

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Anochrome Limited

Anochrome Limited
Reservoir Place
Pleck
Walsall
West Midlands
WS2 9RZ

Variation application number

EPR/BN0112IN/V004

Permit number

EPR/BN0112IN

Anochrome Limited

Permit number EPR/BN0112IN

Introductory note

This introductory note does not form a part of the notice

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

The following changes have been made as a result of this variation:

- The permitted boundary has been extended to incorporate a new automatic vat line using acid zinc, including chemical storage area, new emission point to air and impermeable surfacing.
- Decommissioning and removal of an existing automatic vat line that uses cyanide zinc, including the associated emission point (A1).
- Addition of existing gas burners serving various processes and new gas burners serving the new surface treatment line as DAAs (AR12) and their associated emission points.
- Increase in permitted discharge to sewer from 300m³/d to 750m³/d.
- Removal and amendment of some emission limits for the discharge to sewer. A limit for nickel will be set and the limits for zinc and cyanide will be revised as part of a future variation.
- Change of site name from Walsall Platers to Anochrome Limited.
- References to hexavalent chromium conversion coatings, which have now been replaced by trivalent chromium conversion coatings.
- Addition of improvement conditions
 - IC1 – focusing on prevention of spills to the Walsall Canal.
 - IC2 – requiring the Operator to identify opportunities for use of low temperature cleaners.
 - IC3 – requiring the Operator to identify opportunities for use of rinse water purification and re-use.
 - IC4 - requiring the Operator to undertake an assessment of emissions to air and the impacts on human health and ecological receptors.
 - IC5 – requiring the Operator to undertake a confirmatory assessment of emissions to sewer and the impacts on the receiving waters.

Site description

The installation is regulated under Section 2.3 Part A(1)(a) – surface treating metals and plastic materials using an electrolytic or chemical process where the aggregated volume of the treatment vats is more than 30m³. The activities undertaken onsite are primarily surface treatment, but also include powder coating, cathodic electrophoretic painting and effluent treatment. The surface treatment lines comprise the following:

- Two automatic barrel plating lines with a surface treatment capacity of 7.4m³ (17m³ total tank volume on the line) on line 1 and 11.4m³ (20m³ total tank volume on the line) on line 2.
- One automatic barrel phosphating line with a surface treatment capacity of 8m³ (18m³ total tank volume on the line).
- One alkaline zinc nickel plating line with a surface treatment capacity of 15.9m³ (33m³ total tank volume on the line).
- One automatic vat zinc plating line with a surface treatment capacity of 69.5m³ (139m³ total tank volume on the line).

- One electrophoretic paint line with a surface treatment capacity of 9.3m³ (31m³ total tank volume on the line), which then continues into the cathodic electrophoretic painting activity.

The site also has an abstraction license, NPS/WR/029699, which may be used to abstract water for the onsite activities.

The site is located on the south-east edge of an industrial area that is currently under development. The north and east of the site is bounded by domestic dwellings and there is an industrial unit to the south, beyond which is the Walsall Canal. There is one Special Area of Conservation (SAC) Cannock Extension Canal within 10km and 17 Local Wildlife Sites within 2km of the site, which includes a number of sites downstream of the Minworth Sewage Treatment Works, into which the site discharges its waste water effluent.

The schedules specify the changes made to the permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

| Status log of the permit | | |
|--|------------------------------|---|
| Description | Date | Comments |
| Application BN0112IN | Received 26/07/2004 | |
| Additional information received | 20/08/2004 and 22/09/2004 | Requests dated 19/08/2004 and 17/09/2004 |
| Permit determined | 16/12/2004 | |
| Application for variation EPR/BN0112IN/V002 | Received 20/05/2010 | |
| Variation determined EPR/BN0112IN/V002 | Issued 23/11/2010 | |
| Application EPR/BN0112IN/V003 | 13/09/2023 | Application to extend permitted area and install new bund and chemical storage tanks |
| Application EPR/BN0112IN/V003 withdrawn | 23/04/2024 | Operator requested to withdraw application |
| Application EPR/BN0112IN/V004 (variation and consolidation) | Duly made 16/09/2024 | Application to add a new automatic vat line, extend the site boundary and update the permit to modern conditions. |
| Additional information received | 30/09/2024 | Updated documents relating to commercial confidentiality – main application document and plans and drawings. |
| Additional information received | 13/06/2025 | Response to Schedule 5 Notice – activities undertaken onsite, operating techniques, emissions to air, emissions to water, accident management plan and BAT. |
| Additional information received | 04/07/2025 | Site plan with emission points and confirmation of estimated discharge concentrations |
| Additional information received | 21/07/2025 | Gas burner details |
| Additional information received | 03/09/2025 | Updated variation application document and tank spreadsheet |
| Additional information received | 29/09/2025 | Updated Incident and Emergency Management and Recovery Plan |
| Additional information received | 31/10/2025 | Flow monitoring data |
| Additional information received | 14/11/2025 | Effluent monitoring data |

| Status log of the permit | | |
|---|-------------|--|
| Description | Date | Comments |
| Variation determined and consolidation issued EPR/BN0112IN | 04/03/2026 | Varied and consolidated permit issued in modern format |

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

Permit number

EPR/BN0112IN

Issued to

Anochrome Limited (“the operator”)

whose registered office is

C/O Wolverhampton Electroplating Limited

Wood Lane

Fordhouses

Wolverhampton

West Midlands

WV10 8HN

company registration number 00405120

to operate a regulated facility at

Anochrome Limited

Reservoir Place

Pleck

Walsall

West Midlands

WS2 9RZ

to the extent set out in the schedules.

The notice shall take effect from 04/03/2026

| Name | Date |
|----------------|------------|
| Stacey Tapsell | 04/03/2026 |

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of the application made by the operator.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/BN0112IN

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BN0112IN/V004 authorising,

Anochrome Limited (“the operator”),

whose registered office is

C/O Wolverhampton Electroplating Limited
Wood Lane
Fordhouses
Wolverhampton
West Midlands
WV10 8HN

company registration number 00405120

to operate an installation at

Anochrome Limited
Reservoir Place
Pleck
Walsall
West Midlands
WS2 9RZ

to the extent authorised by and subject to the conditions of this permit.

| Name | Date |
|----------------|------------|
| Stacey Tapsell | 04/03/2026 |

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
- (b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

1.2 Energy efficiency

1.2.1 The operator shall:

- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
- (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (c) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

1.3.1 The operator shall:

- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
- (b) maintain records of raw materials and water used in the activities;
- (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
- (d) take any further appropriate measures identified by a review.

1.4 Avoidance, recovery and disposal of wastes produced by the activities

1.4.1 The operator shall take appropriate measures to ensure that:

- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
- (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
- (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

- 1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).

2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation (“plan”) specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- (a) the nature of the process producing the waste;
 - (b) the composition of the waste;
 - (c) the handling requirements of the waste;
 - (d) the hazardous property associated with the waste, if applicable; and
 - (e) the waste code of the waste.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Total annual emissions from the emission point(s) set out in schedule 3 tables S3.1, S3.2 and S3.3 of a substance listed in schedule 3 table S3.4 shall not exceed the relevant limit in table S3.4.
- 3.1.4 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
 - (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
 - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Odour

- 3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.3.2 The operator shall:
 - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
 - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.4 Noise and vibration

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

3.4.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.5 Monitoring

3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

- (a) point source emissions specified in tables S3.1, S3.2 and S3.3;

3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2 and S3.3 unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

4.1.1 All records required to be made by this permit shall:

- (a) be legible;
- (b) be made as soon as reasonably practicable;
- (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
 - (i) off-site environmental effects; and
 - (ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:
- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
 - (b) the annual production/treatment data set out in schedule 4 table S4.2; and
 - (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
 - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
 - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.3 Notifications

- 4.3.1 In the event:
- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
 - (i) inform the Environment Agency,
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (iii) take the measures necessary to prevent further possible incidents or accidents;
 - (b) of a breach of any permit condition the operator must immediately—
 - (i) inform the Environment Agency, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
 - (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

4.3.6 The Environment Agency shall be given at least 14 days' notice before implementation of any part of the site closure plan.

4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:

- (a) a decision by the Secretary of State not to re-certify the agreement;
- (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
- (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately", in which case it may be provided by telephone.

Schedule 1 – Operations

| Table S1.1 activities | | | |
|-------------------------------------|---|---|--|
| Activity reference | Activity listed in Schedule 1 of the EP Regulations | Description of specified activity | Limits of specified activity |
| AR1 | Section 2.3 A(1)(a) | Surface treating metals and plastic materials using an electrolytic or chemical process where the aggregated volume of the treatment vats is more than 30m ³ | <p>From receipt of raw materials into the surface treatment process to dispatch into the painting activity/powder coating activity and dispatch offsite.</p> <p>Two automatic barrel plating lines with a surface treatment capacity of 6.7m³ (17m³ total tank volume on the line) on line 1 and 10m³ (20m³ total tank volume on the line) on line 2.</p> <p>One automatic barrel phosphating line with a surface treatment capacity of 8m³ (18m³ total tank volume on the line).</p> <p>One alkaline zinc nickel plating line with a surface treatment capacity of 15m³ (33m³ total tank volume on the line).</p> <p>One automatic vat zinc plating line with a surface treatment capacity of 70m³ (145m³ total tank volume on the line).</p> <p>One electrophoretic paint line with a surface treatment capacity of 9m³ (31m³ total tank volume on the line), which then continues into AR8.</p> |
| Directly Associated Activity | | | |
| AR2 | Directly associated activity | Treatment of process effluent at onsite effluent treatment plant | <p>From receipt of effluent generated from process to treatment and disposal via foul sewer to Severn Trent – Minworth Sewage Treatment Works and re-use onsite.</p> <p>Effluent treatment plant maximum treatment capacity of 605m³/d, comprises of cyanide oxidation, neutralisation, flocculation (addition of poly-electrolyte) and settlement in a Dortmund tower.</p> |
| AR3 | Directly associated activity | Storage and handling of raw materials, products and intermediaries | From receipt of raw materials to transfer to processing areas or offsite, including storage onsite. |
| AR4 | Directly associated activity | Waste storage and management | From receipt of liquid and solid hazardous and non-hazardous wastes to their storage and final disposal. |
| AR5 | Directly associated activity | Chemical/mechanical preparation of parts for submission to surface treatment activity | From receipt of raw materials to dispatch of final product |
| AR6 | Directly associated activity | Rinsing, drying, post treatment of parts that have been surface treated | From receipt of raw materials to dispatch of final product |

| Table S1.1 activities | | | |
|------------------------------|--|--|---|
| Activity reference | Activity listed in Schedule 1 of the EP Regulations | Description of specified activity | Limits of specified activity |
| AR7 | Directly associated activity | Fume extraction and abatement | From receipt of air emissions from process tanks to treatment using an alkaline solution and discharge of emissions to air. |
| AR8 | Directly associated activity | Cathodic electrophoretic painting | From the receipt of work pieces from AR1 (electrophoretic paint line) to dispatch of final product. One painting line with a paint tank capacity of 4.5m ³ and total tank capacity of 14.4m ³ , including paint reclaim and rinse tanks. |
| AR9 | Directly associated activity | Hydrogen embrittlement relief | Use of a gas burner for hydrogen embrittlement relief of work pieces |
| AR10 | Directly associated activity | Quality assurance of process parts | Quality assurance using techniques such as neutral salt spray testing |
| AR11 | Directly associated activity | Gas burners | Combustion of natural gas in gas burners and discharge of emissions to air |

| Table S1.2 Operating techniques | | |
|--|--|----------------------|
| Description | Parts | Date Received |
| Application for variation EPR/BN0112IN/V004 | Pre-approved SOP for the Operation and Maintenance of scrubber system on Acid Zinc line – Bay 3. Version 1, 9 September 2024 | 11/09/2024 |
| Response to request for additional information | Incident and Emergency Management and Recovery Plan, dated September 2025 | 29/09/2025 |

| Table S1.3 Improvement programme requirements | | |
|--|---|---|
| Reference | Requirement | Date |
| IC1 | <p>The Operator shall submit a written report and updated Incident and Emergency Management and Recovery Plan to the Environment Agency for assessment and approval.</p> <p>The report must contain:</p> <ul style="list-style-type: none"> • A list of potential methods that could be used to reduce the likelihood of contaminated stormwater or firewater from leaving the permitted boundary (or preventing entry to the Walsall Canal) via the surface water drainage system. • A feasibility assessment of the potential methods identified, including cost estimates. • A proposal of the method(s) that you will implement, including timescales for completion. <p>The Operator shall implement any agreed method(s) identified within the report in accordance with the Environment Agency's written approval and within the approved timescales.</p> | 12 months from permit variation V004 issue date |
| IC2 | <p>The Operator shall submit a written report to the Environment Agency for assessment and approval, which relates to BAT points 12 and 13 in Section 1.2 of How to Comply, The Surface Treatment of Metals and Plastics by Electrolytic and Chemical Processes (EPR 2.07).</p> <p>The report must contain:</p> | 12 months from permit variation V004 issue date |

| Table S1.3 Improvement programme requirements | | |
|--|--|--|
| Reference | Requirement | Date |
| | <ul style="list-style-type: none"> • A list of tanks that are used for cleaning workpieces as part of the surface treatment process, the working temperatures of the tanks and the cleaning chemicals that are used in those tanks. • A feasibility assessment demonstrating which tanks could be suitable for use/trials of low temperature cleaners in order to reduce the overall amount of heat energy the installation uses. • A risk assessment comparing the current cleaning methods against the proposed method(s). • A proposal of the method(s) that you will implement/trial, including timescales for completion. <p>The Operator shall implement any agreed method(s) identified within the report in accordance with the Environment Agency's written approval and within the approved timescales.</p> | |
| IC3 | <p>The Operator shall submit a written report to the Environment Agency for assessment and approval, which relates to BAT point 1 in Section 1.2 of How to Comply, The Surface Treatment of Metals and Plastics by Electrolytic and Chemical Processes (EPR 2.07).</p> <p>The report must contain:</p> <ul style="list-style-type: none"> • A feasibility assessment demonstrating which tanks/treatment lines could be suitable for use of treatment systems for the re-circulation of rinse waters in order to reduce the volume of water sent to onsite effluent treatment. • A proposal of the method(s) that you will implement, including timescales for completion. <p>The Operator shall implement any agreed method(s) identified within the report in accordance with the Environment Agency's written approval and within the approved timescales.</p> | 12 months from permit variation V004 issue date |
| IC4 | <p>The Operator shall submit a written report to the Environment Agency for assessment and approval.</p> <p>The report must contain:</p> <ul style="list-style-type: none"> • Results of monitoring during normal operations from emission points A6 – A21 of the parameters listed in table S3.1 for those emission points and using the monitoring methods detailed in the online guidance 'Monitoring stack emissions: environmental permits'. • An updated air emissions risk assessment, which must be in line with the online guidance 'Air emissions risk assessment for your environmental permit'. • An updated assessment of the impacts on protected conservation areas from all emission points. All emission points are required to be assessed due to needing to assess acid deposition from NOx and HCl at those sites (along with nutrient nitrogen deposition). • Detailed air dispersion modelling where the emissions do not screen out within the revised air emissions risk assessment. • A proposal of the method(s) and/or emission limits to be taken to reduce or abate emissions where detailed modelling shows likely breaches of EALs, critical loads or critical levels at the receptors, including timescales for completion. <p>The Operator shall implement any agreed method(s) and/or emission limits identified within the report in accordance with the Environment Agency's written approval and within the approved timescales.</p> | 12 months from permit variation V004 issue date |
| IC5 | <p>The Operator shall submit a written report to the Environment Agency for assessment and approval.</p> <p>The report must contain:</p> | 12 months from permit variation V004 issue date, or as |

| Table S1.3 Improvement programme requirements | | |
|--|---|--|
| Reference | Requirement | Date |
| | <ul style="list-style-type: none"> • Results of three separate rounds of monitoring during normal operations from emission point S1 for boric acid, cadmium, mercury, 2-chlorobenzaldehyde and 4-phenylbutenone. • An updated emissions to water risk assessment, which must be in line with the online guidance 'Surface water pollution risk assessment for your environmental permit'. This is only required if the emission concentrations are higher than those used in the assessment for variation V004. • Where the emissions do not screen out in the assessment, then three further samples are to be taken and the results from all testing submitted to the Agency for detailed modelling. • A proposal of the method(s) and/or emission limits to be taken to reduce or abate emissions where detailed modelling shows likely breaches of EQSs, including timescales for completion. <p>The Operator shall implement any agreed method(s) and/or emission limits identified within the report in accordance with the Environment Agency's written approval and within the approved timescales.</p> | otherwise agreed in writing with the Environment Agency |
| IC6 | <p>The Operator shall submit a written report to the Environment Agency for approval.</p> <p>The report must contain:</p> <ul style="list-style-type: none"> • Results of monitoring of emission point S1 for total nickel, dissolved nickel, total zinc, dissolved zinc and free cyanide • Which monitoring standards have been used and demonstrate how they are in line with the <u>online guidance</u>, including limits of detection. • A minimum of 12 separate sample results for each substance. | 13 months from permit variation V004 issue date, or as otherwise agreed in writing with the Environment Agency |

Schedule 2 – Waste types, raw materials and fuels

| Table S2.1 Raw materials and fuels | |
|------------------------------------|---------------|
| Raw materials and fuel description | Specification |
| -- | -- |

Schedule 3 – Emissions and monitoring

| Table S3.1 Point source emissions to air – emission limits and monitoring requirements | | | | | | |
|--|---|---|------------------------|----------------------------------|----------------------|--|
| Emission point ref. & location | Source | Parameter | Limit (including unit) | Reference period | Monitoring frequency | Monitoring standard or method (note 1) |
| A2 on site plan in schedule 7 | Automatic barrel line 1 scrubber vent | Hydrogen chloride | 10 mg/m ³ | Average over the sampling period | Annually | BS EN 1911:1998 Parts 1 to 3 or EN 16429 or CEN TS 17337 |
| A3 on site plan in schedule 7 | Automatic barrel line 2 scrubber vent | Hydrogen chloride | 10 mg/m ³ | Average over the sampling period | Annually | BS EN 1911:1998 Parts 1 to 3 or EN 16429 or CEN TS 17337 |
| A4 on site plan in schedule 7 | Automatic phosphate plant scrubber vent | Hydrogen chloride | 10 mg/m ³ | Average over the sampling period | Annually | BS EN 1911:1998 Parts 1 to 3 or EN 16429 or CEN TS 17337 |
| A5 on site plan in schedule 7 | Local exhaust emissions from zinc plating line | Hydrogen chloride | 10 mg/m ³ | Average over the sampling period | Annually | BS EN 1911:1998 Parts 1 to 3 or EN 16429 or CEN TS 17337 |
| A6 on site plan in schedule 7 | Scrubber serving automatic vat zinc plating line | Hydrogen chloride | 2.5 mg/m ³ | Average over the sampling period | Annually | BS EN 1911:1998 Parts 1 to 3 or EN 16429 or CEN TS 17337 |
| A7 on site plan in schedule 7 | Factory floor - 2 Gas burners: Burn off oven for residual paint on jigs | Oxides of nitrogen (NO and NO ₂ expressed as NO ₂) | No limit set | -- | -- | -- |
| | | Carbon monoxide | No limit set | -- | -- | -- |
| A8 on site plan in schedule 7 | Mezzanine floor above factory - Gas boiler 1 for heating | Oxides of nitrogen (NO and NO ₂ expressed as NO ₂) | No limit set | -- | -- | -- |

| Table S3.1 Point source emissions to air – emission limits and monitoring requirements | | | | | | |
|---|--|--|-------------------------------|-------------------------|-----------------------------|---|
| Emission point ref. & location | Source | Parameter | Limit (including unit) | Reference period | Monitoring frequency | Monitoring standard or method (note 1) |
| | process tanks | Carbon monoxide | No limit set | -- | -- | -- |
| A9 on site plan in schedule 7 | Mezzanine floor above factory - Gas boiler 2 for heating process tanks | Oxides of nitrogen (NO and NO2 expressed as NO2) | No limit set | -- | -- | -- |
| | | Carbon monoxide | No limit set | -- | -- | -- |
| A10 on site plan in schedule 7 | Phosphate line - Gas burner for drying component parts after treatment | Oxides of nitrogen (NO and NO2 expressed as NO2) | No limit set | -- | -- | -- |
| | | Carbon monoxide | No limit set | -- | -- | -- |
| A11 on site plan in schedule 7 | Barrel line 2 - Gas burner for drying component parts after treatment | Oxides of nitrogen (NO and NO2 expressed as NO2) | No limit set | -- | -- | -- |
| | | Carbon monoxide | No limit set | -- | -- | -- |
| A12 on site plan in schedule 7 | Factory floor - Gas burner for de-embrittlement oven | Oxides of nitrogen (NO and NO2 expressed as NO2) | No limit set | -- | -- | -- |
| | | Carbon monoxide | No limit set | -- | -- | -- |
| A13 on site plan in schedule 7 | E-coat - Gas burner 1 for heating process tanks | Oxides of nitrogen (NO and NO2 expressed as NO2) | No limit set | -- | -- | -- |
| | | Carbon monoxide | No limit set | -- | -- | -- |
| A14 on site plan in schedule 7 | E-coat - Gas burner 2 for heating process tanks | Oxides of nitrogen (NO and NO2 expressed as NO2) | No limit set | -- | -- | -- |

| Table S3.1 Point source emissions to air – emission limits and monitoring requirements | | | | | | |
|---|---|--|-------------------------------|-------------------------|-----------------------------|---|
| Emission point ref. & location | Source | Parameter | Limit (including unit) | Reference period | Monitoring frequency | Monitoring standard or method (note 1) |
| | | Carbon monoxide | No limit set | -- | -- | -- |
| A15 on site plan in schedule 7 | E-coat - Gas burner 3 for heating process tanks | Oxides of nitrogen (NO and NO2 expressed as NO2) | No limit set | -- | -- | -- |
| | | Carbon monoxide | No limit set | -- | -- | -- |
| A16 on site plan in schedule 7 | E-coat - Gas burner 4 for heating process tanks | Oxides of nitrogen (NO and NO2 expressed as NO2) | No limit set | -- | -- | -- |
| | | Carbon monoxide | No limit set | -- | -- | -- |
| A17 on site plan in schedule 7 | E-coat - Gas burner for drying after treatment | Oxides of nitrogen (NO and NO2 expressed as NO2) | No limit set | -- | -- | -- |
| | | Carbon monoxide | No limit set | -- | -- | -- |
| A18 on site plan in schedule 7 | Acid zinc (bay 3) - 2 Gas burners for drying | Oxides of nitrogen (NO and NO2 expressed as NO2) | No limit set | -- | -- | -- |
| | | Carbon monoxide | No limit set | -- | -- | -- |
| A19 on site plan in schedule 7 | Acid zinc (bay 3) - 2 Gas burners for drying | Oxides of nitrogen (NO and NO2 expressed as NO2) | No limit set | -- | -- | -- |
| | | Carbon monoxide | No limit set | -- | -- | -- |
| A20 on site plan in schedule 7 | Acid zinc (bay 3) - 2 Gas burners for heating process tanks | Oxides of nitrogen (NO and NO2 expressed as NO2) | No limit set | -- | -- | -- |

| Table S3.1 Point source emissions to air – emission limits and monitoring requirements | | | | | | |
|---|--|---|-------------------------------|-------------------------|-----------------------------|---|
| Emission point ref. & location | Source | Parameter | Limit (including unit) | Reference period | Monitoring frequency | Monitoring standard or method (note 1) |
| | | Carbon monoxide | No limit set | -- | -- | -- |
| A21 on site plan in schedule 7 | Acid zinc (bay 3) - Gas burner for heating process tanks | Oxides of nitrogen (NO and NO ₂ expressed as NO ₂) | No limit set | -- | -- | -- |
| | | Carbon monoxide | No limit set | -- | -- | -- |

Note 1. EN 1911 and EN 16429 are standard reference methods. CEN TS 17337 may be used as an alternative method, provided it meets the requirements specified in the MCERTS performance standard for stack emissions monitoring organisations.

| Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements | | | | | | |
|---|--|------------------|---------------------------|-------------------------|-----------------------------|--------------------------------------|
| Emission point ref. & location | Source | Parameter | Limit (incl. unit) | Reference Period | Monitoring frequency | Monitoring standard or method |
| W1 on site plan in schedule 7 emission to Walsall Canal | Uncontaminated roof and surface water run-off only | -- | -- | -- | -- | -- |

| Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements | | | | | | |
|--|-------------------------------|------------------------------|---------------------------|--|-----------------------------|--|
| Emission point ref. & location | Source | Parameter | Limit (incl. Unit) | Reference period | Monitoring frequency | Monitoring standard or method |
| S1 on site plan in schedule 7 emission to Severn Trent – Minworth Sewage Treatment Works | Site effluent treatment plant | Daily flow | 750m ³ | Instantaneous | Continuous | Calibrated flow meter |
| | | Free cyanide expressed as CN | 10mg/l | Time proportional composite sample (over 24 hours) | Monthly | BS EN ISO 14403 -1 or BS EN ISO 14403 -2 or BS ISO 17690 |
| | | Cadmium (total) | No limit set | Time proportional composite | Annual | BS EN ISO 5961 or |

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements

| Emission point ref. & location | Source | Parameter | Limit (incl. Unit) | Reference period | Monitoring frequency | Monitoring standard or method |
|--------------------------------|--------|----------------------|--|---|----------------------|--|
| | | | | sample (over 24 hours) | | BS EN ISO 11885 or BS EN ISO 17294 -2 or BS EN ISO 15586 |
| | | Mercury (total) | No limit set | Time proportional composite sample (over 24 hours) | Annual | BS EN 12846 or BS EN ISO 17852 |
| | | Chromium (total) | No limit set | -- | -- | -- |
| | | Zinc (total) | 15mg/l | Time proportional composite sample (over 24 hours) | Quarterly | BS EN ISO 11885 or BS EN ISO 17294 -2 or BS EN ISO 15586 |
| | | Zinc (dissolved) | Limit to be set upon completion of IC6 | Dissolved mean limit (as annual average of all samples across the year) | Monthly | BS EN ISO 11885 or BS EN ISO 17294 -2 or BS EN ISO 15586 |
| | | Nickel (total) | No limit set | Time proportional composite sample (over 24 hours) | Quarterly | BS EN ISO 11885 or BS EN ISO 17294 -2 or BS EN ISO 15586 |
| | | Nickel (dissolved) | Limit to be set upon completion of IC6 | Dissolved mean limit (as annual average of all samples across the year) | Monthly | BS EN ISO 11885 or BS EN ISO 17294 -2 or BS EN ISO 15586 |
| | | Copper (total) | No limit set | -- | -- | -- |
| | | Lead (total) | No limit set | -- | -- | -- |
| | | 2-chlorobenzaldehyde | No limit set | -- | -- | -- |
| | | 4-phenylbutenone | No limit set | -- | -- | -- |
| | | Boric acid | No limit set | -- | -- | -- |

| Table S3.4 Annual limits | | |
|---------------------------------|---------------|--|
| Substance | Medium | Limit (including unit) |
| Mercury | Water | 0.92 kg in a year (compliance based on mass balance calculation) |
| Cadmium | Water | 1.1 kg in a year (compliance based on mass balance calculation) |

Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

| Parameter | Emission or monitoring point/reference | Reporting period | Period begins |
|--|--|------------------|---------------|
| Point source emissions to air Parameters as required by condition 3.5.1 | A2, A3, A4, A5, A6 | Every 12 months | 1 January |
| Point source emissions to sewer Parameters as required by condition 3.5.1 | S1 | Every 12 months | 1 January |

| Parameter | Units |
|---|--------|
| Total quantity of anode metal/chemical salt used in process | tonnes |

| Parameter | Frequency of assessment | Units |
|---|-------------------------|----------------------------|
| Water usage (mains water) | Annually | m ³ |
| Water usage (borehole extraction) | Annually | m ³ |
| Electricity usage | Annually | MWh |
| Gas usage | Annually | MWh |
| Other performance parameters (plating efficiency, see Schedule 6 for calculation) | Annually | tonnes per production unit |

| Parameter | Reporting form | Form version number and date |
|---------------------------------|---|------------------------------|
| Point source emissions to air | Emissions to Air Reporting Form, or other form as agreed in writing by the Environment Agency | Version 1, 08/03/2021 |
| Point source emissions to sewer | Emissions to Sewer Reporting Form, or other form as agreed in writing by the Environment Agency | Version 1, 08/03/2021 |
| Water usage | Water Usage Reporting Form, or other form as agreed in writing by the Environment Agency | Version 1, 08/03/2021 |
| Energy usage | Energy Usage Reporting Form, or other form as agreed in writing by the Environment Agency | Version 1, 08/03/2021 |
| Other performance parameters | Other Performance Parameters Reporting Form, or other form as agreed in writing by the Environment Agency | Version 1, 08/03/2021 |

Schedule 5 – Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

| | |
|--------------------------------|--|
| Permit Number | |
| Name of operator | |
| Location of Facility | |
| Time and date of the detection | |

| | |
|---|--|
| (a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution | |
| To be notified within 24 hours of detection | |
| Date and time of the event | |
| Reference or description of the location of the event | |
| Description of where any release into the environment took place | |
| Substances(s) potentially released | |
| Best estimate of the quantity or rate of release of substances | |
| Measures taken, or intended to be taken, to stop any emission | |
| Description of the failure or accident. | |

| | |
|---|--|
| (b) Notification requirements for the breach of a limit | |
| To be notified within 24 hours of detection unless otherwise specified below | |
| Emission point reference/ source | |
| Parameter(s) | |
| Limit | |
| Measured value and uncertainty | |
| Date and time of monitoring | |

| | |
|---|--|
| (b) Notification requirements for the breach of a limit | |
| To be notified within 24 hours of detection unless otherwise specified below | |
| Measures taken, or intended to be taken, to stop the emission | |

| | |
|---|----------------------------|
| Time periods for notification following detection of a breach of a limit | |
| Parameter | Notification period |
| | |
| | |
| | |

| | |
|--|--|
| (c) Notification requirements for the breach of permit conditions not related to limits | |
| To be notified within 24 hours of detection | |
| Condition breached | |
| Date, time and duration of breach | |
| Details of the permit breach i.e. what happened including impacts observed. | |
| Measures taken, or intended to be taken, to restore permit compliance. | |

| | |
|--|--|
| (d) Notification requirements for the detection of any significant adverse environmental effect | |
| To be notified within 24 hours of detection | |
| Description of where the effect on the environment was detected | |
| Substances(s) detected | |
| Concentrations of substances detected | |
| Date of monitoring/sampling | |

Part B – to be submitted as soon as practicable

| | |
|--|--|
| Any more accurate information on the matters for notification under Part A. | |
| Measures taken, or intended to be taken, to prevent a recurrence of the incident | |

| | |
|--|--|
| Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission | |
| The dates of any unauthorised emissions from the facility in the preceding 24 months. | |

| | |
|-----------|--|
| Name* | |
| Post | |
| Signature | |
| Date | |

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

“accident” means an accident that may result in pollution.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“authorised officer” means any person authorised by the Environment Agency 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(4) of that Act.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission or background concentration limit.

“groundwater” means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

“Plating efficiency” means the mass balance between the total quantity of anode metal/chemical salt used in the process against the quantity of anode metal/chemical salt in the drag out tank after 3 hours, using the equation $\% \text{efficiency} = (\text{mass in} - \text{mass out}) \times 100 / \text{mass in}$

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or

in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content “year” means calendar year ending 31 December.

Schedule 7 – Site plan

Site Plan with Permit Boundary and Emissions

Site plan

Anochrome Limited, Walsall
Scale - 1:750

-  Spill kits
-  Permit boundary
-  Emission to air
-  Emission to sewer
-  Emergency exits
-  Chemical storage
-  Waste materials
-  Proposed chemical storage



Key

- A2- Automatic Barrel line 1
 - A3- Automatic Barrel line 2
 - A4- Automatic Phosphate line
 - A5- Automatic Zinc Nickel line
 - A6- Proposed New Vat line
 - A7- Gas burner emission point from burn off oven
 - A8- Gas burner emission point from boiler 1 process tank heating
 - A9- Gas burner emission point from boiler 2 process tank heating
 - A10- Gas burner emission point from phosphate line drying
 - A11- Gas burner emission point from barrel line 2 drying
 - A12- Gas burner emission point from de-embrittlement oven
 - A13- Gas burner emission point 1 from E-coat process tank heating
 - A14- Gas burner emission point 2 from E-coat process tank heating
 - A15- Gas burner emission point 3 from E-coat process tank heating
 - A16- Gas burner emission point 4 from E-coat process tank heating
 - A17- Gas burner emission point from E-coat drying
 - A18- Gas burner emission point 1 from acid zinc drying
 - A19- Gas burner emission point 2 from acid zinc drying
 - A20- Gas burner emission point 3 from acid zinc process tank heating
 - A21- Gas burner emission point 4 from acid zinc process tank heating
 - A22- Gas burner emission point 1 from powder coat drying
 - A23- Gas burner emission point 2 from powder coat drying
- S1- Emission to sewer sampling point
- W1- Emission point to Severn Trent surface water drain network



END OF PERMIT