Reference Number: PPC/A/1018364/VN07

SCOTTISH ENVIRONMENT PROTECTION AGENCY

POLLUTION PREVENTION AND CONTROL ACT 1999

POLLUTION PREVENTION AND CONTROL (SCOTLAND) REGULATIONS 2012 (''THE REGULATIONS'')

NOTICE OF VARIATION TO PERMIT

Permit No: **PPC/A/1018364 (as varied)**

To: **Mersen Scotland Holytown Limited**

Address:

11 Woodside,
Eurocentral,
Holytown,
North Lanarkshire,
ML1 4XL

The Scottish Environment Protection Agency (''SEPA''), in exercise of its powers under Regulation 46 of the Regulations, hereby gives you notice that it has decided, to vary permit PPC/A/1018364 (as varied) granted under the Regulations The variations are specified in the Schedule to this notice and take effect on 2021.

..... Date: 2021
Authorised to sign on behalf of the
Scottish Environment Protection Agency

Right of Appeal
Under Regulation 58 of the Regulations you are entitled to appeal to the Scottish Ministers against the conditions attached to this Notice, except where SEPA has served this Notice to implement a direction to SEPA of the Scottish Ministers. The bringing of an appeal will not have the effect of suspending the operation of the conditions attached to this Notice. The procedures and timescales for the making of an appeal are set out in Schedule 8 of the Regulations.

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Licence Reference: PPC/A/1018364/VN07

SCOTTISH ENVIRONMENT PROTECTION AGENCY

POLLUTION PREVENTION AND CONTROL ACT 1999

POLLUTION PREVENTION AND CONTROL (SCOTLAND) REGULATIONS 2012 (''THE REGULATIONS'')

SCHEDULE TO NOTICE OF VARIATION UNDER REGULATION 46(8)

Operator:	**Mersen Scotland Holytown Limited**
Permit Number:	**PPC/A/1018364**
Date of Permit:	**22 February 2008**
Variation No:	**VN07**

Permit number PPC/A/1018364(As Varied) has been varied as follows:

1. Condition 1.1.4.2 shall be amended to read:

1.1.4.2 a maximum of 54 carbonisation and Intermediate Firing (IF) furnaces;

2. A new Condition 1.1.4.7 shall be added as follows:

1.1.4.7 2 Pyrolysis furnaces.

3. A new Condition 1.1.4.8 shall be added as follows:

1.1.4.8 A Graphitisation furnace.

4. Condition 1.1.5.1 shall be amended to read:

1.1.5.1 Paintshop mixing booths, spray booths and drying ovens with solvent use below 5 tonnes per annum;

5. A new Condition 1.1.5.6 shall be added as follows:

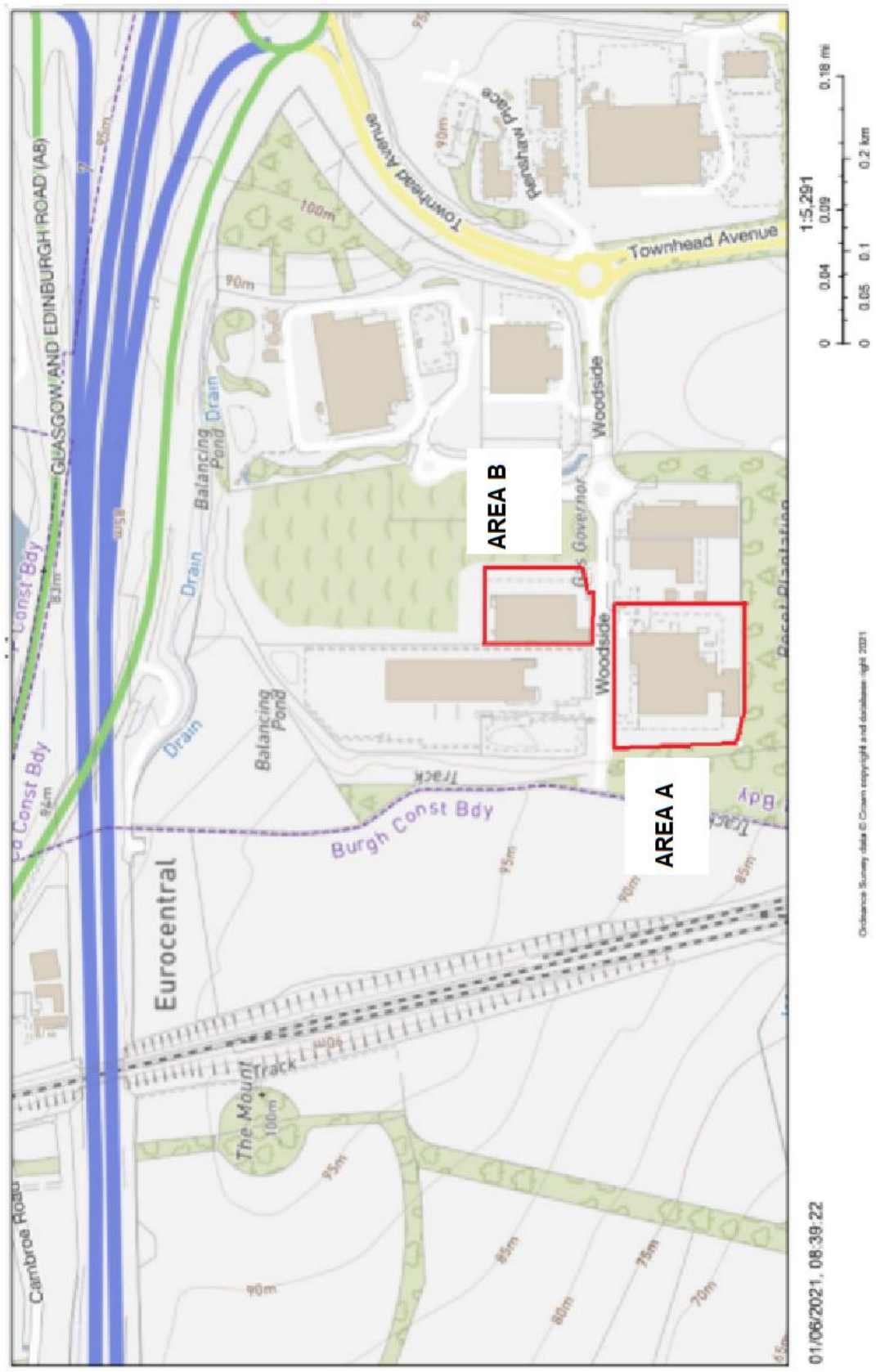
1.1.1.6 A nitrogen generation plant utilising pressure swing adsorption technology

6. The Plan in Section 1.2 shall be renumbered Condition 1.2.2 and renamed “Site Plan: Area A” as follows:

1.2.2 Site Plan: Area A

7. A new Condition 1.2.1 entitled “Site Plan: Overview” shall be added as follows:

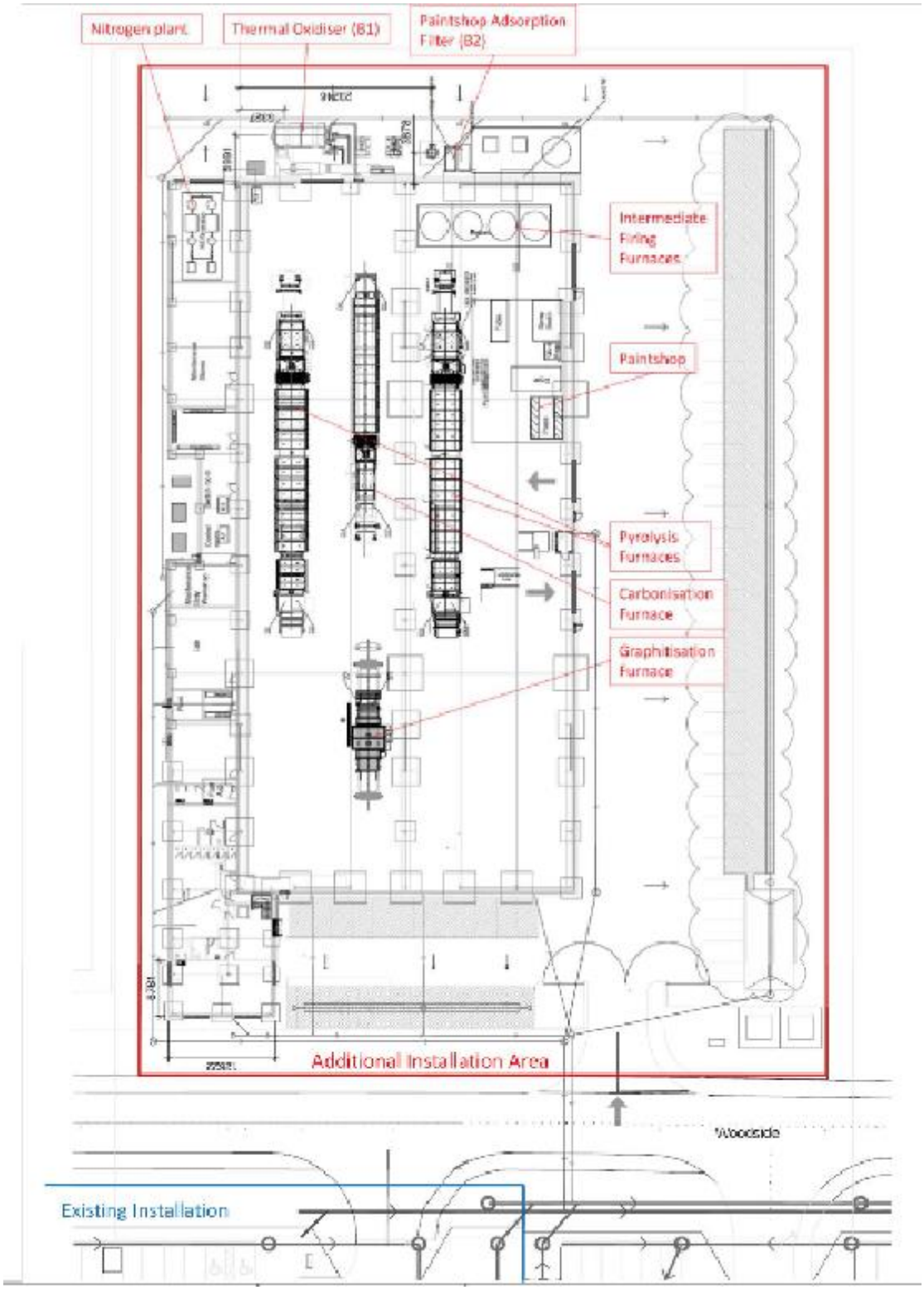
1.2.1 Site Plan: Overview



8. A new Condition 1.2.3 entitled “Site Plan: Site B” shall be added as follows:

9.

1.2.3 Site Plan: Area B



10. Table 2.1 entitled "Reporting and Notification Requirements" shall be deleted and replaced with a new Table 2.2 entitled "Reporting and Notification Requirements" as follows:

Table 2.1 Reporting and Notification Requirements

Summary of Information to be Reported or Notified	Condition	Date/Within period/ Frequency to be Reported	Date First Report Due
Change to primary and / or deputy site contact	2.1.2	Within 2 weeks of date of change	Within 2 weeks of change
Incident investigation report	2.4.4	Within 14 days of the date of the Incident unless otherwise agreed in writing with SEPA	Following incident
Systematic assessment of raw material and resource utilisation	2.5.4	At least once every 4 years	31 May 2019
Ceasing to be covered by a Climate Change Agreement	2.5.6	Within 1 month of cessation	Following cessation of CCA
Waste management review	2.6.1	At least once every 4 years	31 May 2019
Systematic assessment of measures to prevent emissions to Soil and Groundwater	2.7.4	At least once every 4 years	30 September 2025
Noise and vibration review	3.1.1	At least once every 5 years	28 February 2019
Drainage, tank and bund integrity survey	3.4.5	At least once every 5 years	31 January 2020

Emissions to air: Particulates VOC CO SOx NOx Chlorine Benzene Dioxins and furans HCN	4.1.4	 6 monthly 6 monthly 6 monthly 6 monthly 6 monthly 6 monthly 6 monthly Two Yearly Two Yearly	 31 December 2016 31 December 2016 31 December 2016 31 December 2016 31 December 2016 31 December 2016 31 December 2016 31 March 2018 31 March 2018
Mass emissions to air: Particulates, VOC, CO SOx, NOx , Chlorine Dioxins and furans	4.1.5	Yearly	31 January 2017
Emissions to sewer: Phenols Total suspended solids	4.2.5	Quarterly	March √ July √ October v December
Mass emissions to sewer: Phenols Total suspended solids	4.2.6	Yearly	31 January 2017
Commissioning Activities: Commencement	4.6.3	28 days prior to carrying out Commissioning Activities	Prior to Commissioning
Commissioning Activities: Weekly report	4.6.5	Weekly during Commissioning	1 week following the start of Commissioning
Commissioning: Cessation	4.6.7	Within 28 days of cessation of Commissioning	Following Cessation of Commissioning

11. Table 2.2 entitled “Resource Utilisation Data Recording” shall be deleted and replaced with a new Table 2.2 entitled “Resource Utilisation Data Recording” as follows:

Table 2.2 Resource Utilisation Data Recording

Water
Electricity
Natural gas (not including CVD / CVI process gas)
Natural gas as raw material for CVD / CVI process
Rayon
Chlorine
Nitrogen
Organic solvents
Phenolic resin

12. Table 2.3 entitled “Raw Materials, Energy and Fuel” shall be deleted

13.

14. Section 2.5 entitled “Resource Utilisation” shall be deleted and replaced with a new section 2.5 entitled “**2.5 Resource Utilisation”** containing the following conditions:

2.5.1 At least every 4 years, the Operator shall carry out a systematic assessment to determine:

2.5.1.1 how and where raw materials (including water and fuel) and energy are used within the Permitted Installation;

2.5.1.2 the quantities of raw materials (including water and fuel) and energy used within the Permitted Installation;

2.5.1.3 how and where material losses and wastes are generated within the Permitted Installation;

2.5.1.4 the quantities of material losses and wastes generated within the Permitted Installation;

2.5.1.5 how and where raw materials (including water and fuel) and energy can be utilised more efficiently within the Permitted Installation to reduce resource use and minimise material losses and waste; and

2.5.1.6 which of the resource efficiency measures identified in 2.5.1.5 will be implemented at the Permitted Installation during the 4 year assessment cycle

2.5.2 The assessment required by condition 2.5.1 shall be recorded using the SEPA “systematic assessment of resource use and efficiency template” (IED-T-04), or and equivalent format agreed by SEPA, and shall be reported to SEPA as specified in Table 2.1

2.5.3 The operator shall implement the resource efficiency measures identified in the systematic assessment within the timescales specified in that assessment

2.5.4 The information required in 2.5.1.2 and 2.5.1.4 shall be recorded annually

2.5.5 For the purposes of Conditions 2.5.1, “raw materials, energy and fuel” shall mean the materials listed in Table 2.2

2.5.6 In the event that the Permitted Installation ceases to be covered by a Climate Change Agreement, the Operator shall provide written notification to SEPA within one month of such cessation.

15. A new Condition 2.7.4 shall be added as follows:

2.7.4. At least every 4 years, the operator shall carry out a systematic assessment of all measures used to prevent emissions from the permitted installation to soil and groundwater. A written report of each assessment shall be recorded and reported to SEPA. The report shall include details of and timescales for any additional measures that are required to prevent emissions to soil and groundwater.

16. Condition 4.3.2 shall be deleted and replaced with Conditions 4.3.2, 4.3.2.1 and 4.3.2.2 as follows.

4.3.2 The Captured gaseous emissions from the two areas of the site Identified on. the Site Overview Plan, shall exhaust via the associated abatement systems for each area as detailed in conditions 4.3.2.1 and 4.3.2.2, working within process parameters designed to ensure compliance with the Emission Limit Values (ELVs) specified in the relevant Table 4.1

4.3.2.1 In Area A, the captured gaseous emissions from all Carbonisation, Intermediate Firing, CVD and CVI furnaces shall exhaust via their associated intermediate abatement systems to a natural gas fired Regenerative Thermal Oxidiser (the "Carbon RTO"). High Temperature and Ultra High Temperature Firing furnaces shall exhaust via the Carbon RTO stack

4.3.2.1 In Area B, the captured gaseous emissions from all Pyrolysis, Carbonisation and Intermediate Firing furnaces shall exhaust via their intermediate abatement systems to a natural gas fired Thermal Oxidiser.

17. A new Section shall be added to the permit entitled "**4.6 Commissioning Conditions"** containing the following conditions:

4.6.1. The Operator shall not carry out any Permitted Activities, or any new or substantially changed activities following on from a significant modification or change to the Permitted Installation, except as part of Commissioning notified to SEPA in compliance with Condition 4.6.2 until: -

(a) Conditions 4.6.2 to 4.6.7 inclusive have been complied with; and

(b) the Operator has received confirmation from SEPA in writing that those conditions have been complied with.

4.6.2. Prior to carrying out any Commissioning, the following shall be tested and demonstrated to be effective during the appropriate functional test:

(a) design features necessary to ensure compliance with any condition of this Permit; and

(b) the systems required by any Condition of this Permit.

4.6.3. At least 28 days, or such period as otherwise agreed in writing with SEPA, prior to carrying out any Commissioning activities, the Operator shall notify SEPA in writing of details of the Commissioning activities to be carried out including:

(a) the results of any test carried out in compliance with Condition 4.6.2

(b) details of the work to be carried out including each test required by Condition 4.6.4;

(c) the purpose of said work;

(d) details of how said work will be carried out;

(e) an assessment of any environmental impact the said work may have;

(f) the proposed dates on which the said work will be started and completed; and

(g) the criteria for determining when the Commissioning has ceased.

4.6.4. When carrying out any Commissioning the Operator shall carry out tests to demonstrate that the Permitted Installation can be operated so as to comply with any Condition of this Permit.

4.6.5. For the period of any Commissioning the Operator shall submit a weekly report containing a summary of:

(a) the Commissioning undertaken during the preceding week;

(b) details of all tests carried out under Condition 4.6.4 during the preceding week

(c) the results of any such tests received during the preceding week;

(d) the justification for any delays from the dates notified under Condition 4.6.3 (f); and

(e) where appropriate, confirmation that the criteria detailed in the notification required by Condition 4.6.3 (g) have been met.

4.6.6. Notwithstanding any other condition in this Permit, should any test, required by Condition 4.6.4, indicate that the conditions of this Permit have not or cannot be complied with; the Operator shall cease carrying on the part of the Commissioning Activity, which is the subject of the test, until either:

(a) SEPA has given written permission for said part of the Commissioning to continue; or

(b) the Operator has proposed in writing to SEPA remedial action to ensure compliance with the conditions of this Permit; and that

(i) those actions have been agreed with SEPA in writing; and

(ii) those actions have been implemented.

4.6.7. Within one month of Cessation of Commissioning, the Operator shall prepare and submit to SEPA a written report which demonstrates that all the conditions of the permit can be complied with in full.

18. Table 4.1 shall be deleted and replaced with a new Table 4.1 split into Area A and Area B as follows:

Table 4.1 Emissions to Air ELVs

AREA A							
Source of Emission	**Emission point**	A2 Carbon RTO stack	A3 HP Process stack	A5 Process dust stack	A6 Dust extraction vents	A8 Continuous Carbonisation/ Graphitiser RTO Stack	A10 Paintshop Carbon Absorption System Stack
	Emission source	Carbonisation, IF, CVD, CVI, HT processes	Halogen purification process	Machine-shop fixed equipment	Resin / fines mixer and flock-chop vents	Continuous Carbonisation/ Graphitiser Line	Adhesive spray application, paint mixing, water-based paint application and drying ovens
	Stack height/ diameter (m)	As identified in site vent register	As identified in site vent register	As identified in site vent register	As identified in site vent register	As identified in Site Vent Register	As identified in site vent register
	Location on Site Plan	As identified on site plan Area A	As identified on site plan Area A	As identified on site plan Area A	As identified on site plan Area A	As identified on Site Plan Area A	As identified on Site Plan Area A
	NGR	NS 750 616	NS 750 616	NS 750 616	NS 750 616	NS 750 616	NS 750 616

Monitoring Details	Type of Monitoring	SS / visual	SS (and C)	SS	SS	SS / visual	SS
	Sampling Location	As identified In site vent register	As identified in site vent register	As identified in site vent register	As identified in site vent register	As identified in Site Vent Register	N/A
Limits for Parameters from Emission Source	**Particulates (mgm^{-3})**	5	-	10	25	5	5
	VOC as total C (mgm^{-3})	20	-	-	-	20	20
	CO (mgm^{-3})	100	-	-	-	100	-
	SOx (mgm^{-3})	50	-	-	-	50	-
	NOx (mgm^{-3})	100	-	-	-	100	-
	Chlorine (mgm^{-3})	-	3(C) daily average 5 (C) 30 min average 5 (SS)	-	-	-	-
	Benzene (mgm^{-3})	2	-	-	-	2	2
	Dioxins and furans (ngm^{-3} I-TEQ)	-	0.1	-	-	-	-
	HCN (mgm^{-3})	1	-	-	-	-	-
	Plume visibility	No darker than Ringlemann 1 for any consecutive period of 4 minutes	-	-	-	No darker than Ringlemann 1 for any consecutive period of 4 minutes	-

AREA B			
Source of Emission	**Emission point**	B1 Thermal Oxidiser Stack	B2 Paintshop Carbon Filter System
	Emission source	Area B Carbonisation Graphitisation Pyrolysis and Intermediate furnaces	Area B Adhesive spray application, paint mixing, water-based paint application and drying ovens
	Stack height/ diameter (m)	As identified in site vent register	As identified in site vent register
	Location on Site Plan	As identified on Site Plan Area B	As identified on Site Plan Area B
	NGR	NS 750 618	NS 750 618
Monitoring Details	**Type of Monitoring**	SS	SS
	Sampling Location	As identified in site vent register	As identified in site vent register
Limits for Parameters from Emission Source	**Particulates (mgm^{-3})**	5	5
	VOC as total C (mgm^{-3})	20	20
	CO (mgm^{-3})	100	
	SOx (mgm^{-3})	50	
	NOx (mgm^{-3})	100	
	Chlorine (mgm^{-3})		
	Benzene (mgm^{-3})		2
	Dioxins and furans (ngm^{-3} I-TEQ)		
	HCN (mgm^{-3})	1	
	Plume visibility		

19. Table 4.2 shall be deleted and replaced with a new Table 4.2 as follows:

Table 4.2 Emissions to Air Monitoring Requirements

Parameter	Emission point	Spot Sampling (SS)			Continuous (C)		
		Standard	Frequency	Operational Mode	Type	Sample Time	Averaging Period and Time Span for Percentage Limits
Odour	All processes	-	daily	Process active	-	-	-
Plume visibility	A2, A8	BS 2742	daily	Process active	-	-	-
Particulates	All processes	BS EN 13284-1	6-monthly	Process active	-	-	-
VOC	A2, A5, A6, A8, A10 B1, B2	BS EN 12619	6-monthly	Process active	-	-	-
CO	A2, A8 B1	BS EN 15058	6-monthly	Process active	-	-	-
SOx	A2, A8 B1	BS EN 14791	6-monthly	Process active	-	-	-
NOx	A2, A8, A10 B1	BS EN 14792	6-monthly	Process active	-	-	-
Benzene	A2, A8 B1, B2	BS EN 13649	6-monthly	Process active	-	-	-
Dioxins & furans	A3	BS EN 1948-4	Two yearly	Process active	-	-	-
HCN	A2 B1	US EPA CTM33	Two yearly	Process active	-	-	-
Chlorine	A3	US EPA Method 26	-	Process active	Continuous	At least once every 30 seconds	Half hourly average to derive daily average
Gas flow	A2, A3, A8	BS EN 13284-1	-	Process active	Continuous	At least once every 30 seconds	Half hourly average to derive daily average

20. Table 4.3 shall be deleted and replaced with a new Table 4.3 as follows:

Table 4.3 Mass Emissions to Air

Parameter	Combined Emissions	Method (Summary)	Mass Emissions Result to be recorded as
Particulates	A2, A5. A6, A8, A10 B1, B2	Average of all measured results X effluent gas flow over period	Kg per calendar year
VOC	A2, A8, A10 B1, B2	Average of all measured results X effluent gas flow over period	Kg per calendar year
CO / SOx / NOx	A1, A8 B1, B2	Average of all measured results X effluent gas flow over period	Kg per calendar year
Chlorine	A3	Average of all measured results X effluent gas flow over period	g per calendar year
Dioxins & furans	A3	Average of all measured results X effluent gas flow over period	µg (I-TEQ) per calendar year

21. Table 4.7 entitled "Waste Handling and Storage" shall be deleted and replaced with a new Table 4.7 entitled "Waste Handling and Storage" Split into Area A and Area B as follows:

Table 4.7 Waste Handling and Storage

Description of Waste	Location of Storage on Site Plan	Method of Storage	Maximum Permitted Quantity	Storage Conditions
Area A				
Liquid chemicals	Chemical storage	Sealed containers	1500 litres	Under cover and secured
Solvent	Empty & opened solvents	Sealed containers	1000 litres	Separated from any source of ignition
Waste coolant, antifreeze and oils	Waste oil	Sealed containers	2000 litres	Separated from any source of ignition
Solid wastes	Metals skip Mixed recycle Wood waste General waste	Wood waste in designated area. Other wastes in designated skips	-	Segregated by waste type

Carbon dusts (sub 42 fines) and fibres	Carbon skip	Sealed container	10 tonnes	Within closed containers, separated from any source of ignition
Phenolic Resin Bags	Special waste storage	Sealed containers	5 tonnes	Within Re-work Mill area
Area B				
General Waste (cardboard, paper, packaging materials etc)		2 x 1m^3 bins	100 tonnes	On hardstanding
Waste fully carbonised materials from production processes		Skip	20 tonnes	On hardstanding
Segregated steel and aluminium		Skip or Hardstanding if Large Items	2.5 tonnes	On hardstanding
Waste oils and contaminated oily waste		Self-bunded, lockable container	0.3 tonnes	On hardstanding