Variation notice with introductory note

Environmental Permitting (England & Wales) Regulations 2010

Newport Chemical Complex

Solutia UK Limited
Corporation Road
Newport
South Wales
NP19 4XF

Variation notice number
EA/EPR/BR9715IB/V004

Permit number

EPR/BR9715IB

Newport Chemical Complex
Permit Number EPR/BR9715IB

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.2010 No. 675 (the Regulations), gives notice of the variation of an environmental permit to operate a regulated facility.

The variation notice is issued in response to:

A request by the operator to modify the existing main site Boiler No 16. This is to be done by fitting a gas turbine and generator, which will generate approximately 4 MWe. The existing boiler (with modified burners) will be used in conjunction with the turbine as a heat recovery boiler to generate typically 19 t/h steam. In the absence of the turbine, the boiler will be capable of generating 30 t/h steam.

The Schedules specify the changes made to the original permit.

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 and Schedule 4 shows any changes to the plan.

Status Log of the permit		
Detail	**Date**	**Response Date**
Application BR9715	Received 31/03/03	
Response to request for information	Request dated 01/08/03	Response dated 12/9/03
Request to extend determination	Request dated 25/07/03	Request accepted 28/07/03
Request to extend determination	Request dated 25/11/03	Request accepted 05/12/03
Permit determined	28/01/04	
Application YP3435XB	Duly made 18/01/08	
Variation determined	17/04/08	
Variation notice YP3435XB issued	17/04/08	
Application JP3132XJ	Duly made 31/03/08	
Request for extension of determination	18/08/08	19/08/08
Variation determined	24/12/08	
Variation notice JP3132XJ issued	24/12/08	
Application EPR/BR9715IB/V004 (PAS reference No.BP3734HN)	23/12/10	Duly made 10/01/11
Variation EPR/BR9715IB/V004 issued	31/03/2011	

End of Introductory Note

Notice of variation

Environmental Permitting (England and Wales) Regulations 2010

Permit number
EPR/BR9715IB

The Environment Agency in exercise of its powers under Regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No 675) varies the permit as set out below.

Solutia UK Ltd("the operator"),

whose registered office is

Corporation Road
Newport
South Wales
NP19 4XF

company registration number 3295486

to operate a regulated facility at

Solutia UK Ltd
539 Corporation Road
Newport
South Wales
NP19 4XF

To the extent set out in the schedules.

The notice shall take effect from 31st March 2011.

Name	Date
A. Gibbs Andrew Gibbs	31st March 2011

Authorised on behalf of the Agency

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

Condition 1.4.1 is amended

by the addition of the following improvement programme items to Table 1.4.1:

Table 1.4.1: Improvement programme		
Reference	**Requirement**	**Date**
IC28	Submit a written commissioning report to the Environment Agency for approval. The report shall include: • Verification of the emissions to air compared to those used in the assessment of the application. This shall include at least 3 rounds of monitoring data in gas turbine and auxiliary mode. • Identification of any changes to the operating techniques and plant performance provided in the application • Confirmation of the percentage efficiency of the CHP Where deviations from the application have occurred, their environmental impact must be considered and if necessary, a timetable to implement appropriate remedial work must be included. The notification requirements of condition 1.4.1 will be deemed to have been complied with on submission of the report.	23rd December 2011
IC29	Submit a written report of the results of a noise survey detailing the impact of the installation of the CHP and associated plant. The survey shall be carried out at times of full operation of the CHP plant and in accordance with BS4142:1997 and Agency H3 Part 2 noise guidance. Should the assessment indicate that noise complaints are likely, options to attenuate the noise shall be proposed, for agreement with the Agency. The notification requirements of condition 1.4.1 will be deemed to have been complied with on submission of the report.	23rd December 2011

Condition 2.1.1 (Operating Techniques) shall be amended to

The Permitted Installation shall, subject to the conditions of this Permit, be operated using the techniques and in the manner described in the documentation specified in Table 2.1.1, or as otherwise agreed in writing by the Agency in accordance with conditions 1.5.1 and 1.5.2 of this Permit.

Table 2.1.1: Operating techniques

Description	Parts	Date Received
Application	The response to questions 2.1 and 2.2 given in Section 6 pages 1-32; Section 7 white pages 1-76; Section 7 green pages 1-69; Section 8 pages 1, 10-15 and 26 of the application.	31/03/03
Schedule 4 Notice	Response to questions 1, 8 and 10	12/10/03
Application for variation YP3435XB	to include the operational details of the proposed Biological Treatment Plant, as detailed in the application for variation.	18/01/08
Application EPR/BR9715IB/V004 (PAS reference No.BP3734HN)	include the operational details of the proposed CHP and ancillary equipment, as detailed in the application for variation.	10/01/11

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** (Solutia vent reference number and previous IPC Authorisation Release Point)	**Location of emission point**
A1	CHP bypass stack (-)	Turbine stack marked on Solutia Drawing No. 59665-005
A2	Boiler 14 stack (A2)	Associated with Boilerhouse Plant
A3	Boiler 15 stack (A3)	Associated with Boilerhouse Plant
A4	Boiler 16 stack (A4)	Turbine stack marked on Solutia Drawing No. 59665-005
A5	DQ1T1701 Scrub water tank (A1)	Associated with Dequest 2010 manufacturing Plant
A6	DQXT223 scrub water tank (A1)	Associated with Dequest Amino manufacturing Plant
A7	DQ1A150 PCl_3 storage (A3)	
A8	DQXA258 day tank T257 (A4)	
A9	DQXA500 recycle tank (A8)	
A10	DQXA268 Day tank T267 (A16)	
A11	SZXV307 Step-2/3 Reactor (A3)	Associated with Santicizer manufacturing Plant
A12	SZXJ416 Stripper Ejector (A5)	
A13	SZXT151 POCl3 storage (A14)	
A14	3GXJ16 Reactor (A6)	Associated with S2075 manufacturing Plant
A15	PPXT01 Benzene storage tank (A1)	Associated with Therminol manufacturing Plant
A16	PPXT101 Benzene daytank (A2)	
A17	PPXT206 Benzene Column Reflux Drum (A3)	
A18	PPXT112 Biphenyl bulk storage (A4)	
A19	PPXB121 Biphenyl flaker (A4)	
A20	PPXT205 Biphenyl buffer tank (A5)	
A21	PPXT208 Biphenyl melt tank (A5)	
A22	PPXV121 Autoclave (A5)	
A23	PPPYRO Pyrolysis furnace (A6)	
A24	PPXZ104 Biphenyl column reboiler furnace (A6)	
A25	PPXZ149 Santowax reboiler furnace (A6)	

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)[1]	Monitoring frequency	Monitoring method [5]
A1	-	-	-	-
A2 Note 2,3	Oxides of Nitrogen Expressed as NO_2	150 mg/m^3	Annual	Spot sample
A3 Note 3	Oxides of Nitrogen Expressed as NO_2	450 mg/m^3	Annual	Spot sample
A4	Oxides of Nitrogen Expressed as NO_2	75 mg/m^3	6-monthly [7] Extractive spot sample	BS EN 14792 [6]
A4	Carbon Monoxide	100 mg/m^3	6-monthly [7] Extractive spot sample	BS EN 15058 [6]
A6	HCl	10 mg/m^3	Annual	Spot sample
A6 Note 4	Chloromethane	-	Quarterly	Spot sample
A12	Phenol	5 g/hr	Quarterly	Spot sample
A12	Iso Decanol	50 g/hr	Quarterly	Spot sample
A12	Iso Octanol	50 g/hr	Quarterly	Spot sample
A15	Benzene	20g/hr	Annual	Spot sample
A16	Benzene	100g/hr	Annual	Spot sample

Note 1: See Section 6 for reference conditions

Note 2: A limit of 300 mg/m^3 shall apply when Boiler 14 is operating on back-up Kerosene fuel.

Note 3: Monitoring of this emission point is only required should the linked boiler operate for a continuous period of 14 days or more in any calendar year.

Note 4: Chloromethane measurements shall be taken annually from the four main Dequest Amino Grades, i.e. Dequest 2000; 2046; 2060 and 2066.

Note 5: Or other EN, ISO or BS method as agreed in writing by the Agency.

Note 6: All sampling shall be undertaken when both gas turbine and any supplementary firing are operating at a single load point, with the turbine at load point in excess of 70% of its maximum continuous rating, and with the waste heat boiler operating at typical levels.

Note 7: The frequency and scope of the sampling and testing shall be reviewed by the Agency following a minimum of 2 years monitoring.

Condition 2.2.1.4 is amended to:

2.2.1.4 Total emissions to air in any year of a substance listed in Table 2.2.3 shall not be exceed the relevant limit in that Table.

Table 2.2.3 Annual limits

Substance	Limit – kg
Oxides of nitrogen (from A1-A4)	20000
Oxides of sulphur (from A1-A4)	6000
Chloromethane (from A6)	42000
Phenol (from A12)	50
Benzene (from A15,A16 and A17)	800

Condition 2.2.2.4 is amended to:

2.2.2.4 The limits for the emissions to water for the parameter(s) and emission point(s) set out in Table 2.2.5 shall not be exceeded.

Table 2.2.5 : Emission limits to water and monitoring					
Emission point reference	**Parameter**	**Weekly Mass Limit (or other as defined)**	**Concentration Limit**	**Monitoring frequency**	**Monitoring method**
W1	Benzene	20 kg (as an average weekly discharge over each quarter)	-	Weekly composite	Weekly composite
W1	Biphenyl	20 kg (as an average weekly discharge over each quarter)	-	Weekly composite	Weekly composite
W1	Triphenyl	-	-	Weekly composite	Weekly composite
W1	Formaldeyde	-	10 mg/l	Weekly composite	Weekly composite
W1	Phenol	#	#	Monthly	Spot Sample
W1	COD	65000 kg/ week #		Weekly composite	Weekly composite
W1 Note c	Max volume of process effluent discharged	25000 m3/week	-	Continuous	Continuous
W1	pH	5 – 10	-	Weekly	Spot Sample Note
W1	DTA	-	-	Monthly	Weekly composite
W1 and W2 Note a, b	Cadmium	50 g	-	Monthly	Weekly composite
W1 and W2 Note a, b	Mercury	27 g	-	Weekly composite	Weekly composite
W1 and W2 Note a	PCBs Note d	100 g	-	Weekly composite	Weekly composite
W1 and W2 Note a	PCP	250 g	-	Weekly composite	Weekly composite
W1 and W2 Note a	TCB	50 g	-	Weekly composite	Weekly composite
W1 and W2	Mercury	-	1.5 µg/l	Monthly	Spot Sample for W1 Weekly composite for W2
W1 and W2	Cadmium	-	3.5 µg/l	Monthly	Spot Sample for W1 Weekly composite for W2
W1 and W2	PCP	-	150 µg/l	Monthly	Spot Sample for W1

					Weekly composite for W2
W1 and W2	TCB	-	20 µg/l	Monthly	Spot Sample for W1 Weekly composite for W2
W2	COD	500 mg/l	-	Weekly composite	Weekly composite
W2	pH	6-9	-	Continuous	Continuous

Condition 6.1.3.1 is amended to:

6.1.3.1 in relation to gases 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, 15% dry for liquid and gaseous fuels burned at gas turbines.

Schedule 3 – conditions to be added

None.

Schedule 4 - amended plan

None.