# PERMIT REFERENCE: PPC 63 Midland Steel Structures Ltd

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

Process Address Process Type	Golden Acres LaneBinleyCoventryCV3 2RTCoating of metal and plastic
Current Operator	Midland Steel Structures Ltd Wilton House Southbank Road Kenilworth
Previous Operator	N/a
Date of Application	1 <sup>st</sup> April 2004
Date Permit Issued	1 <sup>st</sup> February 2005

#### POLLUTION PREVENTION & CONTROL (ENGLAND AND WALES) REGULATIONS 2000

## **DOCUMENT A : PERMIT**

#### Midland Steel Structures Ltd

Reference Number **PPC/063.** 

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:

#### **Midland Steel Structures Ltd**

Whose registered office is:

Midland Steel Structures Ltd Wilton House Southbank Road Kenilworth Register in England No: 2035144

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:

Midland Steel Structures Ltd Golden Acres Lane Binley Coventry CV3 2RT

The permit is subject to the conditions specified in this document consisting of 14 pages and comprising documents A, B and C, and plans PPC/063/A, PPC/063/B and Appendix 1.

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

Dated ......1 February 2004.....

# <u>SCOPE</u>

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 PG6/23(04) Coating of Metal
- Secretary of State's Guidance General Guidance Manual on Policy and Procedures for A2 and B installations. ISBN 0-85521-028-1

Date Annual Fee Required:	1st April of each financial year
Date For Full Compliance:	Date permit issued
Permit Prepared By: Permit Checked By:	Matthew Pegg Rachel King

## LEGISLATION

- 1. Pollution Prevention and Control Act 1999.
- 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

- An 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.
- An 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.
- An **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 Installation is shown and the installation boundary is marked in red on the attached plan PPC/063./A. The internal layout of the production unit and Installation stacks are marked on the attached plan PPC/063/B

## **Description of Installation**

This permit is for an installation undertaking the coating of metal structures.

- The delivery and subsequent storage of paint and diluents to the site paint store
- Wet spraying of steels structures using air assisted airless spray guns
- Air drying of painted components within the building unit

## <u>Table 1</u>

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

Row Number	Area/Machinery Identification	Pollutants Emitted	Condition in Permit	Abatement Plant Required
1	Stack A	Particulates VOC's	1.3 1.4	Dry Filtration
2	Stack B	Particulates VOC's	1.3 1.4	Dry Filtration
3	Stack C	Particulates VOC's	1.3 1.4	Dry Filtration
4	Stack D	Particulates VOC's	1.3 1.4	Dry Filtration

## DOCUMENT B

#### **CONDITIONS**

#### All conditions shall have immediate effect unless stated otherwise.

#### 1.0 EMISSION LIMITS AND CONTROLS

- 1.1 All emissions to air shall be free from offensive odour outside the installation boundary, as perceived by the local Authority Inspector.
- 1.2 There shall be no emissions of particulate matter noticeable beyond the installation boundary.
- 1.3 Emissions of particulate matter shall not exceed the following levels:
  - a) Total particulate matter from stacks A, B, C and D as shown on plan PPC/063/B 50mg/m<sup>3</sup>
- 1.4 All paints, diluents and cleaning solvents used in the installation shall comply with the organic solvent specifications as detailed in appendix 3 of the Secretary of States Guidance Note PG 6/23(04).
- 1.5 The introduction of dilution air to achieve the emission concentration limits in this permit is not permitted. Exhaust flow rates should be consistent with the efficient capture of emissions.

#### 2.0 MONITORING, SAMPLING AND MEASUREMENT OF EMISSIONS

- 2.1 A visual assessment of particulate emissions from the installation shall be carried out at least once per week whilst paint spraying is in progress, from the installation boundary of the site where accessible.
- 2.2 An olfactory assessment of volatile organic compound emissions from the installation shall be carried out at least once per week whilst paint spraying is in progress, from the installation boundary of the site where accessible.
- 2.3 To demonstrate compliance with clause 1.3 (a) particulate emissions from stacks A, B, C and D shall be tested once every 12 months.
- 2.4 Monitoring to demonstrate compliance with clause 1.3 (a) shall not take place without prior approval from the local authority.
- 2.5 At least 7 days prior to monitoring taking place to demonstrate compliance with clause 1.3 (a) the operator shall notify the local authority of the provisional date and time of monitoring, the pollutants to be tested for and the methods to be used.
- 2.6 If the monitoring required by clause 2.3 indicates that the emission concentration from stacks, A, B, C and D is twice the emission limit Page 5 of 14 Permit: PPC/063

specified in clause 1.3 (a) the operator shall notify the local authority immediately.

- 2.7 If the monitoring required by clause 2.3 indicates that the emission concentration from stacks A, B, C and D exceeds the emission limit specified in clause 1.3 (a) the operator shall notify the local authority within 7 working days of the date of monitoring took place.
- 2.8 The results of monitoring required by clause 2.3 shall be submitted to the local authority in writing within 8 weeks of the date the monitoring took place.
- 2.9 The results of the monitoring required by clauses 2.1 and 2.2 shall be recorded in a log book once per week by a designated member of staff. This log book shall be retained on site for a minimum of 2 years.
- 2.10 Any adverse results from the monitoring required by clauses 2.1 and 2.2 shall be investigated immediately and the appropriate remedial action undertaken immediately. The course of the adverse emission and the remedial action taken shall be recorded in detail in the process log book and be retained for a minimum of 2 years.
- 2.11 A detailed record shall be kept of all organic solvents used in the process to include coatings, diluents and cleaning solvents. This record shall be submitted to the local authority once every 12 months and shall include the following information:-
  - (a) the name of the product and its classification in accordance with appendix 3 of Secretary of State's Guidance Note PG6/23(04)
  - (b) the total amount of solvent in each product used in grams of solvent per litre of product
  - (c) the total amount of each product used in the previous 6 months
  - (d) the total amount of solvent used in the previous 6 month period in tonnes, discounting solvents despatched for recycling or reuse.

#### 3.0 OPERATIONAL CONTROLS

- 3.1 The cleaning of spray guns with organic solvent and subsequent spray out shall only take place next to the extraction points serving the spraying area and shall only take place when the extraction system is in operation and in proper working order.
- 3.2 The spraying of coatings shall only take place within the spraying area and only take place when the extraction system is in operation and in proper working order.

- 3.3 All full and partially full containers holding organic solvent or organic solvent based products shall be stored in the paint stores marked on plan PPC/063/B.
- 3.4 Paint mixing shall only take place within the paint stores marked on plan referenced PPC/063/B.
- 3.5 The extraction system serving stacks A, B, C and D marked on the plans referenced PPC/063/B shall be serviced once every 12 months to ensure proper working order and any faults rectified immediately. The service records and records of maintenance shall be maintained on site for at least two years.

#### 4.0 STACKS, DUCTS AND PROCESS VENTS

- 4.1 Emissions from the spraying of coatings shall only be emitted to atmosphere via stacks A, B, C and D marked on the plan referenced PPC/063/B.
- 4.2 Stacks, A, B, C and D marked on the plan referenced PPC/063/B shall be at least 3m above roof ridge level and have an efflux velocity of 15m/s at the final discharge point of the stack when the extraction system is in operation.
- 4.3 Stacks A, B, C and D marked on the plan referenced PPC/063/B shall not be fitted with caps, cowls or any other restrictive devices except by prior written approval from the local authority.

#### 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 installation 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 <u>COMPLIANCE WITH SOLVENT EMISSIONS REGULATIONS</u>

- 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 emission limits for Volatile Organic Compounds can be demonstrated in 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:

	Current Target Emission	Target Emission by 31/10/05	Target Emission by 31/10/07
5 – 15 tonnes solvent consumption	Total Mass of Solids X 1	Total Mass of Solids X 0.9	Total Mass of Solids X 0.6
15 tonnes or more solvent consumption	Total Mass of Solids X 1	Total Mass of Solids X 0.56	Total Mass of Solids X 0.37

#### Or

 By meeting the following stack VOC emission limit by 31<sup>st</sup> October 2007: -

Emission limits Type of monitoring	
------------------------------------	--

150mg/Nm <sup>3</sup> (for processes consuming 5-15 tonnes of solvent per annum)	Annual manual extractive testing
50mg/Nm3 (for processes consuming more than 15 tonnes of solvent per annum)	Annual manual extractive testing
	Or

Please note the use of compliant coatings as specified in Appendix 3 of Process Guidance Note 6/23 (04) – Coating of Metal and Plastic Processes to is no longer permitted as a SED compliance route after  $31^{st}$  October 2005. Operators must choose 1 of the 2 options outlined above.

## DOCUMENT C

#### **RESIDUAL DUTY**

In relation to any aspect of the installation 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/ 063 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 he 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.

#### <u>Noise</u>

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.

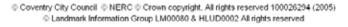
The main components of a Protocol are as follows:-

- 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.



Plan PPC/063/A Premises Boundary of Midland Steel Structures Ltd.





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