

Variation notice with introductory note

Environmental Permitting (England & Wales) Regulations 2007

Barry Silicon Based Manufacturing
Installation

Cabot Carbon Limited
Sully Moors Road
Sully
Vale of Glamorgan
CF64 5RP

Variation notice number
EA/EPR/BU2110IS/V003

Permit number
BU2110IS

Cabot Carbon Limited

Barry Silicon Based Manufacturing Installation

Permit Number BU2110IS

Introductory note

This introductory note does not form a part of the permit

The following notice, which is issued pursuant to regulation 20 and Part 1 of Schedule 5 of the Environmental Permitting (England and Wales) Regulations S.I.2007 No. 3538 (the Regulations), gives notice of the variation of an environmental permit to operate a regulated facility.

The variation notice is issued in response to:

- an application for the addition of a new coating plant reactor and additional formaldehyde abatement,
- the need for the addition of new improvement conditions, and
- changes to monitoring methods for emissions to air.

Schedule 1 of this notice lists any deleted conditions, Schedule 2 lists any amended conditions and Schedule 3 lists any conditions that have been added.

Status Log of the permit		
Detail	Date	Response Date
Application BU2110IS	Received 17/08/05	
Response to request for information	Requests dated: 09/09/05, 22/09/05, 12/01/06, 16/01/06, 19/01/06, 10/03/06	Responses dated: 14/10/05, 26/10/05, 18/11/05, 23/11/05, 12/12/05, 19/12/05, 13/01/06, 09/02/06, 16/03/06
Request to extend determination	Request dated 14/12/05	Request accepted 19/12/05
Permit determined	Determined 31/03/06	
Application RP3137UZ	Duly made 18/10/07	
Further information request	6/11/07	8/11/07
Variation notice RP3137UZ issued	21/11/07	
Application EA/EPR/BU2110IS/V003	Duly made 22/09/08	
Further information request	22/9/08, 13/10/08, 5/11/07	1/10/08, 18/11/07
Variation notice EA/EPR/BU2110IS/V003 issued	22/12/08	

Other PPC permits relating to this installation		
Operator	Permit Number	Date of Issue
Dow Corning Ltd.	BR9685IX	06/06/06
Npower Cogen Ltd.	BX4135IJ	30/06/06
Vopak Terminal Windmill Ltd.	KP3734SH	01/06/06

End of Introductory Note

Notice of variation

**Environmental Permitting
(England and Wales) Regulations 2007**

Permit number

BU2110IS

The Environment Agency in exercise of its powers under Regulation 20 of the Environmental Permitting (England and Wales) Regulations 2007 (SI 2000 No 3538) varies the permit as set out below.

Cabot Carbon Limited("the operator"),

whose registered office is

Cabot Carbon Limited

Lees Lane

Stanlow

Ellesmere Port

South Wirral

L65 4HT

company registration number 462857

holds a permit to operate a regulated facility at

Barry Silicon Based Manufacturing Installation

Cabot Carbon Limited

Sully Moors Road


Sully

Vale of Glamorgan

CF64 5RP

and that permit is varied to the extent set out in Schedules 1 to 3 of this notice.

The notice shall take effect from 22nd December 2008

Name	Date
A W Leakey 	22 nd December 2008

Authorised on behalf of the Agency

Schedule 1 – conditions to be deleted

1. None.

Schedule 2 – conditions to be amended

2. Condition 1.1.1 is amended by the addition of the following
Directly associated activity to Table 1.1.1:

Table 1.1.1		
Activity listed in Schedule 1 of the PPC Regulations / Associated Activity	Description of specified activity	Limits of specified activity
Directly associated activity.	Nitrogen generation plant	Production of process nitrogen for the production processes.

3. Condition 1.4.1 is amended by the addition of the following
improvement requirements to Table 1.4.1:

Table 1.4.1: Improvement programme		
Reference	Requirement	Date
IP20	The Operator shall notify the Agency in writing upon completion of commissioning of the abatement modifications described in the application for variation EA/EPR/BU2110IS/V003	01/05/09
IP21	The Operator shall undertake a BAT review for the prevention and minimisation of formaldehyde releases from the treated silica processes upon completion and commissioning of the abatement modifications described in the application for variation EA/EPR/BU2110IS/V003. A report including proposals for implementing any additional measures identified as representing BAT shall be submitted in writing to the Agency for approval.	01/10/09
IP22	The Operator shall submit a report to the Agency demonstrating validity of the proposed surrogate method for monitoring emissions of chloromethane species described in the response to IP19. The surrogate method shall be adopted for compliance monitoring upon written approval by the Agency.	01/12/09
IP23	The Operator shall submit a report to the Agency demonstrating equivalence of the proposed FTIR monitoring methods described in the application for variation EA/EPR/BU2110IS/V003 in accordance with CEN/TS 14793 – <i>"Intralaboratory procedure for an alternative method compared to a reference method."</i>	01/12/09

4. Condition 2.1.1 is amended by the addition of the further
operating techniques to Table 2.1.1:

Table 2.1.1: Operating techniques		
Description	Parts	Date Received
Application	The response to questions 2.1 and 2.2 given in pages 4 to 31 of the application	17/08/05
Further information	Revised plan and location of sewer emission point S1	19/12/05
Further information	Update to original improvement programme	27/01/05
Further information	Update to description of release points to air	06/02/06
Further information	Revised plan and location of effluent transfer point E1	16/03/06
Variation application	The information provided in Sections C2.1, C2.2 and C2.3 of the variation application.	01/10/07
Further information	Dehumidifier design	8/11/07
Variation application	The information provided in Sections 1, 2, 3 and 4 of the variation application EA/EPR/BU2110IS/V003.	29/08/08

5. Condition 2.2.1.2 is amended to:

2.2.1.2 Emissions to air from the emission points in Table 2.2.1 shall only arise from the sources specified in that Table.

Table 2.2.1 : Emission points to air		
Emission point reference or description	Source	Location of emission point
A1	Silica production plant, acid recovery plant and vent scrubber discharges via 36m stack.	Point A1 on site plan in Application.
A2	Hydrogen production plant via 20m stack.	Point A2 on site plan in Application.
A3	Steam generation boilers via 17m stack.	Point A3 on site plan in Application.
A4	Fumed silica calciner A via 20m stack.	Point A4 on site plan in Application.
A5	Fumed silica calciner B via 20m stack.	Point A5 on site plan in Application.
A6	Central vacuum cleaning system for untreated silica via abatement.	Point A6 on site plan in Application.
A7	Central vacuum cleaning system for treated silica via abatement.	Point A7 on site plan in Application.
A8	De-aerator vent	Point A8 on site plan in Application.
A9	Silica feed tank TK26 vent via abatement.	Point A9 on site plan in Application.
A10	All bagging machines LEV via abatement.	Point A10 on site plan in Application.
A11	Treated plant silica feed tank and surge tank (until completion of IP20) vents via abatement.	Point A11 on site plan in Application.
A12	Treated silica product storage silo vent via abatement.	Point A12 on site plan in Application.
A13	Treated silica reactors, surge tank (after completion of IP20) and production separation conveying air via 12.75m stack.	Point A13 on site plan in Application.
A14	Treated plant bagging machine and JC9 vacuum pump vent via abatement.	Point A14 on site plan in Application.
A15	Untreated plant bagging machine and JC7 vacuum pump vent via abatement.	Point A15 on site plan in Application.
A16	Untreated silica bagging machines JC7, JC8, and JC12 exhaust to sweeps, treated bagging machine JC9 exhaust to sweeps, treated silica rework station to sweeps and big bagging machine LEV to sweeps vent via abatement.	Point A16 on site plan in Application.
A17	Untreated plant bagging machine JC8 vacuum pump vent via abatement.	Point A17 on site plan in Application.
A18	Untreated plant bagging machine JC12 vacuum pump vent via abatement.	Point A18 on site plan in Application.
A19	Untreated plant bagging machine JC4 vacuum pump vent via abatement.	Point A19 on site plan in Application.
A20	Untreated plant bagging machine JC5 vacuum pump vent via abatement.	Point A20 on site plan in Application.
A21	Denser JC1 vacuum pump vent via abatement.	Point A21 on site plan in Application.
A22	Denser JC6 vacuum pump vent via abatement.	Point A22 on site plan in Application.
A23	Combustion air dryer via 5m stack	Point A23 on Site plan in Variation application

6. Condition 2.2.1.3 is amended to:

2.2.1.3 The limits for emissions to air for the parameters and emission points set out in Table 2.2.2 shall not be exceeded.

Table 2.2.2 : Emission limits to air and monitoring

Emission point reference	Parameter	Limit (including Reference Period) ^{Note 1,3}	Monitoring frequency	Monitoring method
A1	Carbon monoxide	3500 mg/m ³ daily average ^{Note 2}	Continuous	BS EN15058, ASTM D6348-03 (FTIR)
A1	Oxides of nitrogen as NO ₂	50 mg/m ³ hourly average	Annually	BS EN14792, ASTM D6348-03 (FTIR)
A1	Hydrogen chloride	10 mg/m ³ hourly average	Quarterly	ASTM D 6348-03, or, BS EN 1911:1998 Parts 1 to 3, or, US EPA 26 or 26A
A1	Chlorine	10 mg/m ³ hourly average	Quarterly	US EPA Method 26 or 26A
A1	Chloromethanes ^{Note 4}	50 mg/m ³ hourly average	Quarterly	BS EN 13649 or an alternative method agreed upon completion of IP22
A2	Oxides of nitrogen as NO ₂	200 mg/m ³ hourly average	Annually	BS EN14792, ASTM D6348-03 (FTIR)
A2	Carbon monoxide	200 mg/m ³ hourly average	Annually	BS EN15058, ASTM D6348-03 (FTIR)
A13	Formaldehyde	150 g/hour	Six monthly	BS EN13649, US EPA M18 ASTM D6348-03 (FTIR)
A6, A7, A9, A10, A11, A12, A14, A15, A16, A17, A18, A19, A20, A21, A22	Particulate	No visible releases of dust with no evidence of deposition in vicinity of stack discharge	None	Not applicable

Note 1: See Section 6 for reference conditions

Note 2: Not more than one calendar monthly average during any rolling twelve month period shall exceed the limit value by more than 10%. Not more than one half hour period (commencing on the hour or half hour) during any 24 hour period shall exceed the limit value by more than 50%.

Note 3: Where spot tests are employed the above limit shall be applied over the period of the test which shall not be less than 1 hour.

Note 4: Including CH₃Cl, CH₂Cl₂, CHCl₃ and CCl₄

7. Condition 2.10.2 is amended to:

2.10.2 The Operator shall carry out environmental or other specified substance monitoring to the frequencies and methods described in Table 2.10.1

Table 2.10.1 : Other monitoring requirements

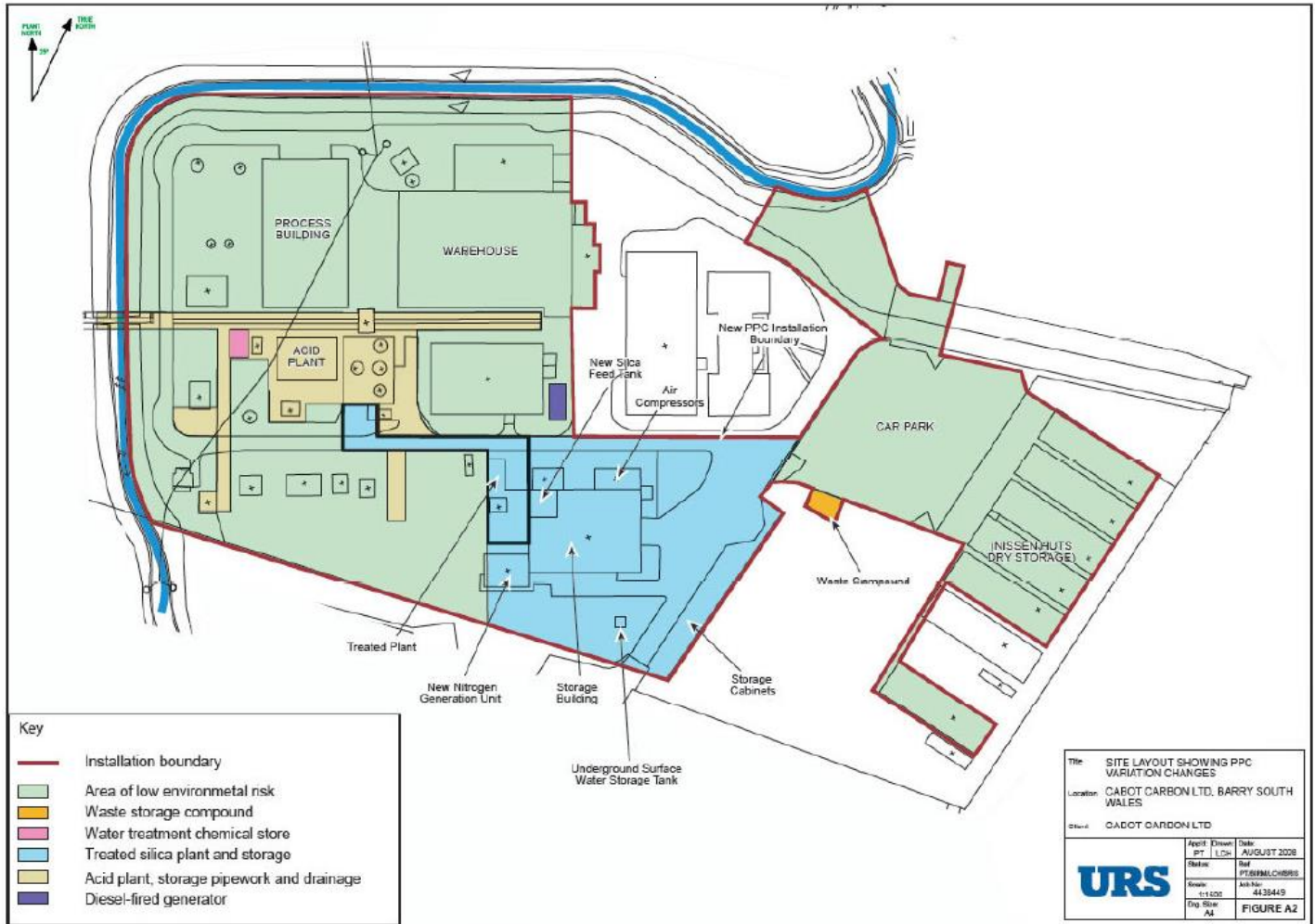
Emission point reference or source or description of point of measurement	Substance or parameter ^{Note 1}	Monitoring frequency	Monitoring method	Other specifications
A3	Oxides of nitrogen as NO ₂	Annually	BS EN14792, ASTM D6348-03 (FTIR)	None
A3	Carbon monoxide	Annually	BS EN15058, ASTM D6348-03 (FTIR)	None

8. Condition 5.1.5.1 is amended to:

5.1.5.1 where the Operator is a registered company:-

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

9. Schedule 5 – Site Plan, Figure 2 shall be amended to:



Schedule 3 – conditions to be added

10. None.