory action by the regulator to the Secretary of State for Environment, Food & Rural Affairs. Appeals must be sent to the Secretary of State on a form found at

[http://www.planning-inspectorate.gov.uk/pins/environment/environment/environmental\\_appeals/environmental\\_permitting\\_appeal\\_form.pdf](http://www.planning-inspectorate.gov.uk/pins/environment/environment/environmental_appeals/environmental_permitting_appeal_form.pdf)

Guidance on the appeal procedure can be found at

[http://www.planning-inspectorate.gov.uk/pins/environment/environment/environmental\\_appeals/environmental\\_permitting\\_guidance\\_notes.pdf](http://www.planning-inspectorate.gov.uk/pins/environment/environment/environmental_appeals/environmental_permitting_guidance_notes.pdf)

There are time limits for making an appeal as follows:

- a) in relation to an appeal against a revocation notice, before the notice takes effect;
- b) in relation to the withdrawal of a duly-made application under paragraph 4(2) of Schedule 5, not later than 15 working days from the date of the notice served under that paragraph;
- c) in relation to a variation notification, a suspension notice, an enforcement notice or a landfill closure notice, not later than 2 months from the date of the notification or notice;
- d) in any other case not later than 6 months from the date of the decision or deemed decision.

Please note:

**An appeal 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 other conditions not subject to the appeal and to direct the local authority either to vary any of these other conditions or to add new conditions.

### **Contact Numbers for the Regulator**

The Regulator is the Pollution Control Section of Telford & Wrekin Council. They can be contacted on 01952 381818. You may also contact them by email at any time. [Environmental.health@telford.gov.uk](mailto:Environmental.health@telford.gov.uk)

### **Correspondence Address**

All correspondence to Telford & Wrekin Council relating to this information shall be addressed to:

**Pollution Control Team,  
Environmental Health and Wellbeing,  
Environmental Health,  
Telford & Wrekin Council,  
Darby House,  
P.O. Box 214,  
Telford,  
TF3 4LE.**

