Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Arconic Manufacturing (GB) Limited

Kitts Green Aluminium Works
170 Kitts Green Road
Kitts Green
Birmingham
B33 9QR

Variation application number

EPR/BJ9720IP/V013

Permit number

EPR/BJ9720IP

Kitts Green Aluminium Works
Permit number EPR/BJ9720IP

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. Only the variations specified in schedule 1 are subject to a right of appeal.

The schedules specify the changes made to the permit.

The variation authorises the following changes:

- a small increase in permitted boundary to add a concrete plinth extension
- an additional emission point to air for a Local Exhaust Ventilation (LEV) extraction point from the head of two small bandsaws situated in the Test House facility
- recording improvement condition IC40 as complete
- correcting emission source W2 in Table S3.2 to read “site surface water” instead of “Yardley Brook”

The other main features of the site remain as follows:

The main purpose of the activities of the installation is to produce secondary aluminium in the form of aluminium plate. The operation of the plant is listed in Table S1.1 of the permit as a Section 2.2 A(1)(b) activity, namely the “….*melting, including making alloys of, non-ferrous metals, including recovered products and the operation of non-ferrous metal foundries*….”.

The installation receives high grade aluminium ingots produced by third parties to operator specification. The ingots are melted in a range of natural gas-fired furnaces with the molten metal being alloyed and further refined through the addition of chlorine gas, before being cast into slabs. The slabs are then hot-rolled, heat treated, stretched, levelled and cut to produce plate to specified customer requirements. Dross removed from the furnaces is cooled under cover prior to export off-site for recovery. Aluminium swarf produced on-site is melted in an induction furnace before being cast into ingots for use as a raw material in the main furnaces.

The site installed a new central fume abatement plant (FAP) in 2016 for the control of emissions to air. The FAP is used to treat dust, fume and metal emissions from the various furnaces. The FAP incorporates bag filtration for dust abatement; lime injection for control of hydrogen fluoride and hydrogen chloride emissions; and activated carbon injection for control of emissions of volatile organic compound and dioxins/furans. A water scrubber is used to abate emissions from the swarf induction furnace.

The installation has a number of discharges points to foul sewer for the discharge of process wastewater. Uncontaminated site drainage is discharged to surface water via a number of emissions points. There are no discharges to land or groundwater from the installation.

The site operates an Environmental Management System that is certified to ISO 14001. The operator is also accredited under ISO 50001 in relation to energy efficient management.

Kitts Green Aluminium Works (the Installation) is operated by Arconic Manufacturing (GB) Limited and is located in Birmingham, England.

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 EPR/BJ9720IP/A001	Received 17/12/2001	
Response to request for information	Request dated 28/03/2002	Related to proposals not put into practice
Response to request for information	Request dated 27/05/2002	Response dated 20/08/2002
Request by Agency to extend determination from 23/09/2002 to 31/12/2002	Request dated 22/08/2002	Request accepted 03/09/2002
Response to request for information	Request dated 03/06/2003	Response dated 30/01/2004
Request by Agency to extend determination to 31/10/2003	Request dated 03/06/2003	Request accepted 06/06/2003
Supplementary information supplied	Letter dated 04/03/2004	Received 08/03/2004
Permit issued EPR/BJ9720IP	24/03/2004	
Variation determined EPR/BJ9720IP/V002 (PAS reference: GP3236SP)	06/09/2005	Request to vary received 30/06/2005
Variation determined EPR/BJ9720IP/V003 (PAS reference: CP3738LL)	30/06/2006	Request to vary received 14/03/2006
Variation determined EPR/BJ9720IP/V004 (PAS reference: XP3637LD)	07/11/2006	Request to vary received 07/08/2006
Variation determined EPR/BJ9720IP/V005 (PAS reference: LP3635UZ)	27/07/2007	Request to vary received 13/02/2007
Variation determined EPR/BJ9720IP/V006 (PAS reference: LP3234XX)	04/04/2008	Request to vary received 18/02/2008
Application EPR/BJ9720IP/V007	22/02/2008	
Response to request for information	07/08/2008	Responses dated 04/09/2008 and 09/01/2008
Response to request for information	18/10/2008	Responses dated 12/01/2008, 13/01/2008, 29/01/2008 and 30/01/2009.
Variation determined EPR/BJ9720IP/V007 (PAS reference: GP3435XG)	15/06/2009	
Application EPR/BJ9720IP/V008 (variation and consolidation)	Duly made 21/09/2015	Application to vary and update the permit to modern conditions.
Response to request for information	24/11/2015	Responses dated 07/12/2015, 18/12/2015 and 23/12/2015

Status log of the permit		
Description	**Date**	**Comments**
Response to request for information	10/12/2015	Responses dated 24/12/2015
Variation determined EPR/BJ9720IP/V008 (PAS reference: EP3432AP)	25/01/2016	Varied and consolidated permit issued in modern condition format.
Regulation 60 Notice dated 16/12/2016 (Notice requiring information for statutory review of permit)	Response Received 31/03/2017	Technical standards detailed in response to the information notice. Information to demonstrate that relevant BAT Conclusions are met for the non-ferrous metals industries as detailed in document reference L174.
Application for variation EPR/BJ9720IP/V009	Duly made 27/07/2017	Application to include: a new chlorine house and emergency scrubber; revised emergency venting provisions in the event of FAS shutdown; and an extension of the Installation boundary.
Regulation 61 Notice dated 18/08/2017 (Notice requiring information for statutory review of permit)	Response received 01/09/2017	Further information / clarification with regard to BATc numbers 3, 6, 76, 79, 83 and 84.
Variation determined EPR/BJ9720IP/V009 (PAS reference: JP3131YY)	24/10/2017	Varied permit issued to Arconic Manufacturing (GB) Ltd.
Environment Agency initiated variation EPR/BJ9720IP/V010 (variation and consolidation) Variation determined EPR/BJ9720IP/V010	25/01/2018	Statutory review of permit – Non-ferrous metals BAT Conclusions published 30/06/2016 Varied and consolidated permit issued
Application EPR/LP3439LK/V011 (variation and consolidation)	Duly made 19/09/2019	Application to vary and update the permit to modern conditions. Variation to address various minor changes to site activities.
Additional information received	12/12/2019	Response to the request for information issued 02/12/2019 including information regarding mill coolant tank operations and infrastructure, clarification of emissions to air, surface water and sewer and confirmation of liquid wastes handled and stored.
Additional information received	27/12/2019	Response to the request for information issued 17/12/2019 including information regarding mill coolant tank operations and clarification of emissions to surface water.
Additional information received	14/01/2020	Response to the request for information issued 17/12/2019 including amended site drainage plan.
Additional information received	05/02/2020	Revised site emissions layout plan.
Variation determined EPR/LP3439LK/V011	11/02/2020	Varied and consolidated permit issued.
Application EPR/BJ9720IP/V013 (variation and consolidation)	Duly made 28/10/2021	Application to vary the permit to: • Include minor changes to the installation

Status log of the permit		
Description	**Date**	**Comments**
		• Update the registered address • Add additional waste codes to table S2.2
Variation determined and consolidation issued EPR/BJ9720IP	12/04/2022	Varied and consolidated permit issued in modern format.
Application EPR/BJ9720IP/V013 (variation and consolidation)	Duly made 11/05/2025	Application to vary the permit to: • Increase permitted boundary • Add emission point to air • Mark improvement condition IC40 as complete
Variation determined and consolidation issued EPR/BJ9720IP	07/11/2025	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/BJ9720IP

Issued to

Arconic Manufacturing (GB) Limited ("the operator")

whose registered office is

170 Kitts Green Road
Kitts Green
Birmingham
West Midlands
England
B33 9QR

company registration number 00633328

to operate a regulated facility at

Kitts Green Aluminium Works
170 Kitts Green Road
Kitts Green
Birmingham
B33 9QR

to the extent set out in the schedules.

The notice shall take effect from 07/11/2025

Name	Date
Sandra Cavill	**07/11/2025**

Authorised on behalf of the Environment Agency

Schedule 1

The following conditions were varied as a result of the application made by the operator:

- the site plan as referenced in condition 2.2.1 and schedule 7 has been amended to include the increased permit boundary
- the Point Source Emissions to Air Table S3.1 as referenced in conditions 3.1.1, 3.5.1 and 3.5.4 has been amended to add emission point A56 Test House Bandsaw
- the Point Source Emission to Water Table S3.2 as referenced in conditions 3.1.1, 3.5.1 and 3.5.4 has been amended to correct W2 emission source to site surface water
- the Improvement Programme Table S1.3 as referenced in conditions 2.4.1 and 2.4.2 has been amended to mark improvement condition IC40 as complete.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/BJ9720IP

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BJ9720IP/V013 authorising,

Arconic Manufacturing (GB) Limited (“the operator”),

whose registered office is

170 Kitts Green Road
Kitts Green
Birmingham
West Midlands
England
B33 9QR

company registration number 00633328

to operate an installation at

Kitts Green Aluminium Works
170 Kitts Green Road
Kitts Green
Birmingham
B33 9QR

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

Name	Date
Sandra Cavill	**07/11/2025**

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 All activities shall take place on impermeable surface with sealed drainage, unless otherwise specified in Table S1.1 or agreed in writing with the Environment Agency.

2.3.4 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.

2.3.5 Waste shall only be accepted if:

(a) it is of a type and quantity listed in schedule 2 table S2.2; and

(b) it conforms to the description in the documentation supplied by the producer and holder.

2.3.6 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.

2.3.7 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 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.

3.6 Fire prevention

3.6.1 The operator shall take all appropriate measures to prevent fires on site and minimise the risk of pollution from them including, but not limited to, those specified in any approved fire prevention plan.

3.6.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;

(b) implement the fire prevention plan, from the date of approval, 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.

4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter, if during that quarter the total amount accepted exceeds 100 tonnes of non-hazardous waste or 10 tonnes of hazardous waste.

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 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, 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:

(c) any change in the operator's name or address; and

(d) any steps taken with a view to the dissolution of the operator.

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 listed in Schedule 1 of the EP Regulations	**Description of specified activity**	**Limits of specified activity and waste types**
Section 2.2 A(1)(b)	Melting, including making alloys of, non-ferrous metals, including recovered products and the operation of non-ferrous metal foundries where- (i) the plant has a melting capacity of more than 4 tonnes per day for lead or cadmium or 20 tonnes per day for all other metals, and (ii) any furnace (other than a vacuum furnace), bath or other holding vessel used in the plant for the melting has a design holding capacity of 5 or more tonnes [Melting of aluminium and other non-ferrous metals in furnaces, followed by casting of slabs]	From charging of furnace to transfer to finishing activities. Waste types as specified in Table S2.2.
Directly Associated Activity		
Storage and handling of raw materials	Storage, sorting and pre-treatment of raw materials.	Receipt of raw materials to transfer to furnaces.
Finishing activities	Plate production from cast slab in the rolling mill.	From receipt of castings to despatch of finished product for sale.
Storage and handling of waste solids and liquids	Storage and handling of dross, slag, bag filter dust, cooling water treatment wastes, oil wastes and liquid fuels.	From separation of wastes to despatch from installation.
Off gas collection, abatement and discharge systems	Ducting, lime injection, carbon injection, bag filter, scrubber and stack.	From melting/holding furnaces to exit point from stack.
Water discharges to controlled waters	Discharge of site drainage from the installation.	From storm drainage to entry into river.
Water discharges to foul sewers	Discharge of process water from the installation.	From interceptors to point of entry to sewer.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application	The response to question 2.3 given in pages 37 to 58	17/12/2002
The response to the third Schedule 4 Notice	The revised Application, section 3	31/01/2004
Further information	Supplied with requests for IPC variations BU0478 and BV1488	20/03/2003

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Variation Application EPR/BJ9720IP/V003	Copy of application and letters dated 27/01/06 & 01/02/06	14/03/2006
Variation Application EPR/BJ9720IP/V004	Copy of application and letters dated	07/08/2006
Variation Application EPR/BJ9720IP/V005	Letters dated 10/02/2007	13/02/2007
Variation Application EPR/BJ9720IP/V006	Application and attachments	18/02/2008
Additional information	Response to question regarding stack locations	29/02/2008
Variation Application EPR/BJ9720IP/V007	Application and attachments	22/02/2008
Response to request for information	Further information relating to operating techniques	09/01/2008
Variation Application EPR/BJ9720IP/V008	Responses to Part C3 of the Application Form and Supporting Information	05/05/2015
Response to Schedule 5 dated 24/11/15	Response to request for; confirmation of the storage of spent reagent and dust, previous air modelling data and an updated site condition report.	07/12/2015, 18/12/2015 and 23/12/2015
Response to Schedule 5 dated 10/12/15	Response to request for additional air quality modelling.	24/12/2015
Variation Application EPR/BJ9720IP/V009	Parts C2 and C3 of the application form and the following sections of the Supporting Technical Information document (Rev 3, dated 12/07/17): - Section 4.1, New chlorine house and emergency scrubber - Section 4.2, Expansion of the waste storage area - Section 4.4, Emergency venting provisions during FAS shutdown - Section 4.6, Reverse Osmosis (RO) plant technical information - Section 4.7, Swarf induction furnace wet scrubber - Plan entitled “Kitts Green Site, Location of Major Emission Points” [Drg. No. K0-169/E]	27/07/2017 & 05/10/2017
Response to Regulation 60 Notice – request for further information dated 06/12/16	Technical standards detailed in response to BAT Conclusions 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 14, 18, 19, 75, 78, 81, 82, 83, 84 and 85 of the notice provided under Regulation 60(1) of Environmental Permitting Regulations. Best available techniques as described in BAT Conclusions under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions for non-ferrous metals industries	31/03/2017
Response to Regulation 61 Notice – request for further information dated 18/08/17	Further information and/or clarification on BAT conclusions 3, 6, 83 and 84	01/09/2017
Application EPR/LP3439LK/V011	Supporting information to the variation application described in the document “*Application to Vary an Environmental Permit, Arconic Ltd* (Project number 60579347)” dated March 2019.	16/05/2019

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Not Duly Made response	Further information provided regarding the reverse osmosis water plant. Document titled '*Industrial Process Water Plant – Additional Information for Environmental Permit Application (BJ9720IP)*', dated 19/09/19.	20/09/2019
Additional information received	Response to the request for information issued 02/12/19 including information regarding mill coolant tank operations and infrastructure, clarification of emissions to air, surface water and sewer and confirmation of liquid wastes handled and stored.	12/12/2019
Additional information received	Response to the request for information issued 17/12/19 including information regarding mill coolant tank operations and clarification of emissions to surface water.	27/12/2019
Application EPR/BJ9720IP/V012	Updated site drainage map drawing number KO-093/S dated 11/08/21	28/10/2021

Table S1.3 Improvement programme requirements		
Reference	**Improvement Condition**	**Completion date**
IC27	A commissioning report will be submitted to the Environment Agency covering the relocation of the water scrubber onto the swarf induction furnace. The report will clarify the level of scrubber water purge and energy demands relative to the water scrubber being on the DC3 duty. A summary report will be submitted to the Environment Agency following the relocation of the water scrubber.	Complete
IC31	The operator shall confirm to the Environment Agency the operational details of the emergency chlorine scrubber, once the design has been finalised.	Complete
IC32	The operator shall undertake a noise survey at the proposed new location for the DC3 scrubber, both before and after its relocation, in order to determine whether the equipment relocation has changed the background noise levels. Following the survey a summary report of the survey findings shall be submitted to the Environment Agency.	Complete
IC33	The operator shall submit, for approval by Environment Agency, a report setting out progress to achieving the BAT conclusion AELs where BAT is currently not achieved, but will be achieved before 30/06/20. The report shall include, but not be limited to, the following: 1) Current performance against the BATc AEL. 2) Methodology for reaching the AELs. 3) Associated targets / timelines for reaching compliance by 30/06/20. 4) Any alterations to the initial plan The report shall address the following BAT Conclusions: 83, 84 • **BAT 83** (compliance with BAT-AEL for PCDD/F at emission point A11)	Complete

Table S1.3 Improvement programme requirements		
Reference	**Improvement Condition**	**Completion date**
	• **BAT 84** (compliance with BAT-AELs for hydrogen chloride and chlorine at emission point A1A, and hydrogen chloride at emission point A11) Refer to BAT Conclusions for a full description of the BAT requirement.	
IC34	The operator shall submit, for approval by Environment Agency, a report setting out progress to achieving the 'Narrative' BAT where BAT is currently not achieved, but will be achieved before 30th June 2020 The report shall include, but not be limited to, the following: 1) Methodology for achieving BAT 2) Associated targets / timelines for reaching compliance by 30/06/20 3) Any alterations to the initial plan. The report shall address the following BAT Conclusion: 6, 10 • **BAT 6** (to set up an implement an action plan on diffuse dust emissions, as part of the environmental management system) • **BAT 10** (monitoring of stack emissions to air) Refer to BAT Conclusions for a full description of the BAT requirement.	Complete
IC35	The operator shall submit a surface water pollution risk assessment to the Environment Agency for approval, which shall assess the impact of discharges of hazardous pollutants to surface water **and/or sewer** from the installation. The risk assessment shall include, but not be limited to the following: a) representative emissions data for the following hazardous pollutants: silver, arsenic, cadmium, cobalt, chromium (total), chromium (VI), copper, mercury, nickel, lead, zinc; and any other relevant substances discharged from the installation. Any emissions monitoring required should be carried out using the methods and standards described in Environment Agency M18 guidance; and b) a risk assessment in accordance with the screening procedures in Environment Agency guidance "Surface water pollution risk assessment for your environmental permit", using the representative emissions data obtained in (a) above.	Complete
IC36	The operator shall submit to the Environment Agency for approval a risk assessment considering the possibility of soil and groundwater contamination at the installation where the activity involves the use, production or release of a relevant hazardous substance (as defined in Article 3(18) of the Industrial Emissions Directive). The risk assessment shall clearly establish with appropriate evidence whether or not there is a risk of contamination of soil and groundwater.	Complete
IC37	Where the risk assessment carried out under IC36 above establishes a risk to soil and groundwater the operator shall: a) prepare and submit a baseline report compliant with Article 22 of the Industrial Emissions Directive (IED)	Complete

Table S1.3 Improvement programme requirements		
Reference	**Improvement Condition**	**Completion date**
	containing information necessary to determine the current state of soil and groundwater contamination; or b) provide a summary report referring to information previously submitted where the operator is satisfied that such information represents the current state of soil and groundwater contamination, so as to enable a quantified comparison to be made with the state of soil and groundwater contamination upon definitive cessation of activity.	
IC38	The operator shall undertake a review of periodic monitoring for emissions to air of particulate matter (dust), HCl, HF and TVOC from both emission points A1A and A11. The review will be made with reference to BAT 10 of the BAT Conclusions for the Non-Ferrous Metals Industries (Commission Implementing Decision EU2016/1032) and shall justify, with appropriate evidence, the frequency of monitoring to be employed at the installation from 30 June 2020. The evidence required under this condition shall include analysis and interpretation of monitoring results for each substance, and performance against the relevant BAT-AEL. Consideration should be given to *inter alia* the nature of the raw materials, fluxing agents, refining chemicals used; operational stability; and process monitoring associated with operation of abatement plant. The quantity of monitoring data considered must be justified and be sufficient so as to demonstrate that the results are statistically representative of emissions during normal operations, covering the concentration range and mass emission rate of substances emitted at all stages of the process. A report on the above review shall be submitted to the Environment Agency to facilitate agreement in writing of the appropriate monitoring provision at the installation.	Complete
IC39	The operator shall submit a written proposal to the Environment Agency to undertake monitoring to investigate emissions from emission points A5, A7 and A9, in relation to the hood extraction above the DC1, DC2 and DC3 holding furnace doors. The objective of the monitoring is to establish the nature (including concentration) of any dust and metal emissions to air via these emissions points. The quantity of monitoring data considered must be justified and be sufficient so as to demonstrate that the results are representative of emissions during normal operation of the furnaces. On receipt of written approval from the Environment Agency to the proposal, the operator shall carry out the monitoring and submit to the Environment Agency an interpretive report on the environmental significance of the results within three months of completion of the monitoring.	Complete

Table S1.3 Improvement programme requirements		
Reference	**Improvement Condition**	**Completion date**
IC40	Submit a risk assessment to establish the risk of contamination of soil and groundwater from the materials stored on areas of unmade ground. The assessment should include a description and schedule of materials/ equipment stored in this area; pollution potential of the materials/ equipment; regular inspection of the areas; event reporting and investigation procedure. Where a risk of contamination has been identified the operator should have sufficient mitigation, decontamination requirements and procedures in place to prevent contamination. Submit this plan to the Environment Agency for technical assessment for written agreement.	Complete

Schedule 2 – Waste types, raw materials and fuels

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

Table S2.2 Permitted waste types and quantities for melting of non-ferrous metals	
Waste code	**Description**
12	**Wastes from shaping and physical and mechanical surface treatment of metals and plastics**
12 01	**wastes from shaping and physical and mechanical surface treatment of metals and plastics**
12 01 03	non-ferrous metal filings and turnings
12 01 04	non-ferrous metal dust and particles
15	**Packaging, absorbents, wiping cloths, and filters**
15 01	**packaging (including separately collected municipal packaging waste)**
15 01 04	metallic packaging
16	**Other wastes from industrial processes**
16 01	**end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling end-of-life vehicles and vehicle maintenance.**
16 01 18	Non-ferrous metal
17	**construction and demolition waste**
17 04	**metals (including their alloys)**
17 04 02	aluminium
17 04 01	copper, bronze, brass
19	**materials from waste and water treatment**
19 10	**Shredding of metal-containing wastes**
19 10 02	Non-ferrous waste
19 12	**Mechanical treatment of waste**
19 12 03	non-ferrous metal
20	**municipal waste and similar materials from commerce and industry**
20 01	**separately collected fractions**
20 01 40	metals

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**
A1A [1]	Fume Abatement System (FAS) stack	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	200 mg/m^3	Average over the sampling period	3 monthly	BS EN 14792
		Particulate matter (PM)	5 mg/m^3	Average over the sampling period	3 monthly	BS EN 13284-1 and MID
		Hydrogen chloride (HCl)	10 mg/m^3	Average during chlorination [5]	3 monthly	BS EN 1911
		TVOC (as C)	10 mg/m^3	Average over the sampling period	3 monthly	BS EN 12619
		Hydrogen fluoride (HF)	1 mg/m^3	Average over the sampling period	3 monthly	BS ISO 15713 and MID
		Chlorine (Cl_2)	1 mg/m^3	Average during chlorination [5]	Once per year	No EN or ISO standard available
		Dioxins and furans (PCDD/F) (ng I-TEQ/Nm^3)	0.1 ng I-TEQ/m^3	Average over the sampling period [2]	Once per year	BS EN 1948 parts 1, 2 and 3, and MID
A4 [1]	DC1 casting pit steam extraction	No parameters set	No limit set	-	-	-
A5 [1]	DC1 holding furnace doors hood extraction	No parameters set	No limit set	-	-	-
A6 [1]	DC2 casting pit steam extraction	No parameters set	No limit set	-	-	-
A7 [1]	DC2 holding furnace doors hood extraction	No parameters set	No limit set	-	-	-
A8 [1]	DC3 casting pit steam extraction	No parameters set	No limit set	-	-	-
A9 [1]	DC3 holding furnace doors hood extraction	No parameters set	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**
A10 [1]	Scalper swarf extraction system scrubber	No parameters set	No limit set	-	-	-
A11 [1]	Swarf induction furnace scrubber extraction	Particulate matter (PM)	5 mg/m^3	Minimum 1 hour	6 monthly	BS EN 13284-1 and MID
		Hydrogen chloride (HCl)	10 mg/m^3	Average over the sampling period	6 monthly	BS EN 1911
		Volatile organic compounds (as C) (VOC)	30 mg/m^3	Average over the sampling period	6 monthly	BS EN 12619
		Hydrogen fluoride (HF)	1 mg/m^3	Average over the sampling period	6 monthly	BS ISO 15713 and MID
		Chlorine (Cl_2)	1 mg/m^3	Average over the sampling period	Once per year	No EN or ISO standard available
		Dioxins and furans (PCDD/F) (ng I-TEQ/Nm^3)	0.1 ng I-TEQ/m^3	Average over the sampling period [2]	Once per year	BS EN 1948 parts 1, 2 and 3, and MID
A12 [1]	Lithium Induction Furnace scrubber	No parameters set	No limit set	-	-	-
A13 [1]	Soaking pits 1-7 combustion product flues	No parameters set	No limit set	-	-	-
A14 [1]	Soaking pits 8-9 combustion product flues	No parameters set	No limit set	-	-	-
A15 [1]	S furnace flue	No parameters set	No limit set	-	-	-
A16 [1]	Hotmill hood extraction	No parameters set	No limit set	-	-	-
A17 [1]	Wessex Saw swarf extraction (baghouse)	No parameters set	No limit set	-	-	-
A18 [1]	Hotmill coolant cellar burners	No parameters set	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**
A19 [1]	V furnace zone 3 flue	No parameters set	No limit set	-	-	-
A20 [1]	V furnace zone 4 flue	No parameters set	No limit set	-	-	-
A21 [1]	V furnace zone 5 flue	No parameters set	No limit set	-	-	-
A22 [1]	V furnace zone 6 flue	No parameters set	No limit set	-	-	-
A23 [1]	V furnace zone 7 flue	No parameters set	No limit set	-	-	-
A24 [1]	V furnace zone 8 flue	No parameters set	No limit set	-	-	-
A25 [1]	K furnace flue	No parameters set	No limit set	-	-	-
A26 [1]	L furnace flue	No parameters set	No limit set	-	-	-
A27 [1]	E furnace flue	No parameters set	No limit set	-	-	-
A28 [1]	X furnace flue	No parameters set	No limit set	-	-	-
A30 [1]	F furnace flue	No parameters set	No limit set	-	-	-
A31 [1]	G furnace flue	No parameters set	No limit set	-	-	-
A33 [1]	M Furnace	No parameters set	No limit set	-	-	-
A34 [1]	R Furnace	No parameters set	No limit set	-	-	-
A35 [1]	U Furnace	No parameters set	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**
A36 [1]	W Furnace	No parameters set	No limit set	-	-	-
A37 [1]	Y Furnace	No parameters set	No limit set	-	-	-
A38 [1]	A Furnace	No parameters set	No limit set	-	-	-
A39 [1]	B Furnace	No parameters set	No limit set	-	-	-
A42 [1]	DC5 Casting Pit steam abstraction	No parameters set	No limit set	-	-	-
A43 [1]	FAS Lime Silo 1 Vent Filter	No parameters set	No limit set	-	-	-
A44 [1]	FAS Lime Silo 2 Vent Filter	No parameters set	No limit set	-	-	-
A45 [1]	FAS Activated Carbon Vent Filter	No parameters set	No limit set	-	-	-
A46 [1]	Chlorine house emergency scrubber vent	Chlorine (Cl_2)	No limit set	-	-	-
A47 [1]	FAS emergency shutdown vent (DC1 furnaces)	Oxides of Nitrogen (as NO_2) Particulate matter (PM) Sulphur dioxide (SO_2) Hydrogen chloride (HCl) Volatile organic compounds (VOC) (as C)	No limit set	-	-	-
A48 [1]	FAS emergency shutdown vent (DC2 furnaces)		No limit set	-	-	-
A49 [1]	FAS emergency shutdown vent (DC3 furnaces)		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**
A50 [1]	FAS emergency shutdown vent (DC5 melting furnace)	Hydrogen fluoride (HF) Chlorine (Cl_2) Dioxins and furans (PCDD/F)	No limit set	-	-	-
A51 [1]	FAS emergency shutdown vent (DC5 holding furnace)		No limit set	-	-	-
A52 [3]	Ty-Sa-Man 1 extraction point	No parameters set	No limit set	-	-	-
A53 [3]	Ty-Sa-Man 2 extraction point	No parameters set	No limit set	-	-	-
A54 [3]	Alu-cut saw extraction point	No parameters set	No limit set	-	-	-
A55 [3]	Pre-heat oven vent	No parameters set	No limit set	-	-	-
A56 [4]	Test House Band Saw extraction point	No parameters set	No limit set	-	-	-

1. As shown on plan received on 05/10/17 (Drg. No. K0-169/E) under application EPR/BJ9720IP/V009.
2. Total sampling period to be no less than 6 hours.
3. As shown on site plan ‘Location of Major Emission Points’ received 05/02/2020 (drawing reference K0-169/G) under application EPR/BJ9720IP/V011.
4. As shown on site plan ‘Location of Major Emission Points’ received 17/02/2025 (drawing reference K0-169HG) under application EPR/BJ9720IP/V013.
5. As agreed with the Environment Agency

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location [1]	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
W1 [1]	Site surface water	No parameters set	No limit set	-	-	-

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location [1]	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
W2 [2]	Site surface water	No parameters set	No limit set	-	-	-
W3 [2]	Car park to Kitts Green Road storm drain	No parameters set	No limit set	-	-	-
W4 [1]	Site surface water	No parameters set	No limit set	-	-	-
W5 [1]	Site surface water	No parameters set	No limit set	-	-	-
W6 [1]	Site surface water	No parameters set	No limit set	-	-	-
W7 [1]	Site surface water	No parameters set	No limit set	-	-	-
W8 [1]	Site surface water	No parameters set	No limit set	-	-	-
W9 [1]	Site surface water	No parameters set	No limit set	-	-	-
W10 [1]	Site surface water	No parameters set	No limit set	-	-	-
W11 [1]	Site surface water	No parameters set	No limit set	-	-	-
W12 [2]	B block road to Kitts Green Road drain	No parameters set	No limit set	-	-	-
W13 [2]	Main office road to Kitts Green road drain	No parameters set	No limit set	-	-	-
W14 [2]	C block road to Kitts Green road drain	No parameters set	No limit set	-	-	-
W15 [2]	J block yard to Kitts Green road drain	No parameters set	No limit set	-	-	-

1. Emissions point location as shown in Site Plan ‘Releases to Water’ of application EPR/BJ9720IP/V008.
2. Emissions point locations as shown in Site Plan ‘Foul & Storm drainage Kitts Green Site’ (drawing number KO – 093/S, update submitted 28/10/2021) of application EPR/BJ9720IP/V012.

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 [1]	**Source**	**Parameter**	**Limit (incl. Unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
S1	Waste storage area drainage	No parameters set	No limit set	-	-	-
S2	Laboratory waste and induction furnace scrubber	No parameters set	No limit set	-	-	-
S3	Heat treatment furnaces - quench tanks, ultrasonic tanks, aluminium slab cooling shower, reverse osmosis plant, water cooling plant and DC5 cooling system hot well	No parameters set	No limit set	-	-	-
S4	A1 substation (disused)	No parameters set	No limit set	-	-	-
S5	Garage wash	No parameters set	No limit set	-	-	-
S6	Main office (KA block) SW	No parameters set	No limit set	-	-	-
S7	EHS office (KB block) SW	No parameters set	No limit set	-	-	-
S8	Old engineering office (S)	No parameters set	No limit set	-	-	-
S9	Training department office (S)	No parameters set	No limit set	-	-	-

1. Emissions point locations as shown in Site Plan ‘Foul & Storm drainage Kitts Green Site’ (drawing number KO – 093/S, update submitted 28/10/2021) of application EPR/BJ9720IP/V012.

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Emissions to air Parameters as required by condition 3.5.1.	A1A	A1A - 3 monthly and annually	1 Jan, 1 Apr, 1 Jul, 1 Oct
	A11	A11 - 6 monthly and annually	1 Jan, 1 Jul

Table S4.2: Annual production/treatment	
Parameter	**Units**
-	-

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Water usage	Annually	tonnes
Energy usage	Annually	MWh

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Air	Form air 1 or other form as agreed in writing by the Environment Agency	08/03/2021
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	11/02/2020
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	01/11/2017

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.

“average during chlorination” means the average value of three consecutive measurements of at least 30 minutes each, obtained during the period of chlorination (refining using gaseous chlorine), unless otherwise stated, as required under BAT 84 of the Non-Ferrous Metals BAT Conclusions. For batch processes, the average of a representative number of measurements taken during the period of chlorination or the result of a measurement carried out over the total period of chlorination can be used.

“average over the sampling period” means the average value of three consecutive measurements of at least 30 minutes each, unless otherwise stated, as defined in the *General Considerations* section of the Non-Ferrous Metals BAT Conclusions. For batch processes, the average of a representative number of measurements taken over the total batch time or the result of a measurement carried out over the total batch time can be used.

“BAT-AELs” means BAT-associated emission levels, i.e. the emission levels associated with the best available techniques for emissions to air and/or water, as set out in the Non-Ferrous Metals BAT Conclusions.

“emissions to land” includes emissions to groundwater.

“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 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.

“Hazardous property” has the meaning in Annex lll of the Waste Framework Directive.

“Hazardous waste” has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 (as amended).

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

“List of Wastes” means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

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

“quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“Waste code” means the six digit code referable to a type of waste in accordance with the List of Wastes and in relation to hazardous waste, includes the asterisk.

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 and not subject to BAT-AELs for air emissions, the concentration in dry air at a temperature of 273.15K, at a pressure of 101.3 kPa, and with an oxygen content of 3% dry for liquid and gaseous fuels and 6% dry for solid fuels; and/or

- in relation to emissions from non-combustion sources and not subject to BAT-AELs for air emissions, the concentration at a temperature of 273.15K and at a pressure of 101.3 kPa, with no correction for water vapour content; and/or

- in relation to emissions from non-combustion sources subject to BAT-AELs for air emissions, the concentration in dry air at a temperature of 273.15K and at a pressure of 101.3 kPa; and/or

- in relation to emissions from combustion processes subject to BAT-AELs for air emissions, the concentration in dry air at a temperature of 273.15K and at a pressure of 101.3 kPa, and with an oxygen content of 3% dry for liquid and gaseous fuels and 6% dry for solid fuels.

For the determination of the toxic equivalence (I-TEQ) value stated as a release limit the mass concentrations of the following dioxins and furans have to be multiplied with their equivalence factors before summing.

Equivalence factor:

Dioxins

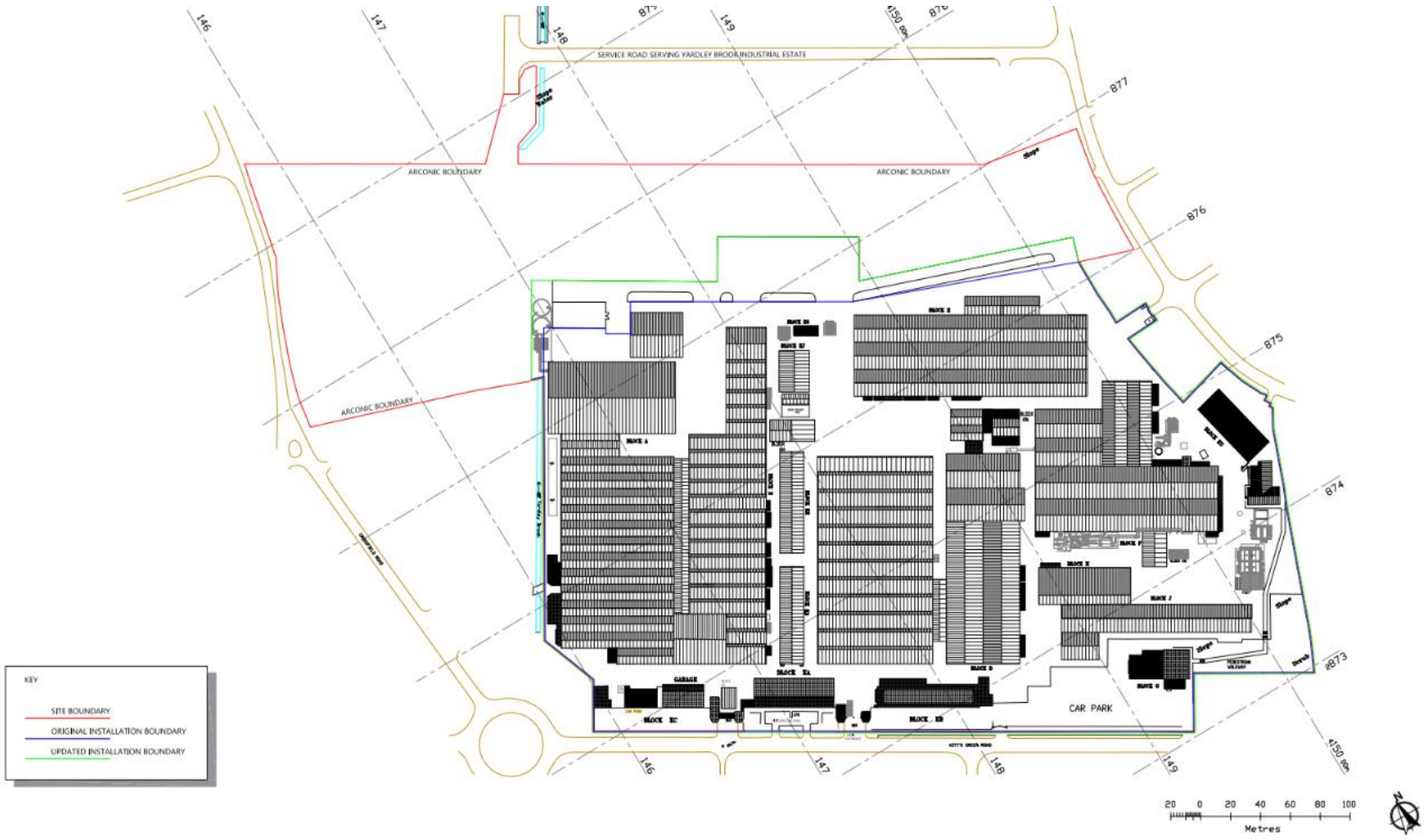
2,3,7,8 Tetrachlordibenzodioxin (TCDD)	1
1,2,3,7,8 Pentachlordibenzodioxin (PeCDD)	0.5
1,2,3,4,7,8 Hexachlordibenzodioxin (HxCDD)	0.1
1,2,3,7,8,9 Hexachlordibenzodioxin (HxCDD)	0.1
1,2,3,6,7,8 Hexachlordibenzodioxin (HxCDD)	0.1
1,2,3,4,6,7,8 Heptachlordibenzodioxin (HpCDD)	0.01
Octachlordibenzodioxin (OCDD)	0.001

Furans

2,3,7,8 Tetrachlorodibenzofuran (TCDF)	0.1
2,3,4,7,8 Pentachlorodibenzofuran (PeCDF)	0.5
1,2,3,7,8 Pentachlorodibenzofuran (PeCDF)	0.05
1,2,3,4,7,8 Hexachlordibenzofuran (HxCDF)	0.1
1,2,3,7,8,9 Hexachlordibenzofuran (HxCDF)	0.1
1,2,3,6,7,8 Hexachlordibenzofuran (HxCDF)	0.1
2,3,4,6,7,8 Hexachlordibenzofuran (HxCDF)	0.1
1,2,3,4,6,7,8 Heptachlordibenzofuran (HpCDF)	0.01
1,2,3,4,7,8,9 Heptachlordibenzofuran (HpCDF)	0.01
Octachlordibenzofuran (OCDF)	0.001

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



END OF PERMIT