

# POLLUTION PREVENTION AND CONTROL ACT 1999 ENVIRONMENTAL PERMITTING (ENGLAND AND WALES) REGULATIONS 2016 as amended

**Permit Number: 6.4/100709/JT** 

Installation Address: Cooper and Turner Limited
Sheffield South
Sheffield Road
Sheffield
S9 1RS

In accordance with Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016, as amended, Cooper and Turner Limited is hereby permitted to operate a Coating of Metal Activity using solvents as described in Schedule 1, Section 6.4, Part B, subsection (a)(iv), using between 5 and 15 tonnes of organic solvent in any 12 months period, and subject to the following permit conditions.

Signed Dated this day: 18<sup>th</sup> April 2023

Commercial Team Manager Authorised by Sheffield City Council to sign on their behalf

Cooper & Turner Page 1 of 32

The Secretary of States Guidance Note PG 6/23(11) Coating of Metal and Plastic Processes (revised June 2014) has provided the framework for the conditions in this permit.

#### Name & Address of Operator:

Cooper and Turner Limited Sheffield South Sheffield Road Sheffield S9 1RS

Site Contact: David Edwards Tel: 0114 2560057 Mob: 07971509802

email address: dave.edwards@cooperandturner.co.uk

#### **Registered Office:**

Cooper and Turner Limited Sheffield South Sheffield Road Sheffield S9 1RS

Company Registration Number: 4021697

#### Address of Permitted Installation:

Cooper and Turner Limited Sheffield North Sheffield Road Sheffield S9 1RL

#### Talking to Us

Any communication with Sheffield City Council should be made to the following address quoting the Permit number.

#### **Environmental Protection Service**

Sheffield City Council 5th Floor (North) Howden House 1 Union Street Sheffield S1 2SH

Telephone: (0114) 273 4651

Email:ippc@sheffield.gov.uk or joanne.terry@sheffield.gov.uk

Cooper & Turner Page 2 of 32

## **Contents**

Explanatory note	4
Definitions	7
Description of Activities	8
Section 1: Upgrading	11
Section 2: Plant and Equipment	11
Section 3: Emission Limits and Controls	11
Section 4: Monitoring, Sampling and Monitoring of Emissions	13
Section 5: Materials Handling	15
Section 6: Designated Hazard Statement Materials and Substitution P	lan17
Section 7: Solvent Management Plan	17
Section 8: Fugitive Emissions	18
Section 9: Maintenance of Abatement Plant	18
Section 10: General Conditions	20
Schedule 1 :Installation Location	23
Schedule 2: Installation Boundary	24
Schedule 3: Installation Layout & Process Flow	25
Schedule 4: Coatings Data	26
Schedule 5:Abatement Plant	30
Schedule 6: SE Box 5	31
Schedule 7: Solvent Management Plan Inputs & Outputs	32

## Explanatory Note to Pollution Prevention and Control Permit for Part B Installations

The following Permit is issued under Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016, as amended, ("the EP Regulations") to operate an installation carrying out activities covered by the description in Schedule 1, Section 6.4, Part B, subsection (a)(iv) of those Regulations.

SECTION 6.4 Coating activities, printing and textile treatments

#### Part B

(a)Unless falling within Part A(1) or Part A(2) of this Section or Part A(2)(c) of Section 2.1, any process (other than for the re-painting or re-spraying of, or of parts of, aircraft or road or railway vehicles) for applying to a substrate, or drying or curing after such application, printing ink or paint or any other coating material as, or in the course of, a manufacturing activity, where the process may result in the release into the air of particulate matter or of any volatile organic compound and is likely to involve the use in any 12-month period of—

(iv)5 or more tonnes of organic solvents in respect of any activity not mentioned in sub-paragraph (iii).

#### **Process Changes**

As part of your permit you are required to notify the Council of any proposed change in operation at least 14 days before making the change. This must be in writing and must contain a full description of the proposed change in operation and the likely consequences. Failure to do so is an offence.

If you consider that a proposed change could result in the breach of the existing permit conditions or is likely to require the variation of permit conditions then you may apply in writing under Regulation 20(1) of the EP Regulations. Additionally, if this involves a SUBSTANTIAL CHANGE to the installation you will be required to submit an application, pay the relevant fee and advertise the application accordingly. You may serve a Notice on the Council requesting that they determine whether any change that is proposed would constitute a substantial change before you proceed with application.

#### **Variations to the Permit**

The Permit may be varied in the future (by the Council serving a Variation Notice on the Operator). If the Operator itself wants any of the Conditions of the Permit to be changed, a formal Application must be submitted.

Cooper & Turner Page 4 of 32

#### Surrender of the Permit

Where the operator of a Part B installation or mobile plant ceases or intends to cease the operation of the activity the operator may notify the regulator of the surrender of the whole permit, in any other case, notify the regulator of the surrender of the permit in so far as it authorises the operation of the installation or mobile plant which he/she has ceased or intends to cease operating. The notification shall contain information as described in Regulation 24 or 25 of the EP Regulations.

#### Transfer of the Permit or Part of the Permit

Before the Permit can be wholly or partially transferred to another person, a joint application to transfer the Permit has to be made by both the existing and proposed holders, in accordance with Regulation 21 of the EP Regulations. A transfer will be allowed unless Sheffield City Council considers that the proposed holder will not be the person who will have control over the operation of the installation or will not ensure compliance with the conditions of the transferred Permit.

#### **Annual Subsistence Fee**

In accordance with Regulation 66 of the EP Regulations, the holder of a permit is required to pay a fee for the subsistence of the Permit. This fee is payable annually on 1st April. You are advised that under the provisions of Regulation 66 (5) of the EP Regulations, if you fail to pay the fee due promptly, Sheffield City Council may revoke the Permit. You will be contacted separately each year in respect to this payment.

#### **Public Register**

The Council is required by Regulation 46 of the EP Regulations to maintain a Public Register containing information on all LAPPC installations and mobile plant. The register is available for inspection by the public free of charge during office hours (Monday to Friday 9.00 am to 5.00 pm) at the following address:

#### **Environmental Protection Service**

Sheffield City Council 5th Floor (North) Howden House 1 Union Street Sheffield S1 2SH

Telephone: (0114) 273 4651 Email: <a href="mailto:ippc@sheffield.gov.uk">ippc@sheffield.gov.uk</a>

Cooper & Turner Page 5 of 32

#### Confidentiality

Sheffield City Council has a duty to consider the question of confidentiality of information supplied to it. If any information supplied is considered confidential, a statement of which information this applies to and the reasons why it is considered confidential should be specified. The Operator is reminded that he may apply to Sheffield City Council for the exclusion of information from the public register under the provisions of the Environmental Permitting (England and Wales) Regulations 2016, as amended.

#### **Appeals**

Under Regulation 31 of the EP Regulations operators have the right of appeal against the conditions attached to their permit. Schedule 6 of the EP Regulations sets out the detailed procedures.

Appeals against a Variation Notice do not have the effect of suspending the operation of the Notice. Appeals do not have the effect of suspending Permit conditions.

Notice of appeal against the conditions attached to the permit must be given within six months of the date of the Notice, which is the subject matter of the appeal.

#### **How to Appeal**

There are no forms or charges for appealing. However, for an appeal to be valid, appellants (the person/operator making the appeal) are legally required to provide:

- Written notice of the Appeal;
- A statement of the grounds of Appeal;
- A statement indicating whether the appellant wishes the appeal to be dealt with by written representations procedure or a hearing a hearing must be held if either the appellant or enforcing authority requests this, or if the Planning Inspector or the Secretary of State decides to hold one.
- (Appellants must copy the above three items to the local authority when the appeal is made)
- A copy of any relevant Application;
- A copy of any relevant Permit;
- A copy of any relevant correspondence between the appellant and the regulator; and
- A copy of any decision or notice, which is the subject matter of the appeal.

Cooper & Turner Page 6 of 32

#### Where to Send Your Appeal Documents

Appeals should be addressed to:

The Planning Inspectorate
Environmental Appeals Administration
Room 4/19 - Eagle Wing
Temple Quay House
2 The Square
Temple Quay
Bristol BS1 6PN

In the course of an Appeal process, the main parties will be informed of the procedural steps by the Planning Inspectorate.

To withdraw an Appeal the Appellant must notify the Planning Inspectorate, in writing, and copy the notification to the local authority.

Cooper & Turner Page 7 of 32

#### **Definitions**

In relation to this Permit, the following expressions shall have the following meanings:

"Application" means the application for this Permit, together with any response to a notice served under Schedule 4 to the EPR Regulations and any operational change agreed under the conditions of this Permit.

"EPR Regulations" means the Environmental Permitting (England and Wales)
Regulations S.I.2016 No. 1154 (As Amended) and words and expressions defined in
the EPR Regulations shall have the same meanings when used in this Permit save
to the extent they are explicitly defined in this Permit.

"Permitted Installation" means the activities and the limits to those activities described in this Permit.

"Monitoring" includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.

"Regulator" means any officer of Sheffield City Council who is authorised under section 108(1) of the Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in Section 108(1) of that Act.

"BAT" 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 bases for emission limit values designed to prevent, and where that is not practical, generally to reduce emissions and the impact on the environment as a whole. For those purposes:

"available techniques" means those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under 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" include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned. Schedule 2 of the Regulations shall have effect in relation to the determination of best available techniques;

"Fugitive Emission" means an emission to air from the permitted installation that is not controlled by an emission limit imposed by a condition of this Permit.

Cooper & Turner Page 8 of 32

#### **Description of Activities**

Cooper and Turner Ltd are manufacturers of large diameter bolts and studs used in the construction, rail and renewable energy (wind) industry sectors.

For supply to the wind energy / construction sector a sacrificial coating is applied to a range of bolts and studs.

To apply the coating, the bolts or studs are washed and then shotblasted to create the required finish to allow paint adhesion. The process includes the following;

- Wash line (preparation)
- Shot blast line (preparation)
- Dip Spin enclosed paint line
- Curing of parts in ovens

#### Wash Line

Pre- Wash: The initial process cleans the threaded steel bars of any surface lubricants used in the threading or machining process. The lubricants are a combination of SARCUT ASF22 for threaded parts and SARCUT ECO4648 emulsion for machined parts.

The cleaning agent used is Pentraclean 2014, diluted with water and is filled via a breaker tank.

The effluent discharge is regulated under the scope of consent to discharge permit ref 3160832 issued by Yorkshire water.

Steam is emitted from the stack.

Stack height at date of permit: External diameter 300mm approximate height 7000mm

#### **Shot Blasting**

After the wash line, the cleaned parts are placed in a Jiaxing Xuanyuan Environmental Protection Equipment Co. Ltd XY80-24-V4 shotblasting unit. This process blasts the surface of the components using aluminium oxide shot (WA54 0.297 - 0.350 & WA46 0.35 - 0.42) to provide a surface key to improve paint adhesion. Particulates from this process are passed through fabric filters and vented externally via a horizontal stack. The volume airflow from this plant is 2957 m³/min. The stack height at date of issue of the permit is 3.8m x diameter 300mm, but to be increased to 7m x 300mm diameter.

#### **Paint Storage and Mixing**

New paint is delivered to site and stored in sealed containers in a bunded and vented room prior to use. All paint is stored at a temperature between 17 and 19 degrees Celsius on racks. The paint is mixed into paint tanks with 10% thinners added to enable processing. The tank is then put into a paint booth with pump truck and locked into place, ready for the painting process to take place.

#### **Dip Spin Plant**

The washed and blasted parts are loaded into jigs ranging to a max nett weight of 500kg. The jigs are loaded into a continual carousel track system and taken to the dip tank for the coating to occur. The jig is loaded onto the bed and taken into the paint booth, clamped into position ready for the painting to take place. The paint

Cooper & Turner Page 9 of 32

tank is on hydraulic lift and lifts up to immerse the jig in the paint. The jig rests in the paint for 1 minute, the tank is then lowered leaving a sleeve up and in place around the jig. The jig is then spun at 200rpm for 1 minute. Excess paint is collected by the sleeve and returns to tank. When spinning is finished the tank drops back to the start position with the sleeve inside.

The coatings are applied in different combinations, as detailed below, depending on customer requirements;

Solvent % Rem	Solvent % Rem 70	Solvent % Top 930L	Solvent % Top 939L	Solvent % RCB	Solvent % RCT S	Total Solvent
17.9	30.88	66.16	66.16	100	100	Content (kg)
0	1188.88	0	0	655.5	0	1844.38

## Solvent Ave. Per product: Based on different coating combinations

1 base (Remcor 70)	2 base (Remcor 70)	3 base (Remcor 70)	1 base (Remcor70) 1 top (Remcor 930L)	2 base (Remcor70) 1 top (Remcor 930L)	2 base (Remcor70) 2 top (Remcor 939L)	Average
30.88	30.88	30.88	30.88	30.88	30.88	
	30.88	30.88	66.16	30.88	30.88	
		30.88		66.16	66.16	
					66.16	
30.88	30.88	30.88	48.52	42.64	48.52	38.72

The coatings are high zinc flake paint, to prevent the need for the parts to be galvanised. Once coating is complete, the jig is returned to the track and parts are transferred to the "walking oven".

The paint kettle tank has a capacity of 650 kgs. Paint is added to the tank by transferring from 30kgs drums using an enclosed system. If required, thinners are added and the product is mixed to obtain the optimum viscosity.

Details of coatings and thinners are in Schedule 5.

#### **Curing of Coated Parts**

Once coated the parts are cured in a series of ovens.

The first section of the oven flashes off the solvent operating between 250–300·C. The second section of the oven is a curing section operating between 240–300·C. The final section of the oven is a circulated air-cooling system. This reduces the temperature of the parts and acts as an air curtain. The curing cycle is repeated depending on the customer specification.

Stack height at date of permit: Situated on the roof approximate height 2.85 m (total height 10.23 m) x diameter 600 mm. Internal diameter to be reduced to 491 mm to increase the efflux velocity. Emissions of VOCs from the coating and curing process are extracted and passed through an activated carbon filter to adsorb the VOCs. This is fitted with temperature monitors (to check for fires) and also continuous VOC monitoring to check for carbon saturation. The motor is anti-spark. Once dried and cured the parts are cooled and packaged for dispatch.

Cooper & Turner Page 10 of 32

#### **Conditions of Permit**

The requirements of all the conditions take immediate effect unless otherwise stated.

#### Section 1 – Upgrading

- 1.1 The shot blast stack height shall be increased to a level above the roof eaves within 6 weeks of the date of issue of this permit.
- 1.2 Any cap or cowl to the process stacks shall be removed and replaced with a low resistance or jet type that does not interfere with the dispersion of emissions, within 6 weeks of the date of this permit. The VOC stack shall be fitted with an accelerator cone within 6 weeks of the date of this permit.
- 1.3 Within 6 weeks of the date of issue of this permit the emissions of volatile organic compounds (VOCs) shall be continuously monitored.
- 1.4 Prior to installation of the VOC continuous monitor, the Operator shall submit the technical specification details of the monitor to the Regulator for approval in writing.

#### **Section 2 – Plant and Equipment**

- 2.1 The activities at the installation shall be carried out within the Installation Boundary (outlined in red) as indicated on the plan shown in Schedule 2 of this Permit.
- 2.2 Permitted activities shall only be carried on using the plant and equipment as detailed in the Description of Activities and on the Installation Layout and Process Flow plan in Schedule 3 of this Permit.
- 2.3 The Operator shall notify Sheffield City Council's Environmental Protection Service, hereafter referred to as "the Regulator" of any proposed operational changes including any alterations to the process involving the provision of new plant or equipment, changes to raw materials or processes which may affect emissions or have consequences for the environment. The information shall be submitted at least 14 days before the changes take place.
- 2.4 No plant or equipment used for any activity shall be operated with an extraction point to atmosphere unless specifically noted within this Permit or specifically agreed in writing with the Regulator.

#### **Section 3 – Emission Limits and Controls**

3.1 There shall be no burning of materials, including waste, in the open air, inside buildings or in any form of incinerator in connection with the activities within the installation boundary, without permission in writing from the Regulator.

Cooper & Turner Page 11 of 32

- 3.2 Emissions from combustion processes shall be free from visible smoke and in any case shall not exceed the equivalent of Ringelmann Shade 1 as described in British Standard BS 2742:2009.
- 3.3 All reasonably practicable steps shall be taken to minimise the duration and visibility of emissions during start up and shut down.
- 3.4 The best available techniques 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.
- 3.5 Emissions to air shall be free of offensive odour beyond the installation boundary as perceived by an Authorised Officer from the Regulator.
- 3.6 There shall be no visible dust or particulate matter detectable beyond the installation boundary, as perceived by the Regulator.
- 3.7 The Operator shall ensure solvent emissions compliance through waste gas and fugitive emission limits.
- 3.8 The use of odour masking agents is not permitted. Where offensive odour is detected at the installation boundary, counteractants may be used only by agreement in writing with the Regulator.
- 3.9 When using coatings containing isocyanates, an emission limit of 0.1mg/m³ as a 30-minute mean excluding particulate matter and expressed as NCO shall apply.
- 3.10 When using materials designated because of their VOC content as Hazard Statement H340, H350, H350i, H360D or H360F, an emission limit of 2mg/m³ shall apply to the individual compounds.
- 3.11 When using materials designated because of their halogenated VOC content as Hazard Statement H341 or H351, an emission limit of 20mg/m<sup>3</sup> shall apply to the individual compounds.
  - 3.12 Emissions of VOC's from the coating, flash off or curing processes shall not exceed 100mg/m³ for activities using 5-15 tonnes of organic solvent in any twelve-month period.
- 3.13 Emissions of total particulate matter shall not exceed 50mg/m<sup>3</sup>.
- 3.14 Fugitive emissions of VOC's shall not exceed 25% of the organic solvent input.
- 3.15 Emission limit values are laid down in SE Box 5 taken from Process Guidance Note PG6/23, which is duplicated in Schedule 6 of this permit, and shall not be exceeded.

Cooper & Turner Page 12 of 32

- 3.16 In the event that solvent consumption at the activity increase to >15 tonnes in any 12 months period, the emission limits as described in SE Box 5 (Schedule 6 of this permit) shall be applicable.
- 3.17 Emissions from the final point of discharge from the chimneys shall be vertically upwards.

#### **Section 4- Monitoring, Sampling and Measurement of Emissions**

- 4.1 The Operator shall ensure that a detailed inventory of all solvent usage is kept and submitted to the Regulator every six months, within four weeks of the end of the six-month period to which the inventory relates. This inventory shall include cleaning solvent usage, diluent solvent usage (thinners) and the solvent or organic compound content of coatings and the quantity of coatings purchased. The inventory shall also include all solvents removed from the site as waste and any quantities recovered for re-use, and the quantity of solvents used for cleaning or degreasing. The next inventory shall be submitted by 14<sup>th</sup> July 2023.
- 4.2 The Operator shall ensure that a visual and olfactory assessment of emissions from the building housing the coating process is carried out at least once a day for a period of at least two minutes when dip coating and curing is being carried out. The assessment shall be made down wind of the building at a point on the installation boundary where the stacks are visible. The results of these assessments shall be recorded in the log book or recording system kept in accordance with Condition 4.15 of this Permit.
- 4.3 The Operator shall undertake periodic monitoring to demonstrate compliance with emissions limits specified in this Permit. The frequency of this monitoring shall be at least once in every 12-month period or as otherwise agreed in writing by the Regulator. The next monitoring exercise is required by 1st October 2023.
- 4.4 Monitoring shall be carried out in accordance with methods described in M1 "Sampling requirements for monitoring stack emissions to air from industrial installations" and Monitoring Stack Emissions: Environmental Permits (formerly part of M2), Monitoring stack emissions: environmental permits - GOV.UK (www.gov.uk) or by another method agreed in writing by the Regulator.
- 4.5 Results of non-continuous monitoring shall include details of process conditions at the time of monitoring, monitoring uncertainty and any deviations from the procedural requirements of standard reference methods and any error invoked from such deviations.

Cooper & Turner Page 13 of 32

- 4.6 The Regulator shall be advised at least 7 days in advance of any periodic stack monitoring exercise. The site specific monitoring protocols shall be submitted and include the stacks to be tested, pollutants to be monitored, methods to be used and the competencies of the consultants undertaking the testing.
- 4.7 The results of periodic emissions monitoring tests shall be forwarded to the Regulator within 8 weeks of completion of the testing.
- 4.8 The Operator shall ensure that adequate facilities for sampling are provided on vents or ducts. Sampling points on new plant shall be designed to comply with the British or equivalent standards.
- 4.9 The introduction of dilution air to achieve emission limits is not permitted.
- 4.10 In the reporting and keeping of emissions monitoring results, all pollutant concentrations shall be expressed at reference conditions 273k, 101.3kPa. The oxygen and water references shall be that which correspond to the normal operating conditions in the process.
- 4.11 Where the results of any monitoring are adverse, or demonstrate a breach of the emission concentration limit, the Operator shall investigate the matter as soon as possible. The investigation shall include the following steps:
  - Close down the process or plant responsible for the breach;
  - Identify the cause of the breach;
  - Carry out any necessary works or repairs to ensure compliance with the emission concentration limit;
  - Re-test the plant to demonstrate compliance with the emission concentration limit specified;
  - Submit the emissions monitoring report to the Regulator within 7 days of receipt of the results;
  - Record details of investigations and outcomes.
- 4.12 In case of abnormal emissions, the Operator shall:
  - Immediately investigate the cause and take corrective action;
  - Adjust the process or activity to minimise the emissions;
  - Promptly record the events and action taken.
- 4.13 The Operator shall inform the Regulator of any abnormal emissions within 1 day of the event, unless there is an emission likely to have an effect on the local community, in which case the information shall be forwarded no later than 10am the following working day.

Cooper & Turner Page 14 of 32

- 4.14 The Operator shall ensure that adverse results from monitoring and assessments carried out in accordance with conditions of the Permit, and alarm events, are investigated immediately to identify the cause of the emission and allow the appropriate corrective action to be taken. The corrective action taken shall be recorded in the log book or recording system kept in accordance with condition 4.15.
- 4.15 The Operator shall ensure that a log book or suitable recording system containing the details and results of all visual and olfactory assessments, records of all inspections, checks and assessments made in accordance with Permit conditions is kept. These records shall include the time and date of inspection, the nature, colour, persistency and intensity of any emission and the name of the person carrying out the assessment. The log book or recording system shall be kept on the premises and made available for inspection by the Regulator. Such records shall be kept for a minimum of two years and shall be furnished in writing to the Regulator on demand.
- 4.16 The Operator shall inform the Regulator within one day in cases where:
  - An emission is likely to have an effect on neighbouring premises; or
  - There is a failure of any arrestment plant.

The report to the Regulator shall include:

- The date and time of the incident
- The cause and nature of the incident
- Details of any abnormal emissions
- Remedial action taken
- 4.17 Emissions from the final point of discharge from the chimneys shall be vertically upwards.

#### **Section 5 - Materials Handling**

- 5.1 All spillages shall be cleared as soon as possible and in the case of fine materials this shall be achieved by the use of vacuum cleaning, wet methods, or other appropriate techniques. Dry sweeping or the use of compressed air to blow surfaces clean shall not be permitted. Dusty materials shall be stored in closed containers and handled in a manner that prevents emissions.
- 5.2 All substances containing organic solvents shall be stored in sealed containers prior to use. Storage of substances containing solvents shall be in accordance with the advice in the relevant chemical data sheet.
- 5.3 Coatings shall be mixed or stirred using a lidded system in order to contain solvent emissions.

Cooper & Turner Page 15 of 32

- 5.4 Emissions from the filling and emptying of storage and mixing vessels and the transfer of coatings and thinners to the dipping tank shall be contained by the use of covered or closed delivery systems.
- 5.5 All potentially odorous materials, including waste, shall be stored in suitable enclosed containers.
- 5.6 All reasonable efforts shall be made to minimise the amount of residual organic solvent bearing material left in drums and other containers after use.
- 5.7 Prior to disposal, empty drums and containers contaminated with organic solvent should be closed to minimise emissions from residues during storage prior to disposal.
- 5.8 Spillages of materials containing solvents shall be cleared without delay.
- 5.9 An adequate number of suitable Spill Kits shall be provided and located in suitable areas in order to adequately tackle spillages. All relevant staff shall be trained in the use of the spill kits.
- 5.10 Spill Kits shall be checked frequently and the stocks maintained in order to ensure they are capable of adequately tackling a spillage.
- 5.11 Waste contaminated with solvents such as wiping cloths, gloves, overalls or material used to clear spillages shall be disposed of in a suitably labelled metal bin fitted with a self-closing lid.
- 5.12 All vessels or containers of organic solvents shall be stored in a bunded zone which shall extend to completely surround the container, be impervious and resistant to the liquids in storage and be capable of holding 110% of the capacity of the largest container.
- 5.13 The use of thinners shall be controlled, monitored, recorded and minimised.
- 5.14 Addition of thinners shall be calculated and specified for each job in written instructions and the required quantity shall not be exceeded.
- 5.15 Paint application shall only be carried on inside a building with the doors closed. Doors shall be kept closed other than to provide access for plant movements.
- 5.16 Cleaning of tanks, equipment and hooks shall be undertaken in a manner which does not include the use of organic solvents.

Cooper & Turner Page 16 of 32

#### Section 6 - Designated Hazard Statement Materials and Substitution Plan

- Designated "Hazard Statement" materials<sup>1</sup>, used in the installation must be replaced, or controlled and limited, as set out in PG 6/23(11) for Coating of Metal and Plastic Processes SE Box 7, or any re-issue or update of the same.
  - 1Materials designated, because of their VOC content: From 1 Dec 2010: hazard statement H340, H350, H350i, H360D or H360F. Materials designated because of their halogenated VOC content: Until 1 Jun 2015: risk phrase R40, or from 1 Dec 2010 until 1 Jun 2015, risk phrase R68. From 1 Dec 2010: hazard statements H341 or H351. As from 1st Dec 2010 "risk phrase" materials will also be known as "hazard statement" materials.
- 6.2 The Operator shall maintain a register of designated Hazard Statement materials used in the installation. The register shall be made available for inspection by the Regulator upon request.
- 6.3 The Operator shall inform the Regulator in writing of any proposed changes to the Hazard Statement register at least 7 days prior to the changes taking place.
- 6.4 Where Hazard Statement substances are used, annual manual extractive testing shall be carried out to determine compliance with the emission limits in section 3 of this permit.

#### Section 7 - Solvent Management Plan

- 7.1 The Operator shall produce and submit a Solvent Management Plan to the Regulator on an annual basis by 14<sup>th</sup> January each year. The next Solvent Management Plan is due to be submitted on 14<sup>th</sup> January 2024. The Solvent Management Plan shall be produced in accordance with clauses 4.11 to 4.12 of PG 6/23 (11) (revised June 2014). The Solvent Management Plan inputs and outputs have been reproduced in Schedule 7 to this permit.
- 7.2 The Operator shall submit details to the Regulator for prior written approval for any proposal to carry out any of the following activities:
  - Replacement of low or no VOC solvent coating systems with conventional high VOC content coating systems;
  - Introduction of conventional high VOC content coating systems into the process;
  - Introduction of conventional high VOC content coating systems onto products where it was not previously used;
  - Introduction of high solids formulations which have no beneficial effect on the product but increase the solids used, except where a reduction in the overall VOC emissions can be demonstrated.

Cooper & Turner Page 17 of 32

#### **Section 8 – Fugitive Emissions**

- 8.1 The Fugitive Emissions shall be calculated according to the method described in Schedule 7 which is reproduced from Process Guidance Note PG 6/23 (11) revised June 2014.
- 8.2 The Operator shall submit the fugitive emissions calculation to the Regulator at least once in every 12 months period. The first calculation is due by 1<sup>st</sup> October 2023.

#### **Section 9- Maintenance of Abatement Plant**

- 9.1 The Operator shall ensure that a visual inspection of all abatement plant ductwork is carried out at least once in every three-month period, or at an interval as recommended by the manufacturer, for any signs of wear, tear or damage. Any defects shall be repaired as soon as possible to ensure sound operation and prevent emissions to atmosphere. Details of the checks and any repair work shall be recorded in the log book or recording system required by condition 4.15 of this Permit.
- 9.2 The Operator shall ensure that abatement plant serving emission points is serviced in accordance with manufacturer's recommendations or at least once in every 12-month period to ensure sound operation. Details of the servicing or maintenance shall be recorded in the log book or recording system kept in accordance with condition 4.15.
- 9.3 Effective preventative maintenance shall be employed on all plant and equipment concerned with the control of emissions to air. Essential spares and consumables such as replacement filters, shall be stored on site or be readily available in 24 hours from guaranteed suppliers, in order to rectify break downs rapidly.
- 9.4 The Operator shall keep a written maintenance programme in relation to permitted pollution control equipment. Records shall be kept of maintenance works carried out. The programme shall be made available to the Regulator upon request.
- 9.5 All malfunctions or breakdowns leading to visible or odorous emissions shall be investigated and rectified immediately. Process operations shall be adjusted until normal operations are restored. Details of the malfunction shall be recorded in the log book or recording system. If an effect on the local community is likely, the Operator shall inform the Regulator within 1 working day.

Cooper & Turner Page 18 of 32

9.6 Filtration plant serving the shotblasting unit shall be inspected at the frequency specified in the Table below;

**Table- Filter Plant Inspection Frequency** 

Filter Cleaning Method	Frequency of Visual Inspection
Fitted with reverse jets	At least once a month
Fitted with mechanical shakers	At least once a week
Requiring manual shaking	Daily inspection or prior to any delivery being made if deliveries are not daily

- 9.7. The Operator shall ensure that a visual inspection of the condition of the curing ovens, extraction plant, and associated ductwork is carried out at least once a month or at a frequency recommended by the manufacturer. Any fault, damage or defect shall be rectified without delay. The result of these inspections and any remedial action taken shall be recorded in the log book or recording system kept in accordance with Condition 4.15 of this Permit.
- 9.8 Chimney flues and ductwork serving the process plant shall be inspected at least once per year and cleaned as necessary in order to prevent accumulation of material both on the internal ducting and on external ledges. Details of the inspection and any cleaning necessary as a result of the inspection shall be recorded in the logbook or recording system kept in accordance with Condition 4.15 of this Permit.
- 9.9 A list of key arrestment plant shall be maintained on site, each item on the list shall have a written procedure for dealing with its failure, in order to minimise any adverse effects.
- 9.10 Emissions of volatile organic compounds shall be continuously monitored and recorded.
- 9.11 The continuous VOC monitor shall be serviced and calibrated at least once in every 12-month period.
- 9.12 A six-month summary of the logged VOC data shall be submitted to the Regulator within 2 weeks of the last recorded data. The first summary is required by 14<sup>th</sup> January 2024.

Cooper & Turner Page 19 of 32

#### **Section 10 – General Conditions**

- 10.1 Any malfunction or breakdown such as arrestment plant failure leading to abnormal emissions shall be dealt with promptly and process operations adjusted until normal operations can be restored. All such malfunctions shall be recorded in the log book or recording system kept in accordance with condition 4.15 of this permit. If there is likely to be an effect on the local community, the Regulator shall be informed without delay and by no later than 10.00 am the following working day.
- 10.2 Staff at all levels shall receive the necessary training in their duties relating to the control of the process and emissions to air. The training shall include:-
  - awareness of responsibilities under this Permit with particular emphasis on conditions likely to give rise to VOC emissions (e.g. spillages);
  - minimising emissions at start-up and shut-down;
  - actions to minimise emissions during abnormal operations.
- 10.3 The Operator shall retain a statement of training requirements for each operational post. A training record shall be kept for each person whose actions may have an impact on the environment. These documents shall be made available to the Regulator upon request.
- 10.4 The Operator shall ensure that all records required to be made by this Permit and any other records made by it in relation to the operation of the permitted process shall:-
  - be made available for inspection by the Regulator at any reasonable time;
  - be supplied to the Regulator on demand and without charge;
  - be legible;
  - be made as soon as reasonably practicable;
  - indicate any amendments which have been made and shall include the original record wherever possible, and be retained at the Permitted installation, or other location agreed by the Regulator in writing, for a minimum period of 2 years from the date when the records were made, unless otherwise agreed in writing.

Cooper & Turner Page 20 of 32

- 10.5 The Operator shall notify the following to the Regulator in writing, within 14 days of their occurrence:-
  - Any change in the trading name, registered name, or registered office address;
  - A change to any particulars of any ultimate holding company of including details of an ultimate holding where company Cooper & Turner Limited has become a subsidiary;
  - Any steps taken with a view to the company going into administration, entering into a company voluntary arrangement or being wound up.
- 10.6 The Operator shall notify the Regulator without delay of:-
  - The detection of an emission of any substance, which exceeds any limit or criterion in this Permit, specified in relation to the substance;
  - The detection of any fugitive emission that has caused, is causing or may cause significant pollution, unless the quantity emitted is so trivial that it would be incapable of causing significant pollution;
  - The detection of any malfunction, breakdown or failure of plant or techniques which has caused, is causing or has the potential to cause significant pollution;
  - Any accident, which has caused, is causing or has the potential to cause significant air pollution.
- 10.7 The Operator shall give written notification to the Regulator in the following instances;
  - Permanent cessation of the operation of any part of, or all of the Permitted Installation:
  - Cessation of the operation of any part of, or all of the Permitted Installation for a period, likely to exceed 1 year;
  - Resumption of the operation of any part of, or all of the permitted installation after a cessation notified under (b) above.

Cooper & Turner Page 21 of 32

10.8 All reports and notifications required by this Permit, or under any Regulation under the Environmental Permitting Regulations 2016, shall be sent to Sheffield City Council's Environmental Protection Service. Unless notified in writing, all reports, notifications and communications in respect of this Permit shall be sent to email: eps.admin@sheffield.gov.uk or

Sheffield City Council
Environmental Protection Service
5<sup>th</sup> Floor (North)
Howden House
1 Union Street
Sheffield
S1 2SH

**END OF PERMIT CONDITIONS.** 

#### Please Note

Where complaint is attributable to the operation of the installation and is, in the opinion of the Local Authority, justified, or if new knowledge develops on the potential for harmful effects from emissions, an immediate review of the Permit shall be undertaken. The Local Authority shall subsequently specify any new requirements and compliance time scales.

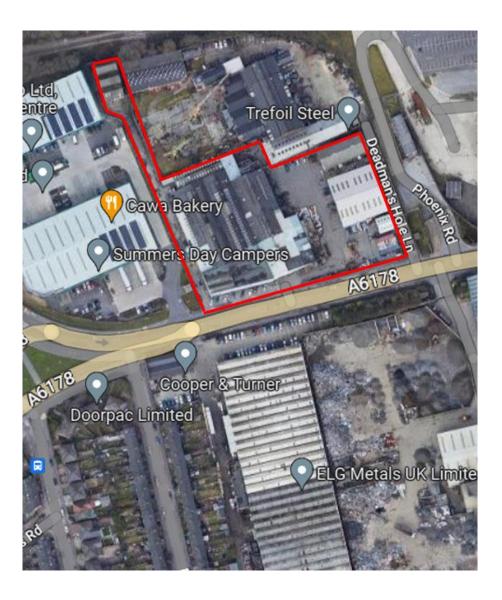
An annual subsistence fee as prescribed by the Secretary of State for the Environment shall be payable, for this Permit, by the process Operator, to this Authority within 2 weeks of the 1<sup>st</sup> April of each year.

In the event that the Permit has been issued after the 1<sup>st</sup> April in the initial year then the subsistence fee shall be pro rata for the complete months remaining and shall be due within 2 weeks of the Permit issue date.

If the relevant payment is not received by the Regulator, Sheffield City Council's Environmental Protection Service, then Permit revocation procedures may be initiated.

Cooper & Turner Page 22 of 32

#### **Schedule 1 Installation Location**



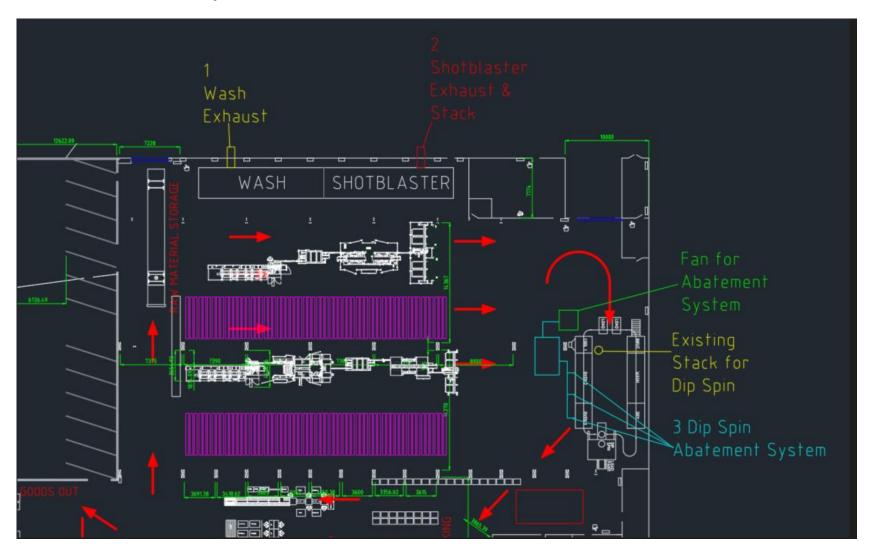
Cooper & Turner Page 23 of 32

## **Schedule 2 Installation Boundary**



Cooper & Turner Page 24 of 32

## **Schedule 3 Installation Layout and Process Flow**



Cooper & Turner Page 25 of 32

#### **Schedule 4 Coatings Data (rarely used)**

Page 1/13

#### Safety data sheet according to 1907/2006/EC, Article 31

Printing date 06.11.2020

Version number 1.06

Revision: 06.11.2020

Tel.: +43.(0)1.27702.0

Fax: +43.(0)1.27702.40

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- · Trade name REMCOR TOP BLACK 939L TOPCOAT
- · Article number: 430065
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Life cycle stages

IS Use at industrial Sites

PW Widespread use by professional workers

- · Product category PC9a Coatings and paints, thinners, paint removers
- Application of the substance / the mixture Coating
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Rembrandtin Coatings GmbH

A-1210 WIEN, Ignaz-Köck-Straße 15

· Informing department:

Safety department for product handling;

SDB-/-MSDS, e-mail:

phone: +43.(0)1.27702.327 productsafety@rembrandiin.com

· 1.4 Emergency telephone number:

Call 999 for emergency medical attention.

professionals only:

National Poison Information Service (NPIS)

24h national number 0844 892 0111

consumer:

National Health Service (NHS)

24h national number, England & Scotland 111

### SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 3

H226 Flammable liquid and vapour.



GHS05 corrosion

Eve Dam. 1

H318 Causes serious eye damage.



GHS07

STOT SE 3

H336 May cause drowsiness or dizziness.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- · 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

GB

Cooper & Turner

#### **Schedule 4 Coatings Data continued (main paint)**

#### SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



#### **REMCOR BASE SILVER 70**

Version 1.0 Revision Date: 20.07.2021 SDS Number: MAT000527274

GB / EN

Date of last issue: -

Date of first issue: 20.07.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product code

: 52727406

Trade name

: REMCOR BASE SILVER 70

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture

: IS Use at industrial sites, Widespread use by professional

workers

PROC7 Industrial spraying, Roller application or brushing,

Treatment of articles by dipping and pouring PC9a Coatings and paints, thinners, paint removers

1.3 Details of the supplier of the safety data sheet

Company

: Rembrandtin Coatings GmbH

Ignaz-Köck-Straße 15

1210 WIEN Austria

Telephone Company

: 43 (0)1 27702 327

Telefax Company

: 43 (0)1 2770240

Responsible/issuing person

: 43 (0)1 27702 327

productsafety@rembrandtin.com

1.4 Emergency telephone number

Call 999 for emergency medical attention

professionals only: National Poison Information Service (NPIS) 24h national number 0844 892

0111

consumer: National Health Service (NHS) 24h national number, England & Scotland 111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3 Skin irritation, Category 2

H226: Flammable liquid and vapour. H315: Causes skin irritation.

Serious eye damage, Category 1 Specific target organ toxicity - sing

H318: Causes serious eye damage.

Specific target organ toxicity - single exposure, Category 3, Central nervous H336: May cause drowsiness or dizziness.

1/27

#### **Schedule 4 Coatings Data continued (thinner)**

Page 1/11

#### Safety data sheet according to 1907/2006/EC, Article 31

Printing date 31.01.2020

Version number 1.06

Revision: 31.01.2020

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier
- · Trade name VERDÜNNUNG RCB S
- · Article number: 430200
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Life cycle stages
- IS Use at industrial Sites
- PW Widespread use by professional workers
- · Product category PC9a Coatings and paints, thinners, paint removers
- · Application of the substance / the mixture Coating
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Rembrandtin Lack GmbH Nfg. KG A-1210 WIEN, Igraz-Köck-Straße 15

· Informing department:

Safety department for product handling; SDB-/-MSDS, e-mail:

· 1.4 Emergency telephone number:

Call 999 for emergency medical attention. professionals only:

National Poison Information Service (NPIS)

24h national number 0844 892 0111

consumer:

National Health Service (NHS)

24h national number, England & Scotland 111

Tel.: +43.(0)1.27702.0 Fax: +43.(0)1.27702.40

phone: +43.(0)1.27702.327 productsafety@rembrandtin.com

#### SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



H226 Flammable liquid and vapour.



GHS08 health hazard

GHS02 flame

Asp. Tox. I

H304 May be fatal if swallowed and enters airways.



GHS05 corrosion

H318 Causes serious eye damage.



Eye Dam. 1

GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



STOT SE 3

H336 May cause drowsiness or dizziness.

(Contd. on page 2)

Cooper & Turner Page 28 of 32

#### **Schedule 4 Coatings Data continued (thinner)**

#### Safety data sheet according to 1907/2006/EC, Article 31

Printing date 31.01.2020

Version number 2,05

Revision: 31.01.2020

Tel.: +43.(0)1.27702.0

Fax: +43.(0)1.27702.40

phone: +43.(0)1.27702.327

productsafety@rembrandtin.com

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- · Trade name VERDÜNNUNG RCT DS
- · Article number: 430202
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Life cycle stages

IS Use at industrial Sites

PW Widespread use by professional workers

- · Product category PC9a Coatings and paints, thinners, paint removers
- · Application of the substance / the mixture Lacquer solvent/ Varnish thinner
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Rembrandtin Lack GmbH Nfg. KG

A-1210 WIEN, Ignaz-Köck-Straße 15

· Informing department:

Safety department for product handling;

SDB-/-MSDS, e-mail:

· 1.4 Emergency telephone number:

Call 999 for emergency medical attention. professionals only:

National Poison Information Service (NPIS)

24h national number 0844 892 0111

consumer:

National Health Service (NHS)

24h national number, England & Scotland 111

## SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 3

H226 Flammable liquid and vapour.



GHS08 health hazard

STOT RE 2

H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

STOT SE 3

H336 May cause drowsiness or dizziness.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms







GHS02

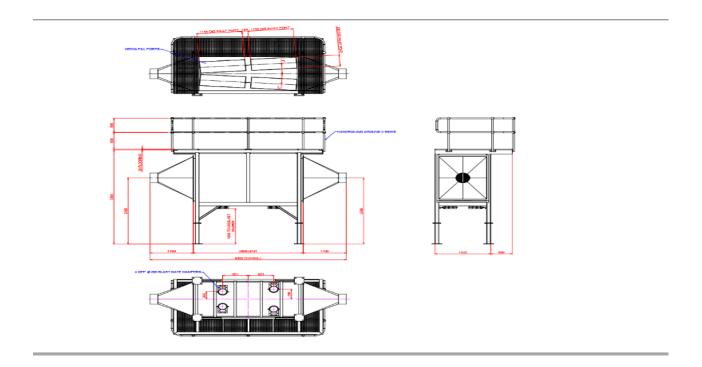
GHS07

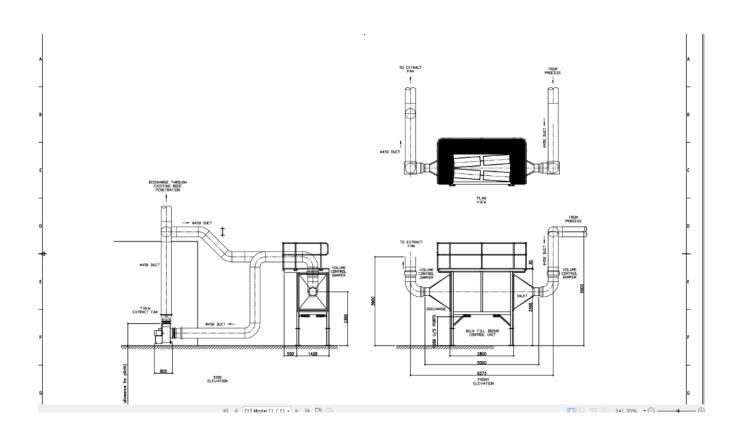
GHS08

(Contd. on page 2)

Cooper & Turner Page 29 of 32

## Schedule 5 Abatement Plant Drawing - Carbon Filters





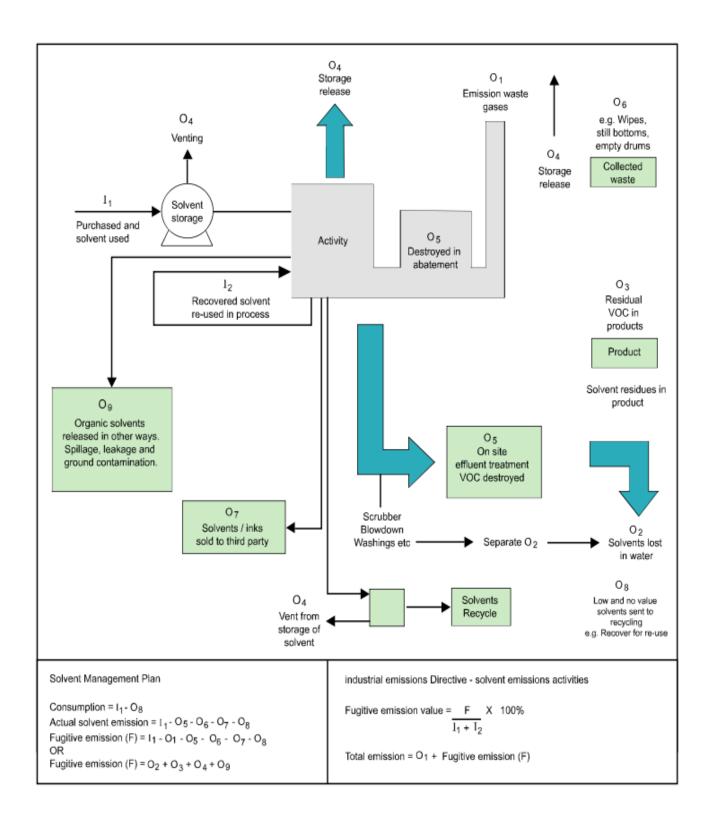
Cooper & Turner Page 30 of 32

#### Schedule 6 SE Box 5

For all activities using the waste gas and fugitive emission limits and requirements				Monitoring	
Row	VOC in waste gases	Emission limits / requirement	Fugitive emission values	Monitoring	
1	Coating installations Solvent consumption 5 – 15 tonnes	VOC expressed as total mass of organic carbon	25% of organic solvent input		
	Waste gases from oxidation plant used as abatement	50mg C/Nm <sup>3</sup>		Abated releases:  Continuous monitoring and recording	
	Any other waste gases	100mg C/Nm <sup>3</sup>			
2	Coating installations Solvent consumption 15 tonnes or more	VOC expressed as total mass of organic carbon	20% of organic solvent input	PLUS  Manual extractive testin	
	Waste gases from oxidation plant used as abatement	50mg C/Nm <sup>3</sup>		Unabated releases:  Manual extractive testin	
	Waste gases from drying processes	50 mg C/Nm <sup>3</sup>			
	Any other waste gases	75 mg C/Nm <sup>3</sup>			

Cooper & Turner Page 31 of 32

#### **Schedule 7 Solvent Management Plan Inputs and Outputs**



Cooper & Turner Page 32 of 32