Variation Notice with introductory note

Pollution Prevention and Control (England & Wales) Regulations 2000

Newport Chemical Complex

Solutia UK Ltd
Corporation Rd
Newport
South Wales
NP19 4XF

Variation Notice Number
JP3132XJ

Permit number

BR9715IB

Newport Chemical Complex
Permit Number BR9715IB

Introductory note

This introductory note does not form a part of the permit

The following notice is issued under regulation 17 of The Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I.2000 No. 1973 (as amended) (the Regulations) to vary the conditions of a permit issued under the Regulations to operate an installation. The notice comprises schedule 1 containing conditions to be deleted, schedule 2 conditions to be amended and schedule 3 conditions to be added.

This variation is issued to allow the installation of a Biological Treatment Plant designed to treat the effluent from two site processes (Santicizer and S2075). The former process effluent contains high concentrations of residual phenol from the manufacturing process, together with lower concentrations of triphenyl phosphate and Santicizer final products. Each of these are classed as R50/R51 &R53, toxic to the marine environment. The S2075 process effluent contains a high chemical oxygen demand (COD). The Biological Treatment Plant will be sized to cope with an intended increase in production volumes of S2075 (expansion of manufacturing plant) and Santicizer (de-bottlenecking to increase throughput).

Treated effluent from the Bio Plant will be sent to the existing effluent neutralisation plant before discharge into the Severn, retaining the existing avoidance of low tide.

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	

Superseded or Partially Superseded Licences/Authorisations/Consents relating to this installation		
Holder	**Reference Number**	**Date of Issue**
Solutia UK Ltd	AA 1988	02/04/92
Solutia UK Ltd	AI 5372	11/05/94
Solutia UK Ltd	AG 6940	17/02/92
Solutia UK Ltd	AN 6787	26/10/94
Solutia UK Ltd	AK9453	10/01/94
Solutia UK Ltd	AW 6570	30/12/96
Solutia UK Ltd	BA 9711	29/06/98

End of Introductory Note

Variation Notice

Permit number
BR9715IB
Variation number
JP3132XJ

The Environment Agency (the Agency) in exercise of its powers under Regulation 17 of the Prevention and Control (England and Wales) Regulations (SI 2000 No 1973), hereby authorises ***Solutia UK Ltd*** ("the Operator"),

Whose Registered Office (or principal place of business) is
Corporation Road
Newport
South Wales
NP19 4XF

Company registration number 3295486

to operate an Installation at

Solutia UK Ltd
Corporation Road
Newport
South Wales
NP19 4XF

to the extent set out in schedules 1 to 3 of this variation notice .

The notice shall take effect from 24/12/2008

Signed	Date
	24/12/2008

Mr A W Leakey

Authorised to sign on behalf of the Agency

SCHEDULE 1 – CONDITIONS TO BE DELETED

1. None

SCHEDULE 2 – CONDITIONS TO BE AMENDED

2. The following conditions are amended as follows

Table 1.1.1 shall be modified to

Table 1.1.1

Activity listed in Schedule 1 of the PPC Regulations / Associated Activity	Description of specified activity	Limits of specified activity
Section 4.1 A(1) (a) (i): Organic Chemicals	Production of Hydrocarbons	Receipt of raw materials to despatch of finished product.
Section 4.1 A(1) (a) (ii): Organic Chemicals	Production of organic compounds containing oxygen	Receipt of raw materials to despatch of finished product.
Section 4.1 A(1) (a) (iv): Organic Chemicals	Production of organic compounds containing halogens	Receipt of raw materials to despatch of finished product.
Section 4.1 A(1) (a) (v): Organic Chemicals	Production of organic compounds containing phosphorus	Receipt of raw materials to despatch of finished product.
Section 4.2 A(1) (a) (i): Inorganic Chemicals	Production of Hydrochloric Acid	Receipt of raw materials to despatch of finished product.
Section 1.1 A(1) (a): Combustion Activities	Directly Associated Activity	Site production of steam and electricity
Section 5.3 A(1) (c) (i): Disposal of non-hazardous waste	Directly Associated Activity	Operation of Biological Effluent Treatment plant for Santicizer & S2075 processes.
Section 5.3 A(1) (c) (ii): Disposal of non-hazardous waste	Directly Associated Activity	Operation of site effluent neutralisation plant

Table 2.1.1 (Operating Techniques) shall be modified to include the operational details of the proposed Biological Treatment Plant, as detailed in the application for variation.

Table 2.2.2 (Emissions limits and monitoring) shall be modified to:

Table 2.2.2 : Emission limits to air and monitoring

Emission point reference	Parameter	Limit (including Reference Period)[1]	Monitoring frequency	Monitoring method
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 Note 3	Oxides of Nitrogen Expressed as NO_2	150 mg/m^3	Biannual	Spot sample
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.

Table 2.2.3 (Annual Limits) shall be modified to:

Table 2.2.3 Annual limits

Substance	Limit – kg
Oxides of nitrogen (from A2-A4)	35000
Oxides of sulphur (from A1-A4)	10000
Chloromethane (from A6)	42000
Phenol (from A12)	50
Benzene (from A15,A16 and A17)	800

Table 2.2.5 shall be modified to:

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 m^3/week	-	Continuous	Continuous
W1	pH	5 – 10	-	Weekly	Spot Sample Note e
W1	DTA	-	-	Monthly	Spot Sample
W1 and W2 Note a, b	Cadmium	50 g	-	Monthly	Spot Sample
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

Limits for these species will be reviewed following the submission of Improvement Condition 23.

Note a: These weekly limits apply to the total weekly emissions from the permitted installation via W1 and W2 together.

Note b: Releases of Mercury and Cadmium consist of releases from the PPC Installation (present as contaminants in raw materials used on site) and also those releases that are the result of historic land contamination.

Note c: Release of process effluent is currently excluded +/- 2hrs of low tide. This shall be increased to +/- 3hrs of low tide following completion of Improvement Condition 9 (Approval by EA of segregated surface water discharge).

Note d: See Section 6 for PCB definition.

Note e: Monitoring for pH shall become continuous by September 2009.

Table 1.4.1 (Improvement programme) shall be amended by the addition of the following improvement conditions:

IC 23:

The Operator shall provide a commissioning and performance report to the Agency following the completion of the installation of the Biological Treatment Plant. The report shall compare the operating efficiency of the plant against that specified against a typical range of product mixes. The report shall characterise typical effluent concentrations and mass releases for key species, as a minimum, Phenol, known R50/R53 species and COD. Data shall be presented in such a fashion that concentration / mass release limits in Table 2.2.5 can be reviewed and modified appropriately. The report shall also contain an assessment of the odour potential at the site boundary, downwind of the biological treatment plant.

An interim report shall be submitted to the Agency within 6 months of the installation and full commissioning of the plant. This shall be supplemented with a final report following a further 6 months of operation.

IC24:

The Operator shall provide a report to the Agency following the completion of the installation of the Biological Treatment Plant. The report shall provide a BAT appraisal of options for treatment of any biomass sludge residues from the Plant, together with timescales for implementation of any agreed option. The assessment shall take into account any pollutants shown to be adsorbed or associated with biomass sludge. Following Agency approval the chosen option shall be installed.

An interim report shall be submitted to the Agency within 6 months of the commissioning of the plant. This shall be supplemented with a final report following a further 6 months of operation.

IC25:

The Operator shall provide a study to the Agency following the completion of the installation of the Biological Treatment Plant. The study shall present findings of the toxicity assessment of the residual effluent to the Severn, using Agency-compliant Direct Toxicity Assessment studies.

The study report shall be submitted to the Agency within 6 months of commissioning of the plant.

IC26:

The Operator shall provide a report to the Agency following the completion of the installation of the Biological Treatment Plant. The report shall detail the conclusions of a Noise Assessment Study, as per BS4142. Should the report conclude that noise complaints are likely, then options for further noise abatement, including timescales, should be included.

The report shall be submitted to the Agency within 3 months of commissioning of the plant.

IC27:

The Operator shall provide a report to the Agency reviewing the environmental impact of the current levels of benzene, biphenyl and triphenyl being released to the Estuary compared to the impact from levels of those pollutants being released at the time of the application for a PPC Permit.

The report shall be submitted to the Agency by 31st March 2009.

SCHEDULE 3 – CONDITIONS TO BE ADDED

3. None