

## **Succinct summary of representative risk management measures (RMMs) and operational conditions (OCs)**

**Legal name of applicant(s):**

Agbrigg Chrome Platers  
Allenchrome Electroplating Ltd  
Alpha Electroplaters Ltd  
Birmingham Plating  
Broadway Brass  
Castle Polishing & Chrome Plating Ltd  
Crown Polishing & Plating Ltd  
Derby Plating Services Ltd  
Doug Taylor Metal Finishing Co.  
Douglas Metal Finishing Ltd  
Essex Finishers Ltd  
Fox Plating  
Genius of the Lamp Ltd  
Global Metal Finishers Ltd  
HD Sports  
Hockley Enterprises (Essex) Ltd  
J&A Finishing Services Ltd  
John Stokes Ltd  
MAJ Hi-Spec Ltd  
Manchester Electroplating Ltd  
Marque Restore Chrome Plating Ltd  
Merridale Polishing & Plating Ltd  
Midland Polishing & Plating  
Prestige Electro Plating  
Quality Chrome Ltd  
Reeve Metal Finishing  
S & T Electro-plate  
Sant Plating Ltd  
Satchrome  
Silchrome Plating Ltd  
Star Polishing & Plating Ltd  
The Sterlingham Co Ltd  
Vernon Moss  
Vintage Headlamp Restoration Ltd

**Submitted by:**

Surface Engineering Association Chromium Trioxide  
Authorisation Consortium

**Date:**

29<sup>th</sup> June 2022

**Substance:** Chromium Trioxide

EC: 215-607-8  
CAS: 1333-82-0

**Use title:** Use of chromium trioxide for the electroplating of various components with technical performance requirements, such as for the brewery industry, construction sector, general engineering, sports equipment, fire protection, architectural hardware, medical devices, classic/vintage cars & motorcycles, sanitaryware & plumbing with the purpose of creating a coating to provide specific performance characteristics and to match existing components and those supplied from other sources

**Use number:** 3

**Exposure Scenario Use at an Industrial Site -** Use of chromium trioxide for the electroplating of various components with technical performance requirements, such as for the brewery industry, construction sector, general engineering, sports equipment, fire protection, architectural hardware, medical devices classic/vintage cars & motorcycles, sanitaryware & plumbing with the purpose of creating a coating to provide specific performance characteristics and to match existing components and those supplied from other sources

ECS and WCS	Task (ERC/spERC or PROC)	Annual amount per site (tonnes /year)	Technical RMMs, including: *Containment, *Ventilation (general, LEV...) *customized technical installation, etc	Organisational RMMs, including: *Duration and Frequency of exposure *OSH management system *Supervision *Monitoring arrangements *Training, etc	PPE (characteristics)	Other conditions	Effectiveness of waste water and waste air treatment (for ERC)	Release factors: water, air and soil (for ERC)	Detailed info. in CSR (section)
<b>ECS 1</b>	Use in chromium Electroplating	1 to 2 tonnes in total for all sites					No direct emissions to the environment	No emissions to soil. No direct emissions to air outside of the site No direct emissions to water	
<b>WCS 1</b>	Receipt, transfer and storage of chromium trioxide PROC8a	See above	General ventilation	All persons with access to the storage areas have been informed of the risks of working with chromium trioxide, the safe way of handling chromium trioxide and use of PPE and other control equipment.	Safety shoes, suitable gloves and eye protection as required	None	Not applicable	Chromium trioxide is in sealed containers – no exposure	9.2.1.1

<b>WCS 2</b>	Loading / unloading of jigs PROC 0	See above	General ventilation	Exposure to chromium trioxide is not possible from loading components onto jigs. Processed components contain no chromium trioxide, only chromium metal	Suitable gloves	Ensure adequate rinsing to remove process solutions	Not applicable	No exposure	9.2.2.1
<b>WCS 3</b>	Operation of electroplating line PROC 13	See above	Mist suppressant or surface tension modifiers are used to control any potential emissions of chromium trioxide.	Mist test measurements taken at least every 2 weeks, to ensure compliance with UK legislation. Individual air monitoring. Biological Monitoring	Suitable gloves, eye protection, clothing and footwear	None		In line with current UK ALARP principles	9.2.3.1
<b>WCS 4</b>	Sampling the electroplating solution PROC19	See above	Mist suppressant or surface tension modifiers are used to control any potential emissions of chromium trioxide.	All persons undertaking sampling activities have been instructed about the risks of working with chromium trioxide, the safe way of handling chromium trioxide and the use of PPE and other control equipment.	Suitable gloves, eye protection, clothing, footwear and respiratory protection where required	None			9.2.4.1
<b>WCS 5</b>	Making additions of chromium trioxide PROC 0	See above	Mist suppressant or surface tension modifiers are used to control any potential emissions of chromium trioxide.  Chromium trioxide is in solid form	All persons undertaking making additions activities have been instructed about the risks of working with chromium trioxide, the safe way of handling chromium trioxide and the use	Suitable gloves, eye protection, clothing, footwear and respiratory protection where required masks	None	To comply with consent to discharge conditions where appropriate		9.2.5.1

				of PPE and other control equipment.					
<b>WCS 6</b>	Maintenance PROC 28	See above		All persons undertaking maintenance activities have been instructed about the risks of working with chromium trioxide, the safe way of handling chromium trioxide and the use of PPE and other control equipment.	Suitable gloves, eye protection, clothing, footwear and respiratory protection where required	None			9.2.6.1
<b>WCS 7</b>	Wastewater & effluent treatment PROC 0	See above	All solid and any liquid waste is collected and either forwarded to an external waste management company, or is treated on site by reducing the hexavalent chromium to trivalent chromium. The treated waste is either recycled or forwarded to an external waste management company (licenced contractor) for disposal as hazardous waste	Suitable training Use of licensed waste contractors Operating with the issued consent to discharge limits	Suitable gloves, eye protection, clothing and footwear	None			9.2.7.1

**Abbreviations:** WCS=Worker contributing scenario, ECS=Environmental Contributing Scenario,\* ERC=Environmental Release Category (or spERC if available) , PROC= Process category, LEV=Local Exhaust Ventilation, PPE=Personal Protective Equipment