

## Part B - Non-Technical Summary

### Overview of the Scope of the Permit Application

This environmental permit application is for the Installation associated with Hard Anodising Surface Treatments Ltd which is located in Kidderminster.

This document contains full details of the current operating techniques which are undertaken at the Installation. The use of 'Best Available Techniques' (BAT) are described within this document (where applicable) and the BAT are also summarised in **Table 2** which is present in **Part E Section 2**.

Representative plans for the Installation are included in **Section G**, they include:

- Figure 1 – Site Location Plan
- Figure 2 – Installation Boundary Plan
- Figure 3a – Factory 1 Layout Plan
- Figure 3b – Factory 2 Layout Plan
- Figure 4a – Factory 1 Drainage Plan
- Figure 4b – Factory 2 Drainage Plan
- Figure 5 – Emissions to Sewer Plan
- Figure 6 - Emissions to Atmosphere Plan
- Figure 7 – Waste Storage Location Plan

### Application Content

This document has been compiled using the Environment Agency's 'The Surface Treatment of Metals and Plastics by Electrolytic and Chemical Processes (EPR 2.07)' guidance document in relation to environmental permits.

In order to satisfy the requirements of the Environment Agency (EA) such that an environmental permit can be granted, the permit variation application includes the following documents and assessments:

- EA application forms A, B2, B3, B6 and F1
- Site plans (**Section G**)
- A Site Condition Report (CL1002)
- A Risk Assessment for Emission to Atmosphere (CL1003)
- A Surface Water Pollution Risk Assessment (CL1004)
- A Detailed Air Dispersion Modelling Report (CL1005)
- Other supporting information (e.g. EMS, accident management plan, waste records) as presented in **Section G** of this document.

## Hard Anodising Surface Treatments Ltd

This application is being made in accordance with the Environmental Permitting Regulations and using the relevant available Environment Agency tools and guidance documents.

### **Summary of Activities**

Details of the Schedule 1 activities and directly associated activities undertaken at the site are summarised in **Table 1a**.

### **Emissions**

There are no direct wastewater emissions to groundwater or surface water bodies associated with the installation.

There are two effluent treatment plants on site which treat the trade effluent from the Installation prior to discharge into the public sewer systems. The wastewater emission points are F1 and F2.

Surface water runoff from the installation (i.e. uncontaminated rainwater) is captured by the external drains which are present around both factories. It is then discharged to a dedicated storm water drainage system located on Oldington Lane. The water is ultimately discharged into the Staffs and Worcester Canal.

There are 18 air emission points associated with the Installation. Six of these are wall mounted fans, three are roof fans and nine are stacks.

## Hard Anodising Surface Treatments Ltd

<b>Table 1a – Types of Activities</b>		
<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity</b>	<b>Limits of specified activity</b>
S2.3 Parts A(1)(a)	Surface treatment of metals using anodising and passivation chemistries.	Receipt of raw materials, surface treatment and despatch of finished parts.  Total scheduled activity vat volume capacity is approx. 117m <sup>3</sup>
S2.3 Part B(a)	Surface treatment of metals by passivation and processes generating oxides of nitrogen	Receipt of raw materials, surface treatment and despatch of finished parts.  Total scheduled activity vat volume capacity is approx. 20m <sup>3</sup>
<b>Directly Associated Activity</b>		
Directly Associated Activity	Delivery, distribution, storing and handling of chemicals	Storage of chemicals in appropriate packaging/containers in secure area.
Directly Associated Activity	Water treatment, rinsing, drying and post-treatment	Water treatment, rinsing and drying of treated work and post-treatment of work, where necessary to complete the surface treatment.
Directly Associated Activity	Mechanical preparation	Substrate cleaning, prior to surface treatment and fume abatement by extraction (via built LEVs).
Directly Associated Activity	Degreasing	Degreasing/general purpose cleaning at room temperature in an ultra-sonic cleaner. and fume abatement by extraction (via built LEVs).
Directly Associated Activity	Chemical Cleaning	Chemical cleaning using aqueous cleaners on a closed loop system on both anodising and passivation lines.
Directly Associated Activity	Rinsing	Rinsing is counter flow on closed loop system. Dedicated operations used to maintain water quality.
Directly Associated Activity	Drying	The drying process includes a water dip to allow the parts to air dry quickly. No external emissions.
Directly Associated Activity	Paint Spraying	Paint spraying (aerosols and brush applications) of some parts. Small scale activity only. Emissions to air from this activity controlled by dedicated wall fans.
Directly Associated Activity	Chemical Etching	Chromic/Phosphoric Etch LEV dedicated to remove process fume emissions to air.
Directly Associated Activity	Storage and handling of Wastes	Storage and collection of waste, empty containers, general and residual waste from activities to be removed from the installation via licensed waste management contractor. Site operates a dedicated waste storage facility with Factory 2.

## Hard Anodising Surface Treatments Ltd

<b>Table 1a – Types of Activities</b>		
<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity</b>	<b>Limits of specified activity</b>
Directly Associated Activity	Effluent Treatment	<p>Waste waters are dealt with via 2 off dedicated Effluent Treatment Plants. Effluent concentrations are monitored twice daily by site personnel and quarterly by STWA.</p> <p>pH probes calibrated on a regular schedule by 3<sup>rd</sup> party contractor.</p> <p>Site limits are specified via Consent to Discharge Trade Effluent documentation.</p>
Directly Associated Activity	Fume extraction and fume abatement	<p>Local exhaust ventilation (LEV) on all major process tanks.</p> <p>All LEVs are subject to annual Inspection and Testing via a 3<sup>rd</sup>. party contractor.</p> <p>All release to air stacks is listed, numbered and located on a site map.</p>
Directly Associated Activity	Monitoring of water flow rates	<p>Factory 2 has an MCERTS accredited flow meter.</p> <p>Factory 1 has a non MCERTS flow meter.</p> <p>Both are subject to scheduled inspection and calibration.</p>
Directly Associated Activity	Chemical Dying	<p>Use of dedicated, purpose formulated, bone fide dye stuffs to treat surface of components.</p> <p>LEV dedicated to remove process fume emissions to air.</p>