PERMIT REFERENCE: PPC 067 COVRAD HEAT TRANSFER Ltd

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

Process Address	Covrad Heat Transfer Ltd	
	Sir Henry Parkes Road	
	Canley	
	Coventry	
	CV6 5BN	
Process Type	Degreasing and Coating of Metal	
	Components	
Current Operator	Covrad Heat Transfer Ltd	
	Sir Henry Parkes Road	
	Canley	
	Coventry	
	CV6 5BN	
Previous Operator	N/A	
Date of Application	1 st April 2004	
	,	
Date Permit Issued	24 th March 2005	

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

DOCUMENT A: PERMIT

Covrad Heat Transfer Ltd

Reference Number PPC/067

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:

Covrad Heat Transfer Ltd

Whose registered office is:

Sir Henry Parkes Rd
Canley
Coventry
CV6 5BN
Registered in England No. 64404

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:

Covrad Heat Transfer Sir Henry Parkes Rd Canley Coventry CV6 5BN

The permit is subject to the conditions specified in this document consisting of 14 pages and comprising documents A, B and C, plans PPC/067/A, PPC/067/B, PPC/067/C, PPC/067/D and Appendix 1.

	lan Bennett, Head of Environmental Heaperson authorised to sign on behalf of	
Dated	24 March 2005	

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SCOPE

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

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

Technical Guidance documents used in the preparation of this document:

- Secretary of States Guidance Note PG 6/23 Coating of Metal and Plastic
- Secretary of States Guidance Note PG 6/45 Surface Cleaning
- 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: Ayeisha Mann Permit Checked By: Rachel King

LEGISLATION

- 1. Pollution Prevention and Control Act 1999.
- 2. Pollution Prevention and Control Regulations 2000 as amended, schedule 1 as amended

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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 (e.g. a company or individual) who has control over the operation of an installation.
- Volatile organic compound (VOC) shall mean any organic compound having at 293K a vapour pressure of 0.01 kPa or more, or having a corresponding volatility under the particular conditions of use.
- Organic solvent shall mean any VOC which is used alone or in combination with other agents, and without undergoing a chemical change, to dissolve raw materials, products or waste materials, or is used as a cleaning agent to dissolve contaminants, or as a dissolver, or as a dispersion medium, or as a viscosity adjuster, or as a surface tension adjuster, or a plasticiser, or as a preservative.
- Stack includes structures and openings of any kind from or through which substances may be emitted to air.
- Duct includes enclosed structures through which gaseous substances may be conveyed.
- Process vent includes open terminations of ducts.
- Authorised Officer shall mean an officer authorised to carry out duties under the Pollution Prevention and Control Act 1999 and subordinate regulations
- Logbook shall mean any electronic or paper means of storage of the required information as agreed by the regulator
- Local Authority shall mean Coventry City Council
- "m" means metre
- "m/s" means metres per second

The general location of the Permitted Process is shown on the attached plan PPC/067/A. The Installation boundary is marked in red on the attached plan PPC/067/B. The internal layout of the paint shop is shown on the attached plans PPC/ 067/C and PPC/067/D.

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Description of Installation

The delivery and storage of paints, diluents and cleaning solvents in the paint store shown on plan PPC/067/D

The degreasing using Trichloroethylene and rinsing of metal components in the troughs marked A on plan PPC/067/C, and the degreasing using Perchloroethylene and rinsing of metal components in the troughs marked B on the PPC/067/C.

The paint spraying of Industrial Radiators in the Industrial Build paint area as shown on plan PPC/067/C marked area D, using the 'Bollhoff' air assisted airless spray guns or high volume, low pressure spray guns.

The spraying of metal components in the assembly shop spray booth marked G on the plan PPC/067/C.

The paint spraying of metal components in the Red Oxide spray area using PA24 Etch primer as shown on plan PPC/067/C marked area F, using the 'Bollhoff' air assisted airless spray gun or high volume, low pressure spray guns.

The powder coating of metal components takes place in the plant marked as H on plan PPC/067/C. However, this is currently not regulated by this permit as the total annual throughput of powder coating material is below the threshold set down in the regulations.

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<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	Emission Limit in Permit	Abatement Plant Required
1	Degreasing Trough A	VOC Particulate	VOC-see Clause 1.3b & 1.5 & 2.9	None
			Particulates- none	
2	Degreasing Trough B	VOC Particulate	VOC-see Clause 1.3b & 1.5 & 2.9	None
			Particulates-	
3	Paint Spraying in Assembly shop spray booth Area G		Particulates- see Clause 1.3a VOC- see clause 2.9	None
4	Paint Spraying in Industrial Build Paint Area, Marked D	VOC Particulate	Particulates- see Clause 1.3a VOC- see clause 2.9	None
5	Paint spraying Red primer spray area marked F		Particulates- see Clause 1.3a VOC- see clause 2.9	None

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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 process boundary.
- 1.3 The following emissions to the atmosphere expressed as a thirty-minute mean shall not be exceeded.
 - (a) Total particulate matter from the stacks serving the Industrial Build, Red Oxide and Assembly Shop spray booths:
 50 mg/Nm³
 - (b) Volatile Organic Compounds expressed as total carbon, excluding particulate matter, from the degreasing tanks using Trichloroethylene in the troughs marked A on plan PPC/067/C, and the degreasing tanks using Perchloroethylene in the troughs marked B on the PPC/067/C: 20 mg/Nm³
- 1.4 The introduction of dilution air to achieve the emission concentration limits in this authorisation is not permitted. Exhaust flow rates should be consistent with the efficient capture of emissions.
- 1.5 The operator shall demonstrate that fugitive Volatile Organic Compound emissions from the Trichloroethylene and the Perchloroethylene degreasing tanks do not exceed 15%, expressed as a total percent of the total organic solvent input. By the submission of a solvent management plan in line with the requirements of PG 6/45(04).

2.0 MONITORING, SAMPLING AND MEASUREMENT OF EMISSIONS

- 2.1 A visual assessment of particulate emissions from the spray booths shall be carried out at least once a week while spraying operations are in progress. This shall be carried out by making an assessment of paint deposits beyond the installation boundary.
- 2.2 An olfactory assessment of emissions of volatile organic compounds shall be carried out at least once a week from a position along the installation boundary, where accessible.
- 2.3 Emissions from the spray booths shall be tested for particulate matter at least once every 12 months to demonstrate compliance with clause 1.3a.
- 2.4 The degreasing tanks using Trichloroethylene and Perchloroethylene shall be tested for VOC expressed as total carbon, excluding particulate matter at least once every 12 months to demonstrate compliance with clause 1.3b.
- 2.5 The Authority shall be notified 7 days in advance of any periodic monitoring to demonstrate compliance with clause 1.3 a and b. This notification shall

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- include the provisional date, time of the monitoring, pollutants to be tested and the method to be used.
- 2.6 The results of the monitoring to demonstrate compliance with clause 1.3 a and b shall be forwarded to this Local Authority within 8 weeks of the monitoring taking place.
- 2.7 The results of monitoring to comply with clauses 2.1 and 2.2 shall be recorded in a logbook. This shall include the date, time, the name of the observer and an assessment of the emissions. This logbook shall be retained on site for a minimum of four years.
- 2.8 Any adverse results from monitoring required in clause 2.1 and 2.2 shall be followed up immediately by the investigation of the cause of the emission and any corrective action taken. This information shall be recorded in the log book required by clause 2.7.
- 2.9 A detailed record shall be kept of all organic solvents used at the installation. This shall include cleaning solvents, the quantity of solvent used for degreasing and metal cleaning, diluent solvent usage and solvents contained within the coatings used. This inventory shall be forwarded to the Local Authority once every 12 months and shall include a determination of the total organic solvent usage for that period.

3.0 OPERATIONAL CONTROLS

- 3.1 Spraying shall only be carried out in the spraybooths. This shall be achieved by a closed delivery system; this system must be in proper working order.
- 3.2 The cleaning and testing of any spray guns and other equipment shall only be carried out in the Industrial Build, Red Oxide and the Assembly Shop spraybooths. This shall only be undertaken whilst the extraction system is in operation and in proper working order. Spray out shall be collected into a separate receptacle and not sprayed directly into the spraybooth.
- 3.3 The mixing of paint shall only be carried out in the paint mixing room.
- 3.4 The spraying of paint in the spray booths shall only be carried out whilst the extraction system is in operation.
- 3.5 All full and partially full containers, which hold or have held materials consisting of organic solvents, shall be lidded whilst not in use.
- 3.6 The application equipment for all coatings shall be capable of achieving a transfer efficiency of solids of at least 65%.
- 3.7 The Trichloroethylene degreaser in the trough marked A on plan PPC/067/C, and the Perchloroethylene degreaser in the trough marked B on plan PPC/067/C, shall be emptied twice a year and the contents along with all other organic solvent waste being removed by a licensed waste contractor. Licensed contractors shall remove all other liquid wastes containing Volatile Organic Compounds.
- 3.8 All solvent-based materials shall be stored in sealed containers impervious and resistant to all chemicals stored within them.

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3.9 All full, partially full and nominally empty containers which hold or have held materials which contain organic solvents must be stored in the paint mixing room and have lidded containers or must be stored in a covered skip.

4.0 STACKS, DUCTS AND PROCESS VENTS

- 4.1 The height of the final discharge point for the stacks serving the Industrial Build, Red Oxide and Assembly Shop spray booths shall be 3m above the roof ridge. The efflux velocity shall not be less than 15m/s.
- 4.2 Emissions from the stacks serving the spray booths shall at all times be emitted to air via dry filters.

5.0 GENERAL OPERATIONS

- 5.1 The operator shall undertake regular cleaning and preventative maintenance including inspection and repair/replacement on all plant and equipment concerned with the emission, capture, transport and control of emissions to atmosphere. Where necessary manufacturers guidelines shall be used to determine the regularity of maintenance. Records of preventative maintenance including inspections and any works undertaken shall be kept on site and made available to the local authority inspector on request.
- 5.2 Spares and consumables for plant and equipment used in the installation in particular that subject to continual use or wear shall be held on site or shall be available at short notice. Such plant or equipment shall not be used unless that plant or equipment is capable of working in accordance with the conditions of this permit.
- 5.3 Staff at all levels shall receive the necessary training and instruction in their duties relating to control of the activities and emissions to air. Records shall be kept which details all relevant training provided to staff, and these records shall be kept for a minimum of 2 years.
- 5.4 Any malfunction of plant or spillage of solvent-based materials shall be remedied as soon as possible and process operations altered whilst the necessary work is undertaken.
- 5.5 Any incident likely to give rise to adverse atmospheric emissions or emissions that may have an impact on the local community shall be notified to the local authority immediately, and the details of incident including remedial action taken recorded in the process log book.
- 5.6 The operator shall make available on demand and without charge any of the records required to be kept by this permit.
- 5.7 If there is any intention to change any aspect of the prescribed installation from the description contained in the beginning of this permit, or any other aspect which may affect the substances or concentration or amount of substances being emitted to atmosphere, the operator shall notify the regulator of the proposed changes at least 4 weeks in advance before the changes take place.

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6.0 COMPLIANCE WITH SOLVENT EMISSIONS REGULATIONS

- 6.1 The operator shall identify products or materials that are/contain risk phrased substances/materials R40, 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 The operator shall demonstrate compliance with the Solvent Emissions (England & Wales) Regulations 2004 in relation to the coating operation by one of the following methods:
 - 1) By 31st October 2007 achieve the following VOC emission limits expressed as total excluding particulate matter over a 30 minute mean:

Release Point	Emission Limit
Waste gases from oxidation plant	50 mg/Nm3
Waste gases from turbines reciprocating	150 mg/Nm3 till 2013
engines or boilers used as abatement plant	50 mg/Nm3 after 2013 for drying
	processes
	50 mg/Nm3 after 2013 for other processes
Any other waste gases	75 mg/Nm3

Fugitive Emission Limit Value = 20 % of solvent input

Or

2) The use of a Solvent Reduction Scheme to demonstrate the achievement of a Target Emission which is calculated by identifying the total amount of solids used in coating material in a 12 month period (all ingredients other than water and organic solvents should be assumed to form part of the solid coating). The Target Emission is as follows:

Existing Installations at 1/12/98	Existing Installations at 31/10/05	Existing Installations at 31/10/07
Total Mass of Solid x 1	Total Mass of Solid x 0.56	Total Mass of Solid x 0.37

Written notification that the operator wishes to comply with the solvent reduction scheme shall be sent to the Local Authority by 31st October 2005.

- 6.3. The operator shall demonstrate compliance with the Solvent Emissions (England & Wales) Regulations 2004 in relation to the solvent degreasing operation by one of the following methods:
 - 1) By 31st October 2007 achieve the following VOC emission limits:

VOC in Waste Gases	Emission Limit	Fugitive Emission Values
For surface cleaning activities whereby solvent consumption equates to between 1 and 5 tonnes of designated risk phrase materials, this includes all waste gases.	VOC expressed as total mass of individual designated risk phrase material:	15% of solvent input

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All waste gases.	20 mg/Nm3 30 minute mean	
For surface cleaning activities whereby solvent consumption equates to 5 tonnes or more of designated risk phrase materials, this includes all waste gases	VOC expressed as total mass of individual designated risk phrase material: 20 mg/Nm3	10% of solvent input

The operator needs to comply with these emission limits from the 31st October 2007.

DOCUMENT C

RESIDUAL DUTY

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

For the purposes of the Pollution Prevention and Control (England and Wales) Regulations 2000, "best available techniques" means the most effective and Page 10 of 14

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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.

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SUPPLEMENTARY NOTES

These notes do not comprise part of the Permit PPC/067 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.

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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 twomonth period, unless the local authority and the applicants agree a longer period. Where the local authority approves the transfer, the transfer will take effect from the date requested by the operator or a date that may be agreed by the local authority and the applicants.

Variation to Permits

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

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

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

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

Substantial Change

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

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

Noise

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

Appeals

An Appeal can be made against the conditions in, or variations to this Permit as per Part IV of the Regulations. Appeals are made to the Planning Inspectorate who acts on behalf of the Secretary of State. Appeals against conditions within a Permit must be submitted within 6 months of the date of issue of the permit. Appeals against

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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.

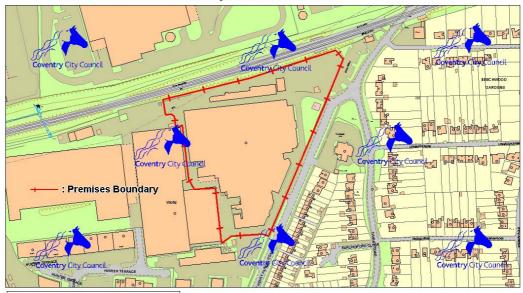
Protocols ensure that the sampling procedures are carried out correctly and that the results obtained accurately characterise the process.

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.

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Plan PPC/067/A Premises Boundary of Covrad Heat Transfer



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