

# Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2010

---

Dow Corning Limited

Barry Silicon Based Manufacturing  
Installation  
Barry Plant  
Cardiff Road  
Barry  
Vale of Glamorgan  
CF63 2YL

Variation application number  
EPR/BR9685IX/V007

Permit number  
EPR/BR9685IX

# Barry Silicon Based Manufacturing Installation

## Permit number EPR/BR9685IX

### 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.

Schedule 1 to the Environmental Permitting Regulations has been updated by the Environmental Permitting (England and Wales) (Amendment) Regulations 2013 to reflect the implementation of the Industrial Emissions Directive into England and Wales. This variation implements the changes made to Schedule 1 of the Regulations into Table S1.1 of the permit. Table S1.1 specifies the activities authorised by the permit.

The schedules to this variation specify the changes made to the original permit.

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 BR9685IX	Received 17/08/05	
Response to request for information BR9685IX	Requests dated: 30/09/05 07/10/05 21/10/05 25/10/05 03/11/05, 9/11/05	Responses dated: 03/11/05, 12/10/05 25/10/05, 17/11/05 08/11/05 15/11/05, 17/11/05 Summary response 24/01/06, 21/02/06, 21/02/06
Request to extend determination BR9685IX	Request dated 14/12/05	Request accepted 09/01/06
Permit determined BR9685IX	06/06/06	
Application HP3138UU	Duly Made 01/05/07	
Additional information received HP3138UU		08/05/07
Response to request for additional information HP3138UU	15/05/07	30/05/07
Variation Notice HP3138UU Issued	27/06/07	
Application EPR/BR9685IX/V003	Duly Made 08/09/08	
Variation notice EPR/BR9685IX/V003 issued	19/11/08	
Application EPR/BR9685IX/V004 (PAS Ref LP3231KF)	Duly Made 07/12/09	
Additional information received EPR/BR9685IX/V004		05/02/10

Status log of the permit		
Additional information received EPR/BR9685IX/V004		08/03/10
Variation notice EPR/BR9685IX/V004 issued	08/03/10	
Application EPR/BR9685IX/V005 (PAS Ref NP3836HK)	Duly Made 24/12/10	
Additional information received EPR/BR9685IX/V005		10/02/11
Variation notice EPR/BR9685IX/V005 issued	11/03/11	
Application EPR/BR9685IX/V006	Duly Made 22/12/11	Minor technical variation to include a very low viscosity fluids (VLVF) project and an ethylene replacement project. Also to vary and update the permit to modern conditions.
Additional information received EPR/BR9685IX/V006	21/02/12	Information regarding the maintenance vent for Methyl Chloride tankers to add to the variation.
Variation determined EPR/BR9685IX/V006	22/03/12	Varied and consolidated permit issued in modern condition format.
Agency variation determined EPR/BR9685IX/V007	21/03/12	Agency variation to implement the changes introduced by IED

Other Part A installation permits relating to this installation		
Operator	Permit number	Date of issue
Cabot Carbon Ltd.	BU2110IS	31/03/06
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 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies

**Permit number**  
**EPR/BR9685IX**

**issued to:**  
**Dow Corning Limited** ("the operator")

whose registered office is

**Barry Plant**  
**Cardiff Road**  
**Barry**  
**Glamorgan**  
**CF63 2YL**

company registration number **00486170**

to operate a regulated facility at

**Barry Silicon Based Manufacturing Installation**  
**Barry Plant**  
**Cardiff Road**  
**Barry**  
**Vale of Glamorgan**  
**CF63 2YL**

to the extent set out in the schedules.

The notice shall take effect from 21/03/2013

Name	Date
Damian Matthias	21/03/2013

Authorised on behalf of the Environment Agency

## Schedule 1 – conditions to be deleted

None

## Schedule 2 – conditions to be amended

The following conditions are amended as detailed, following an Environment Agency initiated variation

- Table S1.1 is amended to reflect the changes to Schedule 1 of the Environmental Permitting Regulations introduced by the Industrial Emissions Directive. The table now reads:

Table S1.1 activities		
Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity
S4.2 A(1)(a) (i) – Producing inorganic chemicals such as gases such as ammonia, hydrogen chloride, hydrogen fluoride, hydrogen cyanide, hydrogen sulphide, oxides of carbon, sulphur compounds, oxides of nitrogen, hydrogen, oxides of sulphur, phosgene.	Natural Gas steam reformer for hydrogen production	Receipt of fuel to production and storage of hydrogen, associated cooling system and emission of combustion gases.
S3.1 B(c) – lime slaking	W806 and W1206 lime slakers.	Receipt of raw materials and storage, production of slaked lime, storage, associated emissions.
S4.1 A(1)(a)(vi) – Producing organic chemicals such as organic compounds containing halogens, such as halocarbons, halogenated aromatic compounds and acid halides.	W931 and W718 methyl chloride plant.	Receipt and storage of reactants, chemical processing and associated abatement plant, product storage, associated emissions.
S4.2 A(1)(a)(iv) – Producing inorganic chemicals such as salts, such as ammonium chloride, potassium chlorate, potassium carbonate, sodium carbonate, perborate, silver nitrate, cupric acetate, ammonium phosphomolybdate.	W307/8 phosphonitrile chloride process.	Receipt and storage of reactants, chemical processing and associated abatement plant, product storage, associated emissions.

**Table S1.1 activities**

<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity</b>
S4.2 A(1)(a)(v) – Producing inorganic chemicals such as non-metals, metal oxides, metal carbonyls or other inorganic compounds such as calcium carbide, silicon, silicon carbide, titanium dioxide.	W343 rearranger unit, W813 chlorocarbon reactor, W930/W714 fluidised bed reactors, W348 TCS/STC process, W930 DPR hydrogenolysis, W922 methylhydrogen cyclics, W410 continuous hydrolysis unit, W410/W407 vinyl polymer processes, W705/W716/W920 hydrolysis, W306/W406 silicone fluids plant, W309 silicone fluid process, W410 acetoxysilane process, W115 gum rig process, W422 polymerisation reactor process, W410 release modifier process and paper coating blenders, W410 amino polymer process, W307/W308 pilot plant, W115 catalyst unit.	
S4.7 A(1)(b) – Any activity for the manufacture of a chemical which involves the use of ammonia or may result in the release of ammonia into the air other than an activity in which ammonia is only used as a refrigerant.	W115 mixing plant	Receipt and storage of reactants, chemical processing and abatement plant, product storage, associated emissions.
S5.1 A(1)(f) – Incineration other than incidentally in the course of burning solid or liquid waste, of any gaseous compounds containing halogens in a plant that is not an incinerator or co-incinerator.	W949 Energy Recovery Unit.	Receipt of waste gases, combustion, abatement plant, associated emissions.
S5.4 A(1)(a)(i) – Disposal of non-hazardous waste in a facility exceeding 50 tonnes per day by biological treatment	W806 effluent treatment process.	Receipt, storage and treatment of process effluent and contaminated surface water, discharge to River Cadoxton.
<b>Directly Associated Activity</b>		
W424/W940 silicon grinders	Receipt of raw materials, grinding, associated abatement and emissions.	
W948/W420/W322 hot oil heaters <20MW thermal input	Production of hot oil for site and emission of combustion gases.	
W404, W406, W408, W414, W708, W801, W802, W810 tank farms	Storage of raw materials, intermediates and products, associated emissions.	
W339, W715, W911 cooling towers	Site cooling towers and associated emissions.	
W413 storm water collection sump and W411 river water filtration unit	Uncontaminated storm water run off from site and discharge to River Cadoxton.	

**Table S1.1 activities**

<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity</b>
W1205 and W1206 quench process, W805 Medusa process.	Receipt of material for quenching/encapsulation, treatment, product storage and associated emissions.	
W946 chlorosilane Recovery unit.	Receipt of silanes, treatment with HCL, despatch of chlorosilanes and associated emissions.	
W709 absorber and fridge.	Absorption of chlorosilanes.	
W945 basics refrigeration unit.	Refrigeration capacity for W930 and W941.	
W707, W717, W941 distillation processes.	Receipt of crude feedstock, distillation and despatch of refined product.	

**Schedule 3 – conditions to be added**

None