## **CONSOLIDATED PERMIT**



#### **Hereby Permit**

Link 51 Limited Link House Halesfield 6 Telford Shropshire TF7 4LN

#### To Operate a Part B Installation At

Link 51(Shelving and Storage Division)
PO Box 16
Mill Street
Brierley Hill
West Midlands
DY5 2TB

#### **Under The Provisions of**

THE POLLUTION PREVENTION AND CONTROL ACT 1999

THE ENVIRONMENTAL PERMITTING (ENGLAND AND WALES) REGULATIONS 2007

SOLVENTS EMISSIONS (ENGLAND AND WALES) REGULATIONS 2004

Permit Reference Number PB/38

**Date Initial Permit Issued** 17<sup>th</sup> March 2005

#### **Variations Issued**

Reference WK/200805192/LAR – 15<sup>th</sup> February 2008 Reference WK/200935086vh –20<sup>th</sup> November 2009

Dated: 20<sup>th</sup> November 2009

#### T Glews

P. Gleus.

#### **Environmental Protection Manager**

(Authorised to sign on behalf of Dudley Metropolitan Borough Council)

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#### INTRODUCTORY NOTE TO PERMIT

The Permit is issued by Dudley Metropolitan Borough Council ("the Council") under Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2007 ("the EP Regulations") to operate an installation carrying out activities covered by the description in Part 2 of Schedule 1 of the EP Regulations, to the extent authorised by the Permit.

The requirements of this Permit shall be effective from the date of service unless otherwise specified within the Permit. Where a Variation Notice has been served the conditions contained within that Variation Notice shall be effective from the date that the Notice is served, unless a specific implementation date is allocated to specific conditions.

For the purpose of this permit the legal operator of the installation is Link 51 Limited, Link House, Halesfield 6 Telford Shropshire TF7 4LN

#### **DESCRIPTION OF THE INSTALLATION:**

The coating of steel components, using solvent-based paints and powder coatings, involving the following operations:

#### **Nordson Powder Coating Line**

- the pre-treatment and alkali degreasing of metal components in an aqueous based phosphate line.
- the drying of metal components in a gas fired oven.
- the application of powder coating to metal components using an automatic electrostatic spray booth with extraction to internally vented particulate matter arrestment plant which re-circulates collected dusts back into the coating line. Subsequent curing of coatings takes place in an infra-red pre-heat oven followed by final curing in gas fired oven

#### **Graco Solvent-based Paint Line**

- the conveyorised aqueous cleaning and iron phosphate spray pre-treatment of metal followed by drying in a gas fired oven.
- the pre-treatment and degreasing of metal components in an aqueous spray based phosphate line.
- the drying of metal components in a gas fired oven.
- the spray application of organic solvent-containing paints in one of two automatic wet back (downdraught waterwash) booths
- the curing of the coating in a gas fired oven

#### **STATUS LOG**

Detail	Reference	Date
Deemed Application Made	PB/38	1 <sup>st</sup> April 2004
Permit Issued	PB/38	17 <sup>th</sup> September 2005
Variation Issued	PB/38	15 <sup>th</sup> February 2008
	WK/200805192/LAR	
Variation Issued	PB/38	20 <sup>th</sup> November 2009
	WK/200935086vh	

#### **CONDITIONS**

#### 1.0 THE PERMITTED INSTALLATION

1.1 The permitted installation shall be comprised of the activities and associated activities specified in Table 1.1

Table 1.1				
Activity listed in Schedule 1 of	Description of specified activity			
PPC Regulations or Associated				
Activity				
Directly Associated Activity –	Handling of all raw materials including receipt through			
Handling of raw materials	to sending material via a designated process route.			
Directly Associated Activity –	Cleaning and pretreatment of components			
Preparation of metal Components				
Section 6.4, Part B (a) (i)	The coating of materials applying more than 20			
	tonnes of coating materials in solid form per annum.			
Section 6.4, Part B (a) (iv)	The application of paint involving the use of more than			
Section 7- Solvent Emission Activity	5 tonnes of organic solvent in any 12 month period.			
Directly Associated Activity – Handling	Collection and storage of waste including collected dust,			
of waste materials	used thinners and paint tins.			

- 1.2 The activities permitted under condition 1.1 shall not extend beyond the site boundary, being the area shown hatched on the Site Plan PB/38 in Appendix 1 to this permit.
- 1.3 If the operator proposes to make a change in the operation of the installation, the operator must, at least 28 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.
- 1.4 The best available techniques (BAT) shall be used to prevent or, where that is not possible, 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

#### 2.0 EMISSION LIMITS AND CONTROL

- 2.1 There shall be no visible emissions to the air of particulate matter or fume from building openings or process exhaust points.
- 2.2 All emissions of water vapour to air shall be free from droplet fall out.
- 2.3 All emissions to air from the installation shall be free from offensive odours outside of the Installation boundary as perceived by an authorised officer of the Council.
- 2.4 Emissions from combustion processes shall, in normal operation, be free from visible smoke and in any case shall not exceed the equivalent of Ringelmann Shade 1 as described in British Standard BS 2742:1969.
- 2.5 The introduction of dilution air to achieve emission concentration limits contained within this permit is not permitted. Exhaust flow rates shall be consistent with the efficient capture of emissions and good operating practices.
- 2.6 The limit for emissions to air from contained emission points set out in Table 2.1 below shall not be exceeded.

Table 2.1				
Pollutant	<b>Emission Source</b>	Concentration Limit		
Particulate Matter	Graco Lines Spray Booths	50 mg/Nm <sup>3</sup> as 30 minute mean for contained sources.		

The concentrations of substances measured in accordance with this condition shall be expressed at reference conditions 273.15K and 101.3 kPa, without correction for water vapour.

#### 3.0 SOLVENT EMISSIONS

- 3.1 The operator shall, by 31<sup>st</sup> January 2009 and annually thereafter, make and submit to the Council a calculation of the annual Actual Consumption of Organic Solvent (C). The calculation shall be carried out in accordance with the Solvent Management Plan attached to this Permit as Appendix 2 where the term "Actual Consumption of Organic Solvent" is defined.
- 3.2 The total annual solvent emission from the coating activity, shall not exceed the target emission detailed in the following table.

# Table 3.1 Target Emission

Total mass of solids x 0.37

In order to demonstrate compliance with this condition a calculation of the "annual solvent emission" and the "total mass of solids" and "target emission" shall be carried out annually in accordance with the Solvent Management Plan, attached to the Permit as Appendix 2, where the terms "annual actual solvent emission" and "total mass of solids" are defined. These calculations shall be submitted to the Council within three months of the end of the accounting period. The accounting period shall be each calendar year unless separately agreed in writing with the Council.

3.3 At no time shall the operator introduce any substance or preparation into the installation which, by reason of the Chemicals (Hazard Information and Packaging for Supply) Regulations 1994, is labelled with the risk phrase of R45, R46, R49, R60 or R61, without the prior written consent of the regulator.

#### 4.0 MONITORING SAMPLING AND MEASUREMENT OF EMISSIONS

- 4.1 Emissions from the stacks serving the spray booth detailed in Table 2.1 shall be monitored for concentrations of total particulate matter by 1<sup>st</sup> June 2008 and every year thereafter to demonstrate compliance with the emission limit stipulated in Condition 2.6.
- 4.2 All monitoring for particulates shall be carried out in accordance with the requirements of BS:9096:2003 or BS EN:13284-1:2001 unless otherwise agreed in writing by the Council.
- 4.3 The Operator shall notify the Council in writing at least 21 days before the commencement of any periodic monitoring exercise to determine compliance with emission limit values. The notification shall include the name and address and any other relevant details of the person(s) or company engaged to undertake the monitoring exercise; the time, and date, on which the monitoring exercise is scheduled to begin, together with a full specification of the monitoring programme including the proposed sampling and analysis techniques.
- 4.4 Safe means of access to enable sampling/monitoring to be carried out in relation to the emission points specified in Condition 2.6 shall be provided.
- 4.5 During monitoring exercises the process being monitored must be operated under normal conditions and at full capacity unless otherwise instructed by Officers of the Council.
- 4.6 The results of non-continuous emissions monitoring including process conditions at the time of testing shall be forwarded to the Council within 28 days of the completion of the testing unless otherwise agreed in writing with the Council. A record of these results shall be maintained in accordance with Condition 7.1 of this Permit.

<sup>\*</sup> This factor applies where the consumption of solvents exceeds 15 tonnes/year.

4.7 All stacks shall be observed for any visible emissions to air once per shift for a period of at least five minutes. The observations shall be made from a position providing an unobstructed view of the point of emission to air by a responsible person who has been instructed to carry out these duties. A record of all observations shall be maintained in accordance with condition 7.1. The records shall include an assessment of the nature and severity of any emission observed, the source of emissions to air, details of any corrective action taken and the identity of the person making the record.

The Council shall be notified as soon as practicable if emissions to air are observed which may contravene any conditions of this Permit and immediate action shall be taken to determine the cause of the emission and to prevent or minimise further emissions.

4.8 The Installation shall be assessed for emissions of odour to air once per shift for a period of at least 5 minutes. The olfactory assessment shall be made from points on the Installation boundary where odour emissions are most likely to be detected taking into account the wind direction, wind speed, source of odour and location of receptors, by a responsible person who has been instructed to carry out these duties. A record of all olfactory observations shall be maintained in accordance with condition 7.1. The records shall include a subjective assessment of the nature and severity of any odour detected, the wind direction and strength, weather conditions, likely source of emissions to air, details of any corrective action taken and the identity of the person making the record.

The Council shall be notified as soon as practicable if odour emissions are detected which may contravene any condition of this Permit and immediate action shall be taken to determine the cause of the emission and to prevent or minimise further emissions.

#### 5.0 PROCESS CONTROLS

- 5.1 The solvent cleaning of plant, equipment and materials shall be carried out in such a manner that emissions of volatile organic compounds are reduced to an absolute minimum.
- 5.2 Spray-paint application shall be achieved by the use of a High Volume, Low Pressure (HVLP) spray system where the atomisation pressure is less than 69 kPa (10psi) or an alternative method which is capable of effecting a transfer efficiency of 65% or more.
- 5.3 The spray application of paint shall only take place within spray booths with extraction of paint overspray through filters capable, and maintained in such a condition, as to enable compliance with the emission limit specified in condition 2.6
- 5.4 All waste substances containing solvents shall be stored in closed containers while awaiting removal from site for disposal or re-processing.
- 5.5 An adequate supply of suitable absorbent material shall be kept on site for use in the case of liquid spillages.

- 5.6 Spillages of liquids and finely divided materials shall be cleaned up immediately. Liquid spillages shall be contained and cleaned up by the use of a suitable absorbent material. Spillages of finely divided materials shall be removed by means of vacuum cleaning using an industrial grade vacuum cleaner or by wet cleaning methods, dry sweeping shall not be permitted. Any used absorbent material contaminated with substances containing solvents shall be stored in a closed container pending removal from site.
- 5.7 Drums and containers containing liquid materials, whether full, partly full or empty, shall be kept tightly closed to prevent any emissions to air.
- 5.8 The raw materials used in the installation and all waste materials produced from the installation shall be handled with care to prevent or reduce to an absolute minimum any emissions of particulate matter and volatile organic compounds to air.
- 5.9 Paint thinning and paint mixing shall only be carried out in a ventilated mixing room or the "paint kitchen" with the extract ventilation operating.
- 5.10 Chimneys and vents from which it is necessary to achieve dispersion of the residual pollutants shall not be fitted with any restrictive plates, caps or cowls at the final opening other than a cone to effect adequate efflux velocity.
- 5.11 Empty powder packaging and dusty wastes shall be stored in closed containers prior to disposal.
- 5.12 The cleaning of powder application booths, coating application plant and extract duct work shall be carried out in a manner that prevents or reduces to an absolute minimum any emissions of particulate matter to air.
- 5.13 The extraction and arrestment systems of the powder application booths shall be kept running during cleaning to reduce escape of particulate matter from the booths.

#### 6.0 GENERAL CONDITIONS

- 6.1 The Operator shall maintain and implement written procedures to ensure that regular cleaning and effective preventative maintenance in accordance with the manufacturer's instructions is employed on all plant, equipment and technical means concerned with the production, capture, transport, control and exhaust of emissions which could lead to an adverse impact on the environment. A record of relevant maintenance shall be maintained in accordance with Condition 7.1.
- 6.2 Essential spares and consumables shall be held on site or shall be available from a guaranteed supplier at short notice so that plant breakdown can be rectified rapidly.
- 6.3 The Installation shall be supervised by suitably trained staff who are fully conversant with the requirements of this Permit.
- 6.4 Staff at all levels shall receive the necessary formal training and instruction in their duties relating to control of the process and emissions to air. Particular

emphasis shall be given to training for start-up and shut-down and action required to minimise emissions during abnormal conditions. A record shall be maintained of all relevant training provided to staff in accordance with condition 7.1.

6.5 Any malfunction or breakdown which results in emissions to air which are likely to cause an adverse effect on the local community shall be reported to the Council and action taken to prevent or minimise further emissions to air immediately. A record of the incident shall be maintained in accordance with condition 7.1.

#### 7.0 RECORDS

- 7.1 The Operator shall ensure that all records required to be made by this Permit and other records made by it in relation to the operation of the Installation shall:
- (a) be made available for inspection by the Council at any reasonable time;
- (b) be supplied to the Council on demand and without charge;
- (c) be legible;
- (d) be made as soon as reasonably practicable;
- (e) indicate any amendments which have been made and shall include the original record wherever possible; and
- (f) be retained at the Installation, or other location agreed by the Council in writing, for a minimum period of 2 years from the date when the records were made, unless otherwise agreed in writing.

Appendix 1 - Site Plan PB/38 Link 51 (Storage Products) Limited, P.O. Box 16 Mill Street, Brierley Hill, West Midlands DY5 2TB

