

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Airbus Operations Limited

**Chester Road
Broughton
Chester
CH4 0DR**

Permit number

EPR/BM3965IA

Airbus Operations Limited

Permit number EPR/BM3965IA

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows.

The operation at Airbus Operations Ltd comprises the whole process of manufacture of aircraft wings and components, from delivery of raw materials, to the despatch of the completed wings. The specific activities authorised by the permit are:

- Operation of natural gas-fired dispersed combustion plant for space and process heating;
- Surface treatment of wing components and completed structures, comprising cleaning and anodising;
- Surface coating of wing components and finished structures in enclosed booths; and
- Operation of Combined Heat and Power (CHP) units providing electrical power and heat to three of the buildings on the site.

Whilst the majority of the installation is controlled by Airbus Operations Limited, there is an associated activity operated by Metal Improvement Company LLC. This involves the treatment of metal surfaces by shot blasting, to shape the surface and to condition it by producing indents, which increase the resistance of the surface to tension cracking. Metal Improvement Company LLC also operate a small space heating plant. The overall site is therefore a multi-operator installation.

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

Status log of the permit		
Description	Date	Comments
Application BM3965IA	Duly Made 06/06/2002	
Request for information	18/09/2002	Received 18/09/2002
Permit determined BM3965IA	15/11/2002	
Application BV0945	10/04/2003	
Variation EPR/BV0945 issued	27/07/2003	
Variation application TP3737PJ	09/07/2004	
Additional information supplied	13/07/2004	
Additional information supplied	02/08/2004	

Status log of the permit

Description	Date	Comments
Additional information supplied	18/10/2004	
Additional information supplied	12/05/2005	
Variation TP3737PJ issued	30/06/2005	
Variation application NP3235MQ	12/12/2006	
Variation NP3235MQ issued	26/01/2007	
Variation application EPR/BM3965IA/V005	Duly Made 11/11/2009	
Variation EPR/BM3965IA/V005 issued	03/08/2010	
Variation application EPR/BM3965IA/V006	Duly Made 27/03/2015	
Variation EPR/BM3965IA/V006 issued	02/09/2015	
Application EPR/BM3965IA/V007 (variation and consolidation)	Duly made 07/06/2016	Application to vary and update the permit to modern conditions.
Additional information received	10/08/2016	Updated site plan and plan of emission points to air
Variation determined Consolidated Permit: EPR/BM3965IA	05/09/2016	Varied and consolidated permit issued in modern condition format. The following permits have been consolidated: EPR/BM3965IA and EPR/BP3937WE

Other Part A installation permits relating to this installation

Operator	Permit number	Date of issue
Metal Improvement Company LLC	EPR/BS4235IN	15/11/2002

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number
EPR/BM3965IA

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BM3965IA/V007 authorising,

Airbus Operations Limited (“the operator”),
whose registered office is

**Pegasus House
Aerospace Avenue
Filton
Bristol
BS34 7PA**

company registration number **03468788**

to operate part of an installation at

**Chester Road
Broughton
Chester
CH4 0DR**

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

Signed

Date

	05/09/2016
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Eirian Macdonald, Principal Permitting Team Leader
Authorised on behalf of Natural Resources Wales

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.

1.5 Multiple operator installations

- 1.5.1 Where the operator notifies Natural Resources Wales under condition 4.3.1 (a) or 4.3.1 (c), the operator shall also notify without delay the other operator(s) of the installation of the same information.

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 areas shown edged in blue on the site plan at schedule 7 to this permit, excluding the area hatched in turquoise.

2.3 Operating techniques

- 2.3.1 (a) 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 Natural Resources Wales.
- (b) If notified by Natural Resources Wales that the activities are giving rise to pollution, the operator shall submit to Natural Resources Wales 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 Natural Resources Wales.

- 2.3.2 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.3 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.
- 2.3.4 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 Natural Resources Wales.
- 2.4.2 Except in the case of an improvement which consists only of a submission to Natural Resources Wales, the operator shall notify Natural Resources Wales 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 Where a substance is specified in schedule 3 table S3.2 or S3.3 but no limit is set for it, the concentration of such substance in emissions to water from the relevant emission point shall be no greater than the background concentration.

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 Natural Resources Wales that the activities are giving rise to pollution, submit to Natural Resources Wales 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 Natural Resources Wales.

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 Natural Resources Wales, 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 Natural Resources Wales that the activities are giving rise to pollution outside the site due to odour, submit to Natural Resources Wales 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 Natural Resources Wales.

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 Natural Resources Wales, 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 Natural Resources Wales that the activities are giving rise to pollution outside the site due to noise and vibration, submit to Natural Resources Wales 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 Natural Resources Wales.

3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by Natural Resources Wales, 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;
 - (b) noise specified in table S3.4;
- 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 Natural Resources Wales.
- 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 Natural Resources Wales.

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 Natural Resources Wales, 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 Natural Resources Wales.

4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to Natural Resources Wales using the contact details supplied in writing by Natural Resources Wales.

- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to Natural Resources Wales by 31 January (or other date agreed in writing by Natural Resources Wales) 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 Natural Resources Wales, 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 Natural Resources Wales, 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 The operator shall submit an annual solvent management plan in order to demonstrate compliance with the requirements of the Industrial Emissions Directive, by 31 January each year in respect of the previous year. The solvent management plan shall be used to:
- (a) verify compliance as specified in Article 62;
 - (b) identify future reduction options; and
 - (c) provide information on solvent consumption, solvent emissions and compliance with the requirements of Chapter V.
- 4.2.6 The operator shall review the availability of NOx reduction techniques for the gas engines used in the CHP Plant. A report shall be submitted to Natural Resources Wales every two years from 26th January 2007.

4.3 Notifications

- 4.3.1 (a) In the event 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 Natural Resources Wales,
 - (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) in the event of a breach of any permit condition the operator must immediately—
- (i) inform Natural Resources Wales, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) in the event 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 Natural Resources Wales has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform Natural Resources Wales when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to Natural Resources Wales at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 Natural Resources Wales 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.
- 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) Natural Resources Wales 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 Natural Resources Wales 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, Natural Resources Wales 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
S1.1 A (1) (a)	Dispersed Combustion Plant including CHP and associated reserve boilers	From receipt of raw materials and fuel to despatch of hot water, steam, electricity and exhaust of the products of combustion to atmosphere
S2.3 A (1) (a)	Chrome Anodising and TSA Anodising (including etch and pickling) on LCM and SMC facilities until conversion process is complete, then TSA anodising only	From receipt of raw materials to despatch of anodised material for further processing, despatch of process effluent to Effluent Treatment Plant and exhaust of extracted process air via scrubbers to air
S6.4 B (a)	Painting and sealing of wing structures	From receipt of raw material to despatch of finished product including cleaning of coating equipment.
Directly Associated Activity		
Manufacture of wing structures	Manufacture of components and assembly of structures	From receipt of raw materials to despatch of finished product
Machining	Manufacture of components	From receipt of raw materials to despatch of material for further processing
Autoclaves	Assembly of components	From receipt of raw materials to despatch of material for further processing
Effluent Treatment	Treatment of effluent from Chrome Anodising and TSA Anodising	From receipt of effluent to discharge of treated effluent, despatch of waste material and exhaust of extracted process air to air
Surface cleaning using organic solvents	IED solvent emission activities as specified in Annex VII, Part 2 of the Industrial Emissions Directive (2010/75/EU) (IED), line 5 "Other surface cleaning"	From receipt of raw materials to despatch of material for further processing
Coating wing structures using organic solvents	IED solvent emission activities as specified in Annex VII, Part 2 of the Industrial Emissions Directive (2010/75/EU) (IED), line 8 "Other coating, including metal, plastic, textile, fabric, film and paper coating".	From receipt of raw materials to despatch of material for further processing, including cleaning of coating equipment.

Table S1.2 Operating techniques

Description	Parts	Date Received
Application BS4243	The response to questions 2.3 and given in pages 14 to 22 inclusive and within sections 2.3.1 to 2.3.12 of the Application	06/06/02
Application BS4243 Response to Schedule 4 Part 1 Notice dated 11 Sept 2002	Response to questions 3 and 4	12/09/02
Application BM3965IA	The response to section 2.1, 2.2 and 2.3 in the application	04/12/06
Application BM3965IA Additional information from the Operator	Atmospheric Dispersion Modelling	08/01/07
Application BM3965IA Additional information from the Operator	Re-submission of main text of the application, PPC04, PPC06 and Table 2.10.2 Surface Water Monitoring	15/01/07
Application BM3965IA Additional information from the Operator	Atmospheric Dispersion Modelling for Onsite Receptors and Conversion of nitric oxide to nitrogen dioxide	17/01/07
Application EPR/BM3965IA/V005	Sections 3.12, 3.13, 3.17, 3.18, 3.19, 3.20, 3.21, 3.22, 3.23 (except 3.23.6 and 3.23.7)	11/11/09
Application EPR/BM3965IA/V006	Section 2 of application report "Application for a Variation to Environmental Permit Np. EPR/BM3965IA"	27/03/15
Application EPR/BM3965IA/V007	Sections 4, 5, 6 and 8 of 934592-RPT-1 Rev. B "Airbus Environmental Permit Variation Application, Permit EPR/BM3965IA" (June 2016)	07/06/16

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC1	The Operator shall continue with the programme to remove chromium from the production process. A summary report shall be submitted to Natural Resources Wales identifying progress towards this removal by the due date and then annually until completion.	31/12/07 and then annually until chromium removed
IC2	The Operator shall: <ul style="list-style-type: none"> (i) confirm the design capacity of the effluent treatment plant by stating the maximum rate at which it can operate expressed as tonnes of untreated effluent per day; and (ii) provide the European Waste Catalogue (EWC) waste codes associated with untreated effluent being introduced into the effluent treatment plant. <p>The design capacity of the effluent treatment plant and the EWC codes for the untreated effluent shall be provided to Natural Resources Wales in the form of a written report.</p>	30/09/16
IC3	The Operator shall submit to Natural Resources Wales an updated plan showing the location of all the emission points to sewer listed in table S3.3.	31/10/16

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC4	<p>The Operator shall confirm the total maximum consumption capacity of the seven paint shops on site as a mass of organic solvents in both kg / hour and tonnes / year. The seven paint shops are: Haden Booth, Site 5, Interim Single Aisle, Binks, Stringer, West and Final Single Aisle. Confirmation of the total maximum consumption capacity shall be submitted in writing to Natural Resources Wales.</p>	31/12/16
IC5	<p>The Operator shall sample and analyse emissions from release points A184 and A185 for Particulate Matter in the form of PM₁₀, when the preparation and combo booths serving these emission points are operational. The sampling and analysis exercise shall be designed to ensure that a representative sample is obtained and shall be conducted in accordance with the requirements of the Natural Resources Wales guidance document M1 "Sampling Requirements for Stack Emission monitoring" and BS EN 13284-1.</p> <p>The analysis results shall be converted into long and short term process contributions (PC) using detailed air dispersion modelling software. The detailed air dispersion modelling shall show the PCs as a percentage of both the 40 µg/m³ annual mean UK air quality objective and the 50 µg/m³ 24-hour mean UK air quality objective for Particulate Matter. In addition, the calculated PCs shall be added to the existing long and short term backgrounds for particulate matter to derive the Predicted Environmental Concentration (PEC) at all nearby human sensitive receptors and as a maximum on the modelling grid. The air dispersion modelling shall also show the PECs as a percentage of the long and short term air quality objectives for particulate matter in order to demonstrate the likelihood of exceedance of either as result of the operation of the new booths.</p> <p>The results of the sampling and analysis exercise and air dispersion modelling study and conclusions shall be submitted in the form of a written report to Natural Resources Wales.</p>	31/03/17
IC6	<p>The Operator shall provide the European Waste Catalogue (EWC) waste codes associated with chromate free untreated effluent being introduced into the effluent treatment plant. This information shall be provided when the installation's surface treatment activities become chromate free operations.</p> <p>The EWC codes for the chromate free untreated effluent shall be provided to Natural Resources Wales in the form of a written report.</p>	30/09/17

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 (on PPC 04 E dated 9/8/16))	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
Chrome Anodising, TSA Anodising, and Effluent Treatment Plant						
Large Component Manufacture (LCM)						
A79, A81, A83	Tanks 01, 02, 03, 04, 05, 08 and 11 on the LCM Treatment Line	n/a	n/a	n/a	n/a	n/a
A90	LCM Effluent Treatment	n/a	n/a	n/a	n/a	n/a
A82	Tank 9	n/a	n/a	n/a	n/a	n/a
Stringer Manufacturing Centre (SMC)						
A84	Tanks 01, 02, 05, 08, 09, 10 and 13 on the SMC Treatment Line	n/a	n/a	n/a	n/a	n/a
A91	SMC Effluent Treatment	n/a	n/a	n/a	n/a	n/a
Paint Shops						
Haden Booth						
A24, A26	Oven, spray booth and paint mix	VOCs	n/a	n/a	Annually	Mass balance ^{Note 1}
Site 5						
A27 – A34	Prep booths, spray booths, detail booths, detail booth oven and paint mix	VOCs	n/a	n/a	Annually	Mass balance ^{Note 1}

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location (on PPC 04 E dated 9/8/16))	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
Interim Single Aisle						
A35 – A43 A35a – A42a	Booths and paint mix	VOCs	n/a	n/a	Annually	Mass balance ^{Note 1}
Binks						
A44	Spray booths, paint mix and oven	VOCs	n/a	n/a	Annually	Mass balance ^{Note 1}
Stringer						
A55, A56	Spray booth, paint mix and booth oven	VOCs	n/a	n/a	Annually	Mass balance ^{Note 1}
West						
A58 – A60	Paint shops and paint mix	VOCs	n/a	n/a	Annually	Mass balance ^{Note 1}
Final Single Aisle						
A177 – A181, A184 – A185	Prep booth and paintshop	VOCs	n/a	n/a	Annually	Mass balance ^{Note 1}
Combustion Plant						
A4 – A10, A12, A14	Process / Space Heaters	n/a	n/a	n/a	n/a	n/a
A23	Hanger 91 Boiler	n/a	n/a	n/a	n/a	n/a
A61 – A72	A380 Autoclaves	n/a	n/a	n/a	n/a	n/a
A112 – A115	Site 5 Burners	n/a	n/a	n/a	n/a	n/a
A119	Haden Booth Burner	n/a	n/a	n/a	n/a	n/a
A99 – A111, A120 – A173, A182	Combustion Plant <0.5MW Input	n/a	n/a	n/a	n/a	n/a
A175	Final Single Aisle Boiler	n/a	n/a	n/a	n/a	n/a

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location (on PPC 04 E dated 9/8/16))	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
CHP-A1	Stringer Boiler 1	Oxides of Nitrogen (as NO _x)	200 mg/m ³	15 minute average	Annually	ISO10849
CHP-A2	Stringer Boiler 2	Oxides of Nitrogen (as NO _x)	200 mg/m ³	15 minute average	Annually	ISO10849
CHP-A3	Skin and Creep Boiler	Oxides of Nitrogen (as NO _x)	200 mg/m ³	15 minute average	Annually	ISO10849
CHP-A4	West Factory Boiler 1	Oxides of Nitrogen (as NO _x)	200 mg/m ³	15 minute average	Annually	ISO10849
CHP-A5	West Factory Boiler 2	Oxides of Nitrogen (as NO _x)	200 mg/m ³	15 minute average	Annually	ISO10849
CHP-A6	West Factory Boiler 3	Oxides of Nitrogen (as NO _x)	200 mg/m ³	15 minute average	Annually	ISO10849
CHP-A7	West Factory Boiler 4	Oxides of Nitrogen (as NO _x)	200 mg/m ³	15 minute average	Annually	ISO10849
CHP-A8	West Factory CHP 1	Oxides of Nitrogen (as NO _x)	500 mg/m ³	15 minute average	Annually	ISO10849
CHP-A9	West Factory CHP 2	Oxides of Nitrogen (as NO _x)	500 mg/m ³	15 minute average	Annually	ISO10849
CHP-A10	West Factory CHP 3	Oxides of Nitrogen (as NO _x)	500 mg/m ³	15 minute average	Annually	ISO10849
CHP-A11	West Factory CHP 4	Oxides of Nitrogen (as NO _x)	500 mg/m ³	15 minute average	Annually	ISO10849
CHP-A12	Stringer CHP 1	Oxides of Nitrogen (as NO _x)	500 mg/m ³	15 minute average	Annually	ISO10849
CHP-A13	Stringer CHP 2	Oxides of Nitrogen (as NO _x)	500 mg/m ³	15 minute average	Annually	ISO10849

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location (on PPC 04 E dated 9/8/16))	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
CHP-A14	Skin and Creep CHP	Oxides of Nitrogen (as NO _x)	500 mg/m ³	15 minute average	Annually	ISO10849
CHP-A15	CHP D	Oxides of Nitrogen (as NO _x)	500 mg/m ³	15 minute average	Annually	ISO10849
CHP-A16	Boiler 1 D	Oxides of Nitrogen (as NO _x)	200 mg/m ³	15 minute average	Annually	ISO10849
CHP-A17	Boiler 2 D	Oxides of Nitrogen (as NO _x)	200 mg/m ³	15 minute average	Annually	ISO10849
CHP-A18	CHP E	Oxides of Nitrogen (as NO _x)	500 mg/m ³	15 minute average	Annually	ISO10849
CHP-A19	Boiler 1 E	Oxides of Nitrogen (as NO _x)	200 mg/m ³	15 minute average	Annually	ISO10849
CHP-A20	Boiler 2 E	Oxides of Nitrogen (as NO _x)	200 mg/m ³	15 minute average	Annually	ISO10849
CHP-A21	Boiler 3 E	Oxides of Nitrogen (as NO _x)	200 mg/m ³	15 minute average	Annually	ISO10849

Note 1: Mass balance required as part of permit condition 4.2.5 (annual solvent management plan)

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements

Emission point ref. & location (on PPC 04F)	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
SW6	Site Drainage via interceptor	n/a	n/a	n/a	n/a	n/a
SW7	Site Drainage via interceptor	n/a	n/a	n/a	n/a	n/a

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements

Emission point ref. & location (on PPC 04F)	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
SW8	Site Drainage from Stringers via interceptor into lagoon	n/a	n/a	n/a	n/a	n/a
SW11	Site Drainage from MIC, site 5 and Raytheon	n/a	n/a	n/a	n/a	n/a
SW15	Site Drainage via interceptor from West Factory	n/a	n/a	n/a	n/a	n/a
SW16	Site Drainage via interceptor	Total Chrome	-	n/a	Monthly	Note 1
		Suspended Solids	50 mg/l			BS EN 872

Note 1: Method to be agreed in writing with Natural Resources Wales

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 (CHP-TE1 – CHP-TE15 shown without CHP prefix on AMBS/Water 15/01/07) ^{Note 3}	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
CHP-TE1	West Factory CHP 1	n/a	n/a	n/a	n/a	n/a
CHP-TE2	West Factory CHP 2	n/a	n/a	n/a	n/a	n/a
CHP-TE3	West Factory CHP 3	n/a	n/a	n/a	n/a	n/a

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 (CHP-TE1 – CHP-TE15 shown without CHP prefix on AMBS/Water 15/01/07) ^{Note 3}	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
CHP-TE4	West Factory CHP 4	n/a	n/a	n/a	n/a	n/a
CHP-TE5	West Factory Boiler House	n/a	n/a	n/a	n/a	n/a
CHP-TE6	Skin and Creep CHP	n/a	n/a	n/a	n/a	n/a
CHP-TE7	Skin and Creep Boiler House	n/a	n/a	n/a	n/a	n/a
CHP-TE8	Stringer Boiler 1	n/a	n/a	n/a	n/a	n/a
CHP-TE9	Stringer Boiler 2	n/a	n/a	n/a	n/a	n/a
CHP-TE10	Stringer CHP 1	n/a	n/a	n/a	n/a	n/a
CHP-TE11	Stringer CHP 2	n/a	n/a	n/a	n/a	n/a
CHP-TE12	Boiler House D Stack	n/a	n/a	n/a	n/a	n/a
CHP-TE13	Boiler House E Stack	n/a	n/a	n/a	n/a	n/a
CHP-TE14	CHP D	n/a	n/a	n/a	n/a	n/a
CHP-TE15	CHP E	n/a	n/a	n/a	n/a	n/a
TE1 (LCM Treatment Plant)	Effluent Treatment Plant	Total Chrome	100 µg/l	Note 1	Weekly	Note 1 Note 2
TE3 (SMC Treatment Plant)	Effluent Treatment Plant	Total Chrome	500 µg/l	Note 1	Weekly	Note 1 Note 2

Note 1: Method and Reference Period to be agreed in writing with Natural Resources Wales

Note 2: Cessation of monitoring for Total Chrome on emission points TE1 and TE3 to be agreed in writing with Natural Resources Wales when monitoring results show that releases have ceased.

Note 3: The location plan required by IC3, shall apply following the completion of IC3

Table S3.4 Noise monitoring requirements

Location or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Noise survey at locations agreed with Natural Resources Wales and Flintshire County Council	Noise	Every three years	BS 4142:2014	-

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	Paint Shops, CHP-A1 – CHP-A21	Every 12 months	01/01/16
Emissions to water Parameters as required by condition 3.5.1	TE1, TE3, SW16	Every 3 months	01/01/07
Noise monitoring Parameters as required by condition 3.5.1	Noise survey at locations agreed with Natural Resources Wales and Flintshire County Council	Every 36 months	01/01/07

Table S4.2: Annual production/treatment

Parameter	Units
Finished Product	tonnes

Table S4.3 Performance parameters

Parameter	Frequency of assessment	Units
Water usage	Annually	m ³
Energy usage	Annually	MWh
Waste produced	Annually	tonnes

Table S4.4 Reporting forms

Media/parameter	Reporting format	Date of form
Air	Form Air 1 or other form as agreed in writing by Natural Resources Wales	05/09/16
VOC	Form VOC 1 or other form as agreed in writing by Natural Resources Wales	05/09/16
Water	Form Water 1 or other form as agreed in writing by Natural Resources Wales	11/01/07
Sewer	Form Sewer 1 or other form as agreed in writing by Natural Resources Wales	11/01/07
Water usage	Form Water Usage 1 or other form as agreed in writing by Natural Resources Wales	11/01/07
Energy usage	Form Energy 1 or other form as agreed in writing by Natural Resources Wales	05/09/16
Other performance indicators	Form Performance 1 or other form as agreed in writing by Natural Resources Wales	05/09/16

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 activity that gives rise to an incident or accident which significantly affects or may significantly affect the environment	
To be notified Immediately	
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 permit condition	
To be notified immediately	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
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) In the event 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:	
To be notified immediately	
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 Airbus Operations Limited

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 Natural Resources Wales 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.

“*background concentration*” means such concentration of that substance as is present in:

- for emissions to surface water, the surface water quality up-gradient of the site; or
- for emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge.

“*emissions to land*” includes emissions to groundwater.

“*EP Regulations*” means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 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.

“*hazardous property*” has the meaning in Annex III of the Waste Framework Directive

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

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

“*notify without delay*” means that a telephone call can be used, whereas all other reports and notifications must be supplied in writing, either electronically or on paper.

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

“*year*” means calendar year ending 31 December.

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:

- (a) 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 (Boiler Plant), 6% dry for solid fuels, 15% dry for CHP; and/or
- (b) 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.

