



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

**PERMIT OF PROCESS**

**THIS IS TO CERTIFY THE RESPRAYING OF ROAD VEHICLES**

at: **Volvo Coach Sales (Loughborough) Ltd  
Byron Street Extension, Loughborough**

National Grid Ref: SK 524204

(The site location is shown on Appendix I which forms part of this Permit)  
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: Volvo Coach Sales (Loughborough) Ltd**  
**Registered Office 9 Fifty Pytches Place, Cardonald Business Park Glasgow, G51 4GA**

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 fourteen 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 Permit unless otherwise stated.

- Refer to Variation Notice dated 23 March 1995
- Refer to Variation Notice dated 4 January 2001
- Refer to Variation Notice dated 27 February 2004
- Refer to Variation Notice dated 27 January 2006
- Refer to Variation Notice dated 11 December 2006

Signed on behalf of Charnwood Borough Council.....  
Beverley Green  
(the delegated officer for the purpose)

Dated... 11 December 2006.....Counter-signed .....  
Charnwood Borough Council  
Southfields Road, Loughborough LE11 2TX

**VOLVO COACH SALES (LOUGHBOROUGH) LTD, BYRON STREET  
EXTENSION, LOUGHBOROUGH****I.0 Description of Process****I.1 Purpose**

The purpose of the premises is to prepare road vehicles for respraying with paint for which this Permit applies. The process of respraying includes the use of solvents. The annual quantity of solvents used exceeds 1 tonne.

**I.2 Location**

The premises are located at Byron Street Extension in Loughborough, Leicestershire, as shown highlighted on Appendix 1.

**I.3 Plant Detail**

Preparation and final coating materials are stored in one of two purpose-built paint stores as shown on Appendix 2. As and when required, paint plus thinners, accelerators and other materials are removed to the mixing area shown on Appendix 2. The vehicles are sprayed in one of four spray booths, three of these having low interior roof profiles, the fourth being designed to cope with double deck vehicles. Spray booth 1 shown on the site plan in Appendix 2 is no longer used for vehicle refinishing.

The paint is applied with HVLP sprayguns operating at a maximum atomisation pressure of 67.5kPa (10psi). Each booth receives filtered heated air through ceiling vents; this air is then drawn out of the booths through disposable paper filters, located down each side of the booth.

**I.4 Plant Operation**

Paint materials are supplied to the site by one of two main suppliers in 1, 2.5 and 5 litre sizes and are placed in the appropriate paint store dependent upon flash point. The materials are removed from the stores when required and taken to the mixing room. There they are mixed with other materials to form the appropriate coatings to be used. The Operator then takes the prepared mixture to one of the spray booths where they are applied to the vehicle using an HVLP spray gun. The booths are fed with heated filtered air via a gas fired warm air heater through the roof of the booth and air is then extracted through paper filters located along the sides of the booth. The fans that draw the air out of the booths are located in the roof spaces; there are 16 fans in total serving the spray booths (Appendix 3).

Spraying in the open workshop shall not occur. All paint spraying operations are carried out in totally enclosed booths under negative pressure so as to prevent fugitive emissions of odour and particulate matter. There is a written plan for the maintenance, inspection and replacement of extract air filters and a logbook is kept detailing all filter changes.

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The tools used in the application of coatings, such as spray guns, mixing vessels, measuring beakers etc are cleaned after use. The cleaning agents vary according to the type of paint employed. Products containing organic solvents, for instance, are cleaned with organic solvents, water-borne materials are cleaned with water or water-alcohol mixtures and cavity waxes with special spirits. In order to maintain cleaning performance and permit separate disposal, these various cleaning agents must not be mixed. Separate cleaning systems are employed for the various coating materials (organic solvent and water-borne).

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The above named company is permitted to operate a vehicle refinishing installation subject to compliance with the following conditions:

**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>	Manual extractive Testing in accordance with BS – EN 13824	Annually
		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	Annually
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 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.

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3. The operator shall implement a maintenance schedule a copy of which shall be made available to Charnwood Borough Council upon request. This shall include all plant, buildings and the equipment concerned with the control of emissions to air.
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 Charnwood Borough Council to examine;
  - records shall be kept by the operator for at least two years
7. The operator shall notify Charnwood Borough Council 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 Charnwood Borough Council.
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 Charnwood Borough Council
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 Charnwood Borough Council 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), extract provided in Appendix 3 of this permit.  
**This shall be complied with by 1 Jan 2007 for all new products and 1 Jan 2008 for existing products.**
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), extract provided in Appendix 4 of this permit. **This shall be completed by 1 Jan 2007.**
13. A detailed record shall be maintained of all paint, hardener, organic solvent and substrate and equipment cleaning materials used. The record shall be kept in such a way that the total organic solvent usage can be determined and this determination shall be made annually. A copy of this record shall be made available to Charnwood Borough Council on request.
14. All paint spraying operations shall be carried out in a totally enclosed booth under negative pressure, to prevent fugitive emissions of VOCs.
15. Spray applied coatings shall be applied to commercial vehicles using high volume low pressure (HVLP) (maximum atomisation pressure 67.5kPa) spraying equipment;
16. All spray guns and equipment cleaning shall be carried out in an automatic, totally-enclosed equipment cleaning machine. 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 an equipment cleaning machine with the extraction running in accordance with a written procedure a copy of which shall be made available to Charnwood

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- Borough Council upon request. This shall include a requirement where such testing and sprayout is carried out in one of the gun cleaning machines with the extraction running, or in a separate chamber which is provided with extraction. A receptacle shall be provided to collect the solvent, which is put through the spraygun. When not in use the receptacle shall be kept lidded to prevent evaporation and fugitive emissions of solvent vapour.
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 Charnwood Borough Council upon request. **This shall be complied with by 1 Oct 2007.**
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
- For information, these conditions should not conflict with the requirements of occupational health and safety regulations*
- This shall be complied with by 1 Oct 2007**
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

**This shall be complied with by 1 Oct 2007**

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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. Charnwood Borough Council 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 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 Charnwood Borough Council.
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 I, as described in British Standard BS 2742:1969.

**General Conditions**

31. All emissions of particulates, isocyanates and VOCs shall be emitted from 8 stacks. The stacks shall be 8.5 m above ground level and extend 1m above roof height.
32. 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 establishing objectives for improved environmental performance by setting targets, measuring progress and revising the objectives according to results. The system shall include managing risks under normal operating conditions and in accident and emergency situations.
33. Staff at all levels shall receive the necessary training and instruction in their duties relating to control of the process and emissions to air. Particular emphasis shall be given to:

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- 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.
34. A record of staff training and instruction shall be maintained by the operator and shall be available to Charnwood Borough Council on request.
35. A written record of all maintenance carried out in accordance with Condition 3 shall be made available for inspection by Charnwood Borough Council.

**Appendix I**

**Appendix 2**

**Appendix 3****Extract of Appendix 4 of PG 6/34b (06) :Individual bodyshop products covered by this permit**

a) 'preparatory and cleaning' means products designed to remove old coatings and rust, either mechanically or chemically, or to provide a key for new coatings:

(i) preparatory products include gunwash (a product designed for cleaning spray-guns and other equipment), paint strippers, degreasers (including anti-static types for plastic) and silicone removers;

(ii) 'precleaner' means a cleaning product designed for the removal of surface contamination during preparation for and prior to the application of coating materials;

b) 'Bodyfiller/stopper' means heavy-bodied compounds designed to be applied to fill deep surface imperfections prior to the application of the surfacer/filler;

c) 'primer' means any coating that is designed for application to bare metal or existing finishes to provide corrosion protection prior to application of a primer surfacer:

(i) 'surfacers/filler' means a coating designed for application immediately prior to the application of topcoat for the purpose of corrosion resistance, to ensure adhesion of the topcoat, and to promote the formation of a uniform surface finish by filling in minor surface imperfections;

(ii) 'general metal primer' means a coating designed for application as primers, such as adhesion promoters, sealers, surfacers, undercoats, plastic primers, wet-on-wet, non-sand fillers and spray fillers;

(iii) 'wash primer' means coatings containing at least 0,5 % by weight of phosphoric acid designed to be applied directly to bare metal surfaces to provide corrosion resistance and adhesion; coatings used as weldable primers; and mordant solutions for galvanised and zinc surfaces;

d) 'topcoat' means any pigmented coating that is designed to be applied either as a singlelayer or as a multiple-layer base to provide gloss and durability. It includes all products involved such as base coatings and clear coatings:

(i) 'base coatings' means pigmented coatings designed to provide colour and any desired optical effects, but not the gloss or surface resistance of the coating system;

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- (ii) 'clear coating' means a transparent coating designed to provide the final gloss and resistance properties of the coating system;
- e) 'special finishes' means coatings designed for application as topcoats requiring special properties, such as metallic or pearl effect, in a single layer, high-performance solid-colour and clear coats, (e.g. anti-scratch and fluorinated clear-coat), reflective base coat, texture finishes (e.g. hammer), anti-slip, under-body sealers, anti-chip coatings, interior finishes; and aerosols.

**Appendix 4****Extract of Appendix 5 of PG 6/34 b (06) : Product categories and maximum, application ready VOC contents**

	<b>Product Subcategory</b>	<b>coatings</b>	<b>VOC g/l(*)</b>
a	Preparatory and cleaning	Preparatory	850
		Pre-cleaner	200
b	Bodyfiller/stopper	All types	250
c	Primer	Surface/filler and general (metal) primer	540
		Wash primer	780
d	Topcoat	All types	420
e	Special finishes	All types	840
(*) g/l of ready for use product. Except for subcategory (a) any water content of the product ready for use should be discounted			

## **EXPLANATORY NOTES**

These notes do not comprise part of Permit Serial No. 041 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 to 35 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.