

# Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2016

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**Airbus Operations Limited**

**Chester Road  
Broughton  
Chester  
CH4 0DR**

Permit number  
**EPR/BM3965IA/V008**

Permit number  
**EPR/BM3965IA**

# Airbus Operations Limited

## Permit number EPR/BM3965IA

### Introductory note

#### **This introductory note does not form a part of the notice**

The following notice gives notice of the variation of an environmental permit.

The schedules specify the changes made to the original permit.

This variation is to authorise the installation of a new paint booth within the existing Final Single Aisle Wing Painting Facility on site (building number 160). The existing paint booths carry out final wing paint and detailed painting of wing elements. The new booth for just detailed painting will increase the production throughput of the Final Single Aisle Wing Painting Facility.

The new paint booth will be operated in the same manner as the existing Final Single Aisle Wing Paint Shop booths and will use the same compliant coating and solvent cleaning materials. The new booth will have a dedicated vent stack and will contribute to the site's overall emission to air. The stack will release air containing particulate matter and volatile organic compounds as a result of the painting activities. Particulates shall be abated by in line filter bags, while releases of volatile organic compounds shall be controlled by the site's compliance with their agreed Solvent Reduction Plan.

Following additional information on the installation's existing effluent treatment plant, it's designation has been amended to reflect the equipment's description as a listed activity.

The status of the existing improvement conditions has also been updated following information from the operator.

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 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
Application for variation PAN-002197 (EPR/BM3965IA/V008)	Duly Made 15/01/2018	Application to install an additional paint booth on site with associated emission point
Variation EPR/BM3965IA/V008 issued	03/05/2018	Variation issued to install a new paint booth on site

End of introductory note

## Notice of variation

Environmental Permitting (England and Wales) Regulations 2016

The Natural Resources Body for Wales (“Natural Resources Wales”) in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

Permit number  
**EPR/BM3965IA**

issued to:  
**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 set out in the schedules.

The notice shall take effect from 03 May 2018

Signed

Date

<b>Holly Noble</b>	<b>03/05/2018</b>
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Authorised on behalf of Natural Resources Wales

### Schedule 1 – conditions to be deleted

None

### Schedule 2 – conditions to be amended

The following conditions are amended as a result of the application made by the operator:

Table S1.2 shall be amended to:

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
Application EPR/BM3965IA/V008	'Permit variation application EPR/BM3964IA' report and the associated Air Quality Impact Assessment (AQIA) report	15/01/18

Table S3.1 shall be amended to:

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
<b>Chrome Anodising, TSA Anodising, and Effluent Treatment Plant</b>						
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
<b>Paint Shops</b>						
Haden Booth						
A24, A26	Oven, spray booth and paint mix	VOCs	n/a	n/a	Annually	Mass balance <sup>Note 1</sup>
Site 5						
A27 – A34	Prep booths, spray booths, detail booths, detail booth oven and paint mix	VOCs	n/a	n/a	Annually	Mass balance <sup>Note 1</sup>
Interim Single Aisle						
A35 – A43 A35a – A42a	Booths and paint mix	VOCs	n/a	n/a	Annually	Mass balance <sup>Note 1</sup>
Binks						
A44	Spray booths, paint mix and oven	VOCs	n/a	n/a	Annually	Mass balance <sup>Note 1</sup>
Stringer						

**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
A55, A56	Spray booth, paint mix and booth oven	VOCs	n/a	n/a	Annually	Mass balance <sup>Note 1</sup>
West						
A58 – A60	Paint shops and paint mix	VOCs	n/a	n/a	Annually	Mass balance <sup>Note 1</sup>
Final Single Aisle						
A177 – A181, A184 – A185, A186	Prep booth and paintshop	VOCs	n/a	n/a	Annually	Mass balance <sup>Note 1</sup>
<b>Combustion Plant</b>						
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
CHP-A1	Stringer Boiler 1	Oxides of Nitrogen (as NOx)	200 mg/m3	15 minute average	Annually	ISO10849
CHP-A2	Stringer Boiler 2	Oxides of Nitrogen (as NOx)	200 mg/m3	15 minute average	Annually	ISO10849
CHP-A3	Skin and Creep Boiler	Oxides of Nitrogen (as NOx)	200 mg/m3	15 minute average	Annually	ISO10849
CHP-A4	West Factory Boiler 1	Oxides of Nitrogen (as NOx)	200 mg/m3	15 minute average	Annually	ISO10849
CHP-A5	West Factory Boiler 2	Oxides of Nitrogen (as NOx)	200 mg/m3	15 minute average	Annually	ISO10849
CHP-A6	West Factory Boiler 3	Oxides of Nitrogen (as NOx)	200 mg/m3	15 minute average	Annually	ISO10849

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

<b>Emission point ref. &amp; location (on PPC 04 E dated 9/8/16))</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
CHP-A7	West Factory Boiler 4	Oxides of Nitrogen (as NOx)	200 mg/m3	15 minute average	Annually	ISO10849
CHP-A8	West Factory CHP 1	Oxides of Nitrogen (as NOx)	500 mg/m3	15 minute average	Annually	ISO10849
CHP-A9	West Factory CHP 2	Oxides of Nitrogen (as NOx)	500 mg/m3	15 minute average	Annually	ISO10849
CHP-A10	West Factory CHP 3	Oxides of Nitrogen (as NOx)	500 mg/m3	15 minute average	Annually	ISO10849
CHP-A11	West Factory CHP 4	Oxides of Nitrogen (as NOx)	500 mg/m3	15 minute average	Annually	ISO10849
CHP-A12	Stringer CHP 1	Oxides of Nitrogen (as NOx)	500 mg/m3	15 minute average	Annually	ISO10849
CHP-A13	Stringer CHP 2	Oxides of Nitrogen (as NOx)	500 mg/m3	15 minute average	Annually	ISO10849
CHP-A14	Skin and Creep CHP	Oxides of Nitrogen (as NOx)	500 mg/m3	15 minute average	Annually	ISO10849
CHP-A15	CHP D	Oxides of Nitrogen (as NOx)	500 mg/m3	15 minute average	Annually	ISO10849
CHP-A16	Boiler 1 D	Oxides of Nitrogen (as NOx)	200 mg/m3	15 minute average	Annually	ISO10849
CHP-A17	Boiler 2 D	Oxides of Nitrogen (as NOx)	200 mg/m3	15 minute average	Annually	ISO10849
CHP-A18	CHP E	Oxides of Nitrogen (as NOx)	500 mg/m3	15 minute average	Annually	ISO10849
CHP-A19	Boiler 1 E	Oxides of Nitrogen (as NOx)	200 mg/m3	15 minute average	Annually	ISO10849
CHP-A20	Boiler 2 E	Oxides of Nitrogen (as NOx)	200 mg/m3	15 minute average	Annually	ISO10849
CHP-A21	Boiler 3 E	Oxides of Nitrogen (as NOx)	200 mg/m3	15 minute average	Annually	ISO10849

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



The following conditions are amended as a result of changes made by NRW:

**Table S1.2** shall be amended to:

<b>Table S1.1 activities</b>		
<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity</b>	<b>Limits of specified activity</b>
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)	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
S5.4 A (1) (a) (ii)	Treatment of effluent TSA Anodising	From receipt of effluent to discharge of treated effluent, despatch of waste material and exhaust extracted air 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.
<b>Directly Associated Activity</b>		
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
Surface cleaning using organic solvents	IED solvent emission activities as specified in Industrial Emissions Directive (2010/75/EU) (IED), Annex VII, Part 1(11)	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 Industrial Emissions Directive (2010/75/EU) (IED), Annex VII, Part 1(1)(b) and (d)	From receipt of raw materials to despatch of material for further processing, including cleaning of coating equipment.

Table S1.3 shall be amended to:

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
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	<p>The Operator shall:</p> <p>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</p> <p>provide the European Waste Catalogue (EWC) waste codes associated with untreated effluent being introduced into the effluent treatment plant.</p> <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>	<p>30/09/16</p> <p>Discharged (08/02/2016)</p>
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.	<p>31/10/16</p> <p>Discharged (28/10/2016)</p>
IC4	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</p> <p>Discharged (06/02/2017)</p>
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>	<p>31/03/17</p> <p>Discharged (11/01/2018)</p>
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

**Table S4.4** shall be amended to:

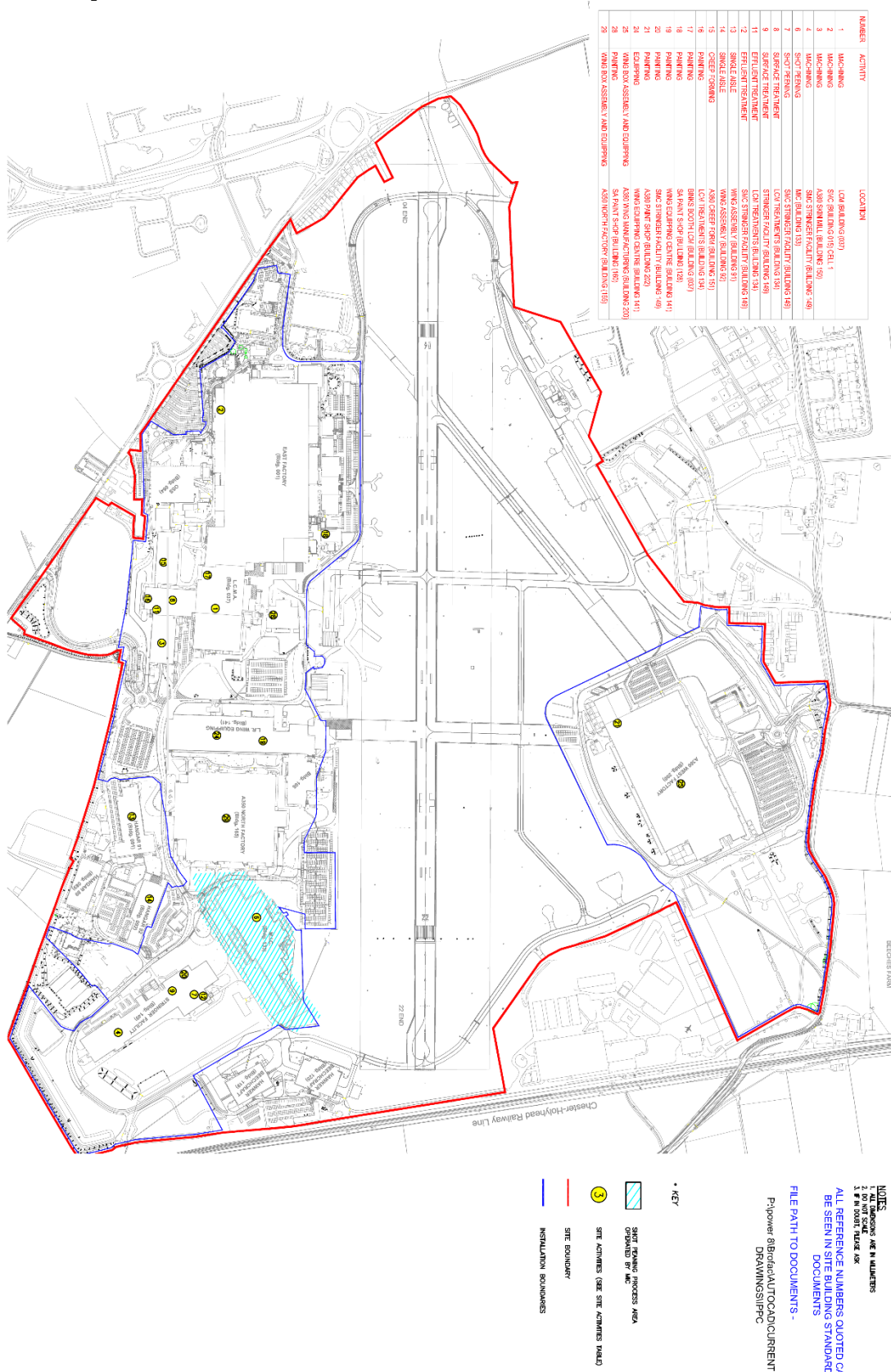
<b>Table S4.4 Reporting forms</b>		
<b>Media/parameter</b>	<b>Reporting format</b>	<b>Date of form</b>
Air	Form Air 1 or other form as agreed in writing by Natural Resources Wales	05/09/16
VOC	Form VOC 1 or other form as agreed in writing by Natural Resources Wales	03/05/18
Water	Form Water 1 or other 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 3 – conditions to be added**

None

The site plans shall be amended to:

## Site plan





Emission Point Plan

EA Reference	Internal Reference	Building Number
A6	HWB06	091
A7	HWB07	091
A8	HWB10	084
A9	HWB11	084
A10	HWB12	044
A10	HWB13	044
A12	HWB14	044
A14	WAH17	141
A14	WAH18	141
A23	HWB7A	091
A24	-800 Oven & Spray Booth	134
A26	-800 Paint Mix	134
A27	Site 5 Prep Booth 1	141
A28	Site 5 Prep Booth 2	141
A29	Site 5 Spray Booth 1	141
A30	Site 5 Spray Booth 2	141
A31	Site 5 Detail Booth 1	141
A32	Site 5 Detail Booth 2	141
A33	Site 5 Detail Booth Oven	141
A34	Site 5 Paint Mix	141
A35	Single Aisle Interim Paintshop	128
A35a	Single Aisle Interim Paintshop	128
A36	Single Aisle Interim Paintshop	128
A36a	Single Aisle Interim Paintshop	128
A37	Single Aisle Interim Paintshop	128
A37a	Single Aisle Interim Paintshop	128
A38	Single Aisle Interim Paintshop	128
A38a	Single Aisle Interim Paintshop	128
A39	Single Aisle Interim Paintshop	128
A39a	Single Aisle Interim Paintshop	128
A40	Single Aisle Interim Paintshop	128
A40a	Single Aisle Interim Paintshop	128
A41	Single Aisle Interim Paintshop	128
A41a	Single Aisle Interim Paintshop	128
A42	Single Aisle Interim Paintshop	128
A42a	Single Aisle Interim Paintshop	128
A43	SA Interim Paintshop - Paint Mix Room	128
A44	Blinks Spray Booths 1 & 2, Paint Mix & Oven	037
A55	Stringer Booth Spray & Paint Mix	149
A56	Stringer Booth Oven	149
A58	West Paintshop 1	202
A59	West Paintshop 2	202
A60	West Paint Mix	202
A61-A72	A380 Autoclave	151
A79	LCM Treatment Tank 5	134
A81	LCM Treatment Tank 1-2	134
A82	LCM Treatment Tank 9	134
A83	LCM Treatment Tank 11	134
A84	Stringer Treatment	149
A90	LCM Effluent Treatment	134
A91	Stringer Effluent Treatment	149
A111	Blinks Burners	037
A112	Site 5 - Booth 1 Burners	141
A113	Site 5 - Booth 1 Burners	141
A114	Site 5 - Booth 2 Burners	141
A115	Site 5 - Booth 2 Burners	141
A116	Site 5 - Prep Booth 1	141
A117	Site 5 - Prep Booth 2	141
A119	-800 Paintshop - Burners	134
A120	-800 Paintshop - Burners	134
A175	Single Aisle Paintshop - Boilerhouse	033
A176	Single Aisle Paintshop - Boilerhouse	033
A177	Single Aisle Final Paintshop Prep	160
A178	Single Aisle Final Paintshop	160
A179	Single Aisle Final Paintshop	160
A180	Single Aisle Final Paintshop	160
A181	Single Aisle Final Paintshop	160
A184	Single Aisle Final Paintshop	160
A185	Single Aisle Final Paintshop	160
A186	Single Aisle Final Paintshop	160
A201	A350 Combustion Plant	165
A229	Hangar 89 Boiler	089
A247	Hangar 89 Boiler	089
A259	B166 Long Range Wing Ecoupling	166
A260	B166 Long Range Wing Ecoupling	166
WAH 35	Wanson Warm Air Heater	141
CHP-A8	West CHP1	211
CHP-A9	West CHP2	212
CHP-A10	West CHP3	213
CHP-A4	West Boiler 4	209
CHP-A5	West Boiler 3	209
CHP-A6	West Boiler 2	209
CHP-A7	West Boiler 1	209
CHP-A12	Stringer 2	065
CHP-A13	Stringer 1	066
CHP-A1	Stringer Boiler	067
CHP A2	Stringer Boiler	067
CHP-14	Creep CHP	043
CHP-A3	Creep Boiler	044
CHP-15	LCM Boiler	033
CHP-A16	LCM Boiler	033
CHP-A17	LCM CHP	032
CHP-A19	West Road Boiler	025
CHP-A20	West Road Boiler	025
CHP-A21	West Road Boiler	025
CHP-A18	West Road CHP	024

