



**Pollution Prevention & Control Act 1999
Environmental Permitting (England and Wales)
Regulations 2010**

Document A: Environmental Permit

Steel Construction Ltd
Reference Number **PPC/204**

Coventry City Council (“the Council”) in accordance with Section 13(1) of the Environmental Permitting (England & Wales) Regulations 2010 (“The Regulations”), hereby permits:

Steel Construction Ltd

Whose registered office is:

Steel Construction Ltd
Bodmin Road
Coventry
CV2 5DB

To operate a Part B installation involving a metal coating activity, as prescribed in Section 6.4, Part B (a) of Schedule 1 Part 2 to The Regulations, at:

Steel Construction Ltd
Bodmin Road
Coventry
CV2 5DB

The permit is subject to the conditions specified in this document consisting of 18 pages and comprising documents A, B and C, Plan PPC/204/A, Plan PPC/204/B and Appendix 1.

Signed.....

Sara Roach - Assistant Director, Public Safety and Safeguarding Adults
A person authorised to sign on behalf of the Council

Dated

SCOPE

The installation comprises not just any relevant unit carrying out a Part B activity listed in Schedule 1 Part 2 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 (11) (revised May 13) – Coating of Metal and Plastic
- Secretary of State's Guidance – General Guidance Manual on Policy and Procedures for A2 and B installations (Defra April 2012).

Date Annual Fee Required: 1st April of each financial year

Date for Full Compliance: Date permit issued

Permit Prepared By: Zoe Smith

LEGISLATION

1. Pollution Prevention and Control Act 1999
2. Environmental Permitting (England and Wales) Regulations 2010 as amended

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 EP 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 EP 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.
- **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.
- **Regulator** shall mean Coventry City Council.
- **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.
- **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.
- **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.
- "m" means metre
- "m/s" means metres per second
- **Due diligence** the use of these words in the odour boundary condition means that there shall not be a breach of the condition if the operator can show that he/she employed the BAT. Accordingly, any emission of offensive odour where the operator can show that he/she employed BAT ought not to give rise to the Regulator issuing proceedings against the operator for the breach of an odour boundary condition.
- **Best Available Techniques (BAT)** 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 Environmental Permitting (England & Wales) Regulations 2010 “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 that is not 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.
- d) Further guidance can be obtained from the Secretary of State’s Guidance - Environmental Permitting General Guidance Manual on Policy and Procedures for A2 and B Installations.

Description of Installation

The general location of the Permitted Process and installation boundary is shown on the attached plan PPC/204/B. The internal layout of the factory is shown on the attached plan PPC/204/A, including the paint store and the location of the wet back booth.

The metal products being sprayed arrive at the premises shot blasted and sometimes primed. The application of paints to steel beams, by airless spraying, occurs inside a wet wall spray booth. All emissions from the spray booth are released to atmosphere. The sludge from the wet filtration is removed and collected by a waste disposal company.

This is a coating activity as defined in Schedule 1 Part 2, Section 6.4 Part B (a) of the Environmental Permitting (England and Wales) Regulations 2010 using 5 tonnes or more of organic solvents.

Table 1

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

Area/Machinery Identification	Pollutants Emitted	Emission Limit in Permit	Abatement Plant Required	Monitoring frequency
Paint Spraying in Industrial Spray Booth	Volatile Organic Compounds (VOC)	1.1 to 2.2 inclusive	None	Annually OR Submit Solvent Management Plan
	Particulate Matter	1.1 to 2.2 inclusive	Wet filtration	Annually OR Submit Certificate of Compliance

Note: See relevant sections of Permit for monitoring requirements

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 site boundary, as perceived by the Local Authority Inspector.
- 1.2 All emissions to air, other than steam or condensed water vapour, shall be free from droplets, persistent mist and persistent fume.
- 1.3 There shall be no visible emissions of particulate matter noticeable beyond the installation boundary.
- 1.4 (i) The following concentrations of emissions to atmosphere shall not be exceeded:
 - (a) Total particulate matter from the wet wall spray booth shall not exceed 50mg/m^3 , as a 30 minute mean.
 - (b) Volatile organic compounds (expressed as total mass of organic carbon) from the wet wall spray booth shall not exceed 100mg/m^3 .
- (ii) The following fugitive emission limit shall not be exceeded:
 - (a) 25% of organic solvent input.

Note: The reference conditions for the limit given in condition 1.5 are 275.15K, 101.3kPa, without correction for water vapour content, unless stated otherwise.

- 1.5 The introduction of dilution air to achieve the emission concentration limits in condition 1.4 above is not permitted. Exhaust flow rates should be consistent with the efficient capture of emissions.
- 1.6 The wet filtration and extraction system should be switched on at all times when the booth is in use. It should not be used in the event of malfunction.
- 1.7 The water levels in the wet wall filter should be checked daily and records of this should be kept.

2.0 MONITORING, SAMPLING AND MEASUREMENT OF EMISSIONS

- 2.1 A calculation shall be submitted to this Authority annually, in order to demonstrate compliance with the provisions of the Solvent Emissions Regulations 2004. If compliance with this can not be demonstrated the operator shall comply with the VOC emission limit outlined in condition 1.4 (i) (b) and 1.4 (ii) (a) above.

- 2.2 Emissions of particulate matter from the wet wall booth shall be monitored annually to the main procedural provisions of BS ISO 13284.
- 2.3 To demonstrate compliance with condition 1.3 a visual assessment of particulate emissions from the spray booth shall be carried out at least once a day while spraying operations are in progress. This shall be carried out by making an assessment of deposits around the installation boundary.
- 2.4 An olfactory assessment of emissions of volatile organic compounds from the spray booth, shall be carried out at least once a day from the installation boundary, whilst spraying operations are in progress.
- 2.5 The results of monitoring to comply with 2.3 and 2.4 shall be recorded in a logbook. This shall include the date, time, wind direction and strength and the name of the observer and an assessment of the emissions. This logbook shall be retained, on site, for a minimum of two years.
- 2.6 For extractive testing the sampling should meet the following requirements:
- For batch processes the extractive sampling should take place over a complete cycle of the activity and;
 - For all activities the sampling period should be sufficient such that at least 3 results are obtained
- 2.7 Should the activity be continuous, or have a batch cycle that is not compatible with the time available for sampling then the data required should be obtained over a minimum period of 2 hours in total where:
- No 30 minute mean emission concentration should exceed twice the specified emission concentration limits during normal operation (excluding start up and shut down)
 - For extractive testing, no result of monitoring should exceed the emission limit concentrations specified
- 2.8 The operator shall notify the regulator at least 7 days before any periodic monitoring exercise to determine compliance with emission limit values. The operator shall state the provisional time and date of monitoring, pollutants to be tested and the methods to be used.
- 2.9 The results of any non-continuous emission testing shall be forwarded to the regulator within 8 weeks of the completion of the sampling.
- 2.10 The operator shall ensure that adequate facilities for sampling are provided on vents or ducts.

- 2.11 Adverse results from **any** monitoring activity shall be investigated by the operator as soon as the monitoring data has been 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, and the action taken by the operator to rectify the situation
 - Re-test to demonstrate compliance as soon as possible; and
 - Notify the regulator
- 2.12 The operator shall keep records of inspections, tests and monitoring, including all non-continuous monitoring, inspections and visual assessments. In such cases:
- Records shall be kept on site by the operator for at least two years
 - Made available for the regulator to examine
- 2.13 The operator shall provide a list of key abatement plant (wet wall spray booth) and shall have a written plan for dealing with its failure, in order to minimise any adverse affects.
- 2.14 In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions, the operator must;
- Investigate immediately and undertake corrective action
 - Adjust the process or activity to minimise those emissions; and
 - Promptly record the events and actions taken.
- 2.15 The regulator shall be informed without delay if there is an emission that is likely to have an effect on the local community or in the event of the failure of key arrestment plant.

3.0 DISPERSION OF CONTAINED EMISSIONS

- 3.1 Stacks and ductwork shall be cleaned to prevent accumulation of materials, as part of the routine maintenance programme.
- 3.2 Stacks or vents shall not be fitted with any restriction at the final opening such as a plate, cap or cowl or other restriction at the final opening. The discharge from the chimney shall be vertically upwards. The target exit velocity should be 15 m/s.

4.0 MATERIALS HANDLING AND PROCESSING

- 4.1 Drums of organic solvents shall be stored in a secure and well ventilated storage area. This storage area shall be bunded, and shall be capable of holding at least 110% of the capacity of the largest organic solvent storage vessel contained within.

- 4.2 All vessels or containers containing organic solvents, including coatings containing VOC shall be lidded or enclosed when not in use and the period that the vessel or container is opened for use shall be kept to a minimum.
- 4.3 All potentially odorous waste materials shall be stored in suitable closed containers or bulk storage vessels, where appropriate vented to suitable abatement plant.
- 4.4 All measures shall be taken to minimise VOC emissions during mixing i.e. the use of covered or closed mixing vessels.
- 4.5 Emissions from the emptying of mixing vessels and transfer of materials shall be adequately contained, preferably by the use of closed transfer systems. This may be achieved by the use of closed mobile containers, containers with close fitting lids, or, preferably, closed containers with pipeline delivery.
- 4.6 All reasonably practicable effort shall be made to minimise the amount of residual organic solvent bearing material left in drums and other containers after use. All organic solvent contaminated waste shall be stored in closed containers.
- 4.7 Prior to disposal, empty drums and containers contaminated with organic solvent shall be closed to minimise emissions from residues during storage prior to disposal and labelled, so that all handling them are aware of their contents and hazardous properties.
- 4.8 Nominally empty drums or drums containing waste contaminated with VOC awaiting disposal shall be stored in accordance with the requirements for full or new containers.
- 4.9 Prior to disposal, used wipes and other items contaminated with organic solvent shall be placed in a suitably labelled metal bin fitted with a self closing lid.

Note: From a Health & Safety point of view it is advised that bins should be emptied at least daily, as they not only present a fire hazard, they may also undergo spontaneous combustion – for such materials special bins that allow air to circulate beneath and around them to aid cooling are advised.

5.0 CLEANING OPERATIONS

- 5.1 Cleaning operations involving organic solvents shall be periodically reviewed, normally at least once every two years, to identify opportunities for reducing VOC emissions. The operator shall be provided with a report on the conclusions of the review.
- 5.2 Where practicable, fixed equipment shall be cleaned in situ, and such equipment shall, where practicable, be kept enclosed whilst cleaning is carried out.

- 5.3 Where equipment is cleaned off line using organic solvents, cleaning shall be carried out using enclosed cleaning systems, wherever possible. Enclosed cleaning systems shall be sealed to prevent emissions whilst in operation, except during purging at the end of the cleaning cycle. If this is not practicable, emissions shall be vented to abatement plant where necessary.
- 5.4 Residual coating materials contained in parts of the application equipment shall be removed prior to cleaning.
- 5.5 Suitable organic solvent containment and spillage equipment shall be readily available in organic solvent handling areas.
- 5.6 Cleaning of particulate matter arrestment plant, coating application plant, and extract ductwork which may contain finely divided materials, shall be carried out so as to minimise emissions into the air.
- 5.7 Cleaning of the trestle tables used for spraying and any reject products should take place in the spraying area and with the extraction system running.
- 5.8 Dusty wastes shall be stored in closed containers and handled in a manner that avoids emissions.
- 5.9 All spillages shall be cleared as soon as possible; solids by vacuum cleaning, wet methods, or other appropriate techniques. Dry sweeping of dusty materials shall not be permitted.

6.0 SOLVENT MANAGEMENT

- 6.1 A programme to monitor and record the consumption of coatings against product produced shall be used to minimise the amount of excess organic solvent/coating used.
- 6.2 A determination of the organic solvent consumption, the total mass of organic solvent inputs minus any solvents sent for reuse/recovery off site, shall be made and submitted to the regulator annually. The determination of solvent consumption shall be in the form of a mass balance calculation to determine the annual actual consumption of organic solvent. The quantity of compliant and non compliant coating shall also be determined.
- 6.3 The operator shall implement a system of solvent mass tracking and shall use this data to provide a Solvent Management Plan (SMP) to demonstrate compliance with the provisions of the Solvent Emissions Regulations 2004. Compliance with the Reduction Scheme is achieved if the annual actual solvent emission determined from the Solvent Management Plan is less than or equal to the Target Emission, in accordance with Process Guidance Note 6/23(11):

Coating activity	5-15 tonnes solvent consumption	Total mass of solids x 0.6
	Over 15 tonnes	Total mass of solids x 0.37

- 6.4 The Solvent Management Plan and associated solvent mass tracking data shall be made available for inspection by the regulator upon request.
- 6.5 The operator shall undertake an annual review to ascertain whether any solvent/coating used contains one of the following designated risk phrase materials: R45, R46, R49, R60, R61 (Hazard phrase H340, H350, H350i, H360D, H360F) and shall seek to replace that solvent/coating with a less harmful substance or preparation.
- 6.6 Fugitive emissions should not exceed 25% of organic solvent input, as outlined in condition 1.4(ii), and the solvent management system required in conditions 6.1 to 6.5 shall be used to demonstrate compliance with this limit.

7.0 GENERAL OPERATIONS

- 7.1 A high standard of housekeeping shall be maintained at all times.
- 7.2 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 plant breakdowns can be rectified rapidly.
- 7.3 The operator shall maintain a written maintenance programme for all pollution control equipment and a record of maintenance that has been undertaken and shall be made available for inspection by the regulator.
- 7.4 The best available techniques (BAT) shall be used to prevent or, where that is not practicable, reduce emissions from the installation in relation to any aspect of the operation of the installation which is not regulated by any other condition of this permit (see definitions for explanation of BAT).
- 7.5 If the operator proposes to make a change in operation of the installation, he must, at least 14 days before making the change, notify the regulator in writing. The notification must contain a description of the proposed change in operation. It is not necessary to make such a notification if an application to vary this permit has been made and the application contains a description of the proposed change. In this condition 'change in operation' means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment.
- 7.6 The process operator shall ensure that adequate environmental management systems (EMS) are devised and maintained to ensure compliance with this Permit. These systems may involve the adoption of recognised published standards such as ISO 14001 or EMAS, or alternatively may comprise a system tailored to the nature and size of the business.

- 7.7 All staff whose functions could impact on air emissions from the activity should receive appropriate training on those functions. These should include:
- Awareness of their responsibilities under the permit
 - Steps that are necessary to minimise emissions on start up and shut down
 - Action to take when there are abnormal conditions or accidents or spillages that could, if not controlled, result in emissions
- 7.8 The operator shall maintain a statement of training requirements for each post with the above mentioned functions and keep a record of the training received by each person. These documents shall be made available to the regulator on request.
- 7.9 All records and documentation referred to in this Permit shall be recorded in an easily retrievable format. These records shall be retained by the operator for a minimum of two years and shall be made available to the Regulator for inspection upon request.

DOCUMENT C

RESIDUAL DUTY

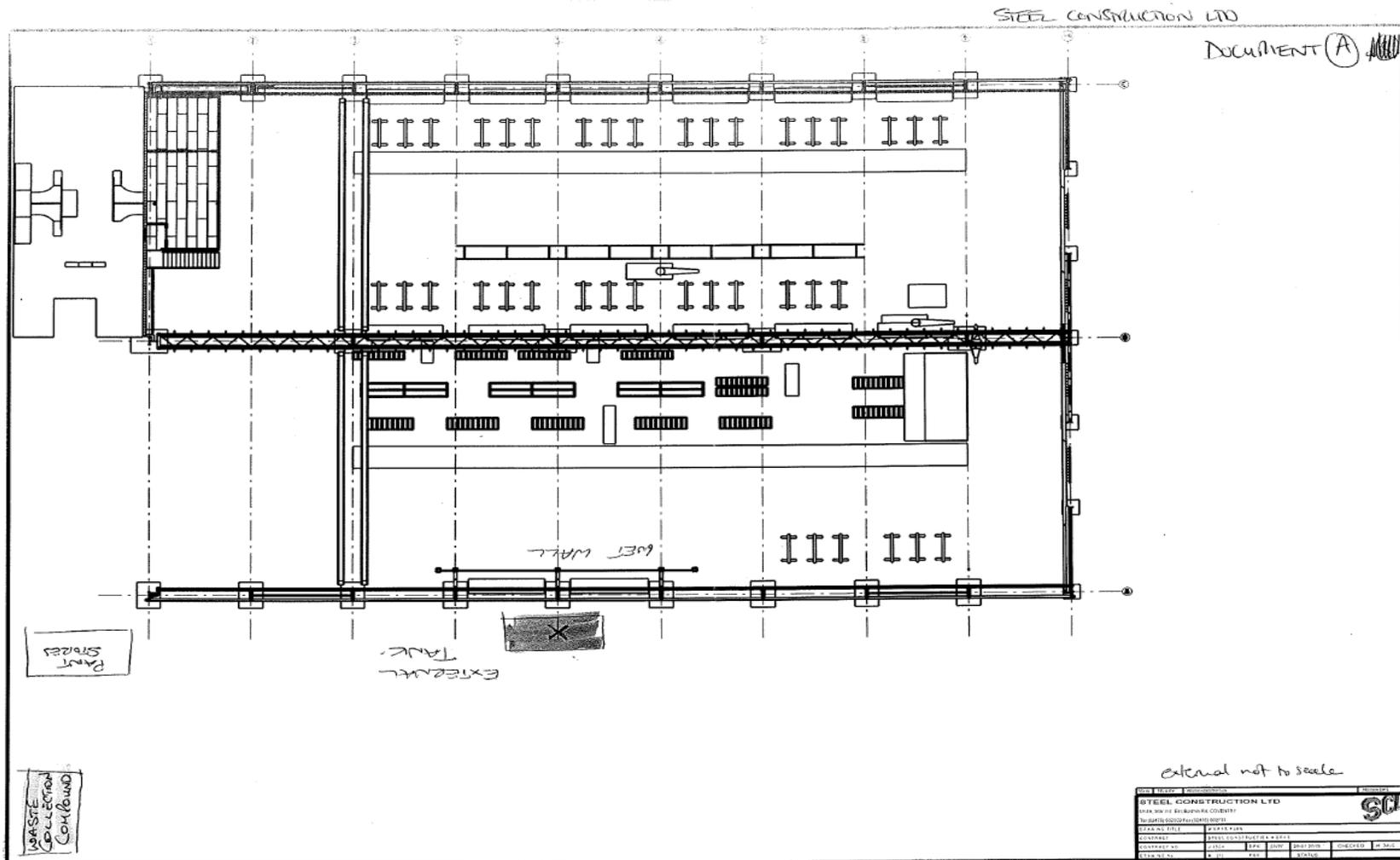
In relation to any aspect of the process not regulated by specific conditions in this permit, then Best Available Techniques shall be used:

For the purposes of the Environmental Permitting (England & Wales) Regulations 2010 “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 that is not practicable, generally to reduce emissions and the impact on the environment as a whole; and for the purpose of this definition –

- “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;
- “best” means, in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole;
- “techniques” includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

Further guidance can be obtained from the Secretary of State’s Guidance - Environmental Permitting General Guidance Manual on Policy and Procedures for A2 and B Installations.

PPC/204 Plan A – Site Layout



PPC/204 Plan B – Steel Construction Site Boundary and Location



Community Services Directorate, Environmental Health,
Coventry City Council Room 314,
Broadgate House, Coventry, CV1 1NH
Tel: 0500 834 3333
Fax: 024 7683 1840



APPENDIX 1 - SUPPLEMENTARY NOTES

These notes do not comprise part of the Permit 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 34(1) of the Environmental Permitting (England and Wales) Regulations 2010:

- 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 the 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 Environmental Permitting (England and Wales) Regulations 2010. 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. The 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.

- 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 20(1) of the Regulations. The application must be in writing and, in accordance with Part 1 of Schedule 5 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 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
Environment Team, Major and Specialist Casework
Room 4/19 – Kite Wing
Temple Quay House, 2 The Square
Temple Quay
BRISTOL
BS1 6PN