

# **Notice of variation and consolidation with introductory note**

The Environmental Permitting (England & Wales) Regulations 2010

---

Solutia UK Limited

Cefn Mawr (former Flexys 'Ruabon'  
Works)  
Wrexham  
LL14 3SL

Variation application number  
EPR/NP3335GR/V008

Consolidated permit number  
EPR/NP3335GR

# **Cefn Mawr (former Flexys 'Ruabon' Works)**

## **Consolidated permit number EPR/NP3335GR**

### **Introductory note**

**This introductory note does not form a part of the notice.**

The following notice gives notice of the variation of environmental permits EPR/NP3335GR (Permit A) and EPR/PP3231WL (Permit B) referred to in the status logs below and the replacement of those permits with a consolidated environmental permit. Both Permits A and B are held by Solutia UK Limited.

Permit A allows the operation of three carbon filtration units, which treat groundwater abstracted for reasons of slope stability. Groundwater is abstracted from two de-watering boreholes and two collection sumps. The groundwater - which contains iron and organic compounds - is passed through the carbon units to absorb trace plant-related organic compounds. The carbon filtration units do not act to remove the iron in the groundwater.

Permit B allows the operation of a Groundwater and Stormwater Storage Facility (GSSF). This facility receives water from two sources: (i) treated groundwater from the carbon filtration units; and (ii) rainwater collected by the site's surface water drainage system. Both sources of water are transferred to the GSSF via pipeline, where they are combined and held in storage tanks before being discharged to the River Dee via pipeline at the normal discharge point W1. A second discharge point - W2 (into the Tref-y-Nant Brook) - is used only when W1 is not available, for example due to maintenance.

Control and operation of the GSSF was recently transferred to Solutia UK Limited from the Air Products Electronics Advanced Materials Europe Limited (AP) permit EPR/BV2689IE via Part Transfer Notices EPR/BV2689IE/T006 and EPR/PP3231WL/T001. The transfer was required because AP have closed their Silica Manufacturing unit at the installation and intend to withdraw from the site. Takeover of operation of the GSSF by Solutia UK Limited was therefore required in order for them to be able to continue discharging groundwater and surface water from the site to the River Dee.

Prior to the closure of AP's Silica Manufacturing unit, the GSSF (which was at that point known as the Waste Water Treatment Plant (WWTP)) received effluent from this operation, in addition to receiving the treated groundwater from the carbon filtrations units and rainwater from the site's surface water drainage system. Effluent and water from all three sources was combined and subsequently treated using physical and chemical methods in the WWTP before being discharged to the River Dee. Physical and chemical treatment processes were used to remove residual silica solids in the liquor and to neutralise the silica unit effluent. The removal of the Silica Manufacturing unit effluent stream means that these physical and chemical treatment processes are no longer needed and now the only functions of the GSSF are to allow combination and storage of treated groundwater and collected rainwater from the site.

As well as consolidating the two permits, this variation also makes changes that are required as a result of the decommissioning of the Silica Manufacturing unit, including changes to the requirements for monitoring emissions from the GSSF. Monitoring requirements for the discharge from the carbon filtration units have been reduced where consistent compliance with emission limits has been demonstrated. The testing frequency requirements of the groundwater and surface water monitoring programme have also been reduced due to consistent compliance. Some administrative changes have also been incorporated.

A full list of the changes that have been incorporated as part of this variation and consolidation is given below:

- (a) Renaming of the GSSF from Waste Water Treatment Plant to reflect the fact that effluent from the Silica Manufacturing unit no longer forms part of the liquor received at the facility;
- (b) Reclassification of the GSSF from a listed activity to a Directly Associated Activity, due to the fact that there is no longer a need to physically or chemically treat the waters received at the GSSF as the Silica Manufacturing effluent stream has been removed;
- (c) Changes to the requirements for monitoring the discharged water from the GSSF at the W1 and W2 emission points due to removal of the manufacturing source (Silica Production) of the relevant parameters, including:
  - (i) Removal of the requirement to monitor pH, biological oxygen demand, chemical oxygen demand, suspended solids, total zinc nitrogen and sulphate;
  - (ii) Reclassification of the total iron emission limit to an objective level of 5 mg/l, using an in-house testing method for the analysis on a weekly basis, and sampled and analysed following British Standards on a quarterly basis;
  - (iii) Reclassification of the monitoring frequencies for total phenol, total tetrachloroethene, total organic carbon and micropollutants to once a quarter;
- (b) Removal of the air emission points A8 to A11;
- (d) Decreasing the frequency of the surface and groundwater monitoring programme to twice a year;
- (e) Rationalisation of the references to phenol monitoring across all tables in Schedule 4 where phenol monitoring is required. All monitoring references are now to 'total phenol' as the parameter, and 'SCA Blue Book 50 ISBN 011751671' as the monitoring standard;
- (f) Decreasing the frequency of monitoring for the groundwater carbon filter outlets to twice per year, and removal of the associated emission limits;
- (g) Removal of the requirement to monitor levels of micropollutants at the River Dee Upstream and Downstream monitoring points;
- (h) Decreasing the frequency of monitoring for total phenol and total organic carbon at the Tref-y-Nant Brook and Pontcysyllte Adit, Middle and South De-watering Boreholes Brook Culvert and Road Culvert Sumps, Rhosymedre Quarry Leachate and Groundwater Borehole (B3) monitoring points to twice yearly;
- (i) Alteration of the site name to 'Cefn Mawr (former Flexys 'Ruabon' Works)';
- (j) Alteration of the monitoring standard for total organic carbon to BS EN 1484 or SCA blue book 157 ISBN 0117529796 across all tables; and

- (k) Minor amendment to the wording of the monitoring standard references for micro-pollutants to 'Solvent extraction with analysis by GC-MS (VOC and SVOC) across all tables.

The schedules specify the changes made to the permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

**Status log of Permit A: EPR/NP3335GR**

<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application BQ4173	Received 14/08/03	
Additional information	Received Nov.03-Jan.04	Further Site Report information
Additional information	Received 16/12/03	Releases to air
Additional information	Received 11/12/03, 09/01/04	Hertel Services lease & location
Additional information	Received 30/01/04	Units and minor operational changes
Additional information	Received 05/03/04	Impact of released copper from Syton ion-exchange unit
Additional information	Received 05/03/04	Site plan
Additional information	Received 23/03/04, 01/04/04	Cadmium and Mercury in effluent
Permit BQ4173 determined	13/04/04	
Variation DP3232MG	Received 11/12/06	
Additional information	Received 26/02/07, 26/02/07, 16/03/07	H2S abatement and limits
Additional information	Received 07/03/07	Waste Water Treatment Plant operation
Additional information	Received 14/05/07	Drg.88CO1027 (revB)
Variation DP3232MG determined	24/05/07	
Transfer EPR/NP3335GR/T001	Received 22/10/08	
Transfer EPR/NP3335GR/T001	Effective 23/12/08	
Variation application EPR/NP3335GR/V002 received	29/11/08	
Additional information received	03/12/08	Abstractor meeting notes
Additional information received	08/12/08	Fish toxicity of organic chemicals
Additional information received	12/12/08	Effluent monitoring
Additional information received	17/12/08	Drg. 88/C01/048 and Taste & Odour
Additional information received	22/12/08	Water testing and GCMS
Additional information received	12/01/09	Analytical methods BS numbering and updated Part A form

Additional information received	14/01/09	Site organisation – Spring 2009
Variation EPR/NP3335GR/V002 determined	19/01/09	
Application EPR/NP3335GR/T003 (partial transfer of permit EPR/NP3335GR	Duly Made 08/06/09	
Environment Agency request to extend determination date to 01/09/09	17/07/09	
Additional information received	20/07/09	Revised drg. 88C01050 (rev.1) & new cover letter extending transfer area
Extension request agreed	22/07/09	
Schedule 5 Request for further information	Sent 04/08/09	
Additional Information Received	06/08/09	Response to Schedule 5 Notice
Partial transfer determined EPR/NP3335GR	31/08/09	
Environment Agency Led Variation EP3035TW (EPR/NP3335GR/V004), initiated	30/03/10	
Variation Notice EPR/NP3335GR/V004 issued	01/04/10	
Application EPR/NP3335GR/S005 (partial surrender of permit EPR/NP3335GR)	Duly Made 05/05/10	
Partial Surrender Notice EPR/NP3335GR/S005 issued	03/11/10	
Environment Agency Led Variation (EPR/NP3335GR/V006) initiated	31/07/12	Emission limit for Fe discharge from the outlet of the carbon filters reversed to an objective level
Environment Agency Led Variation determined EPR/NP3335GR/V006 Permit EPR/NP3335GR	26/10/12	Varied permit issued
Agency variation determined EPR/NP3335GR/V007	25/03/13	Agency variation to implement the changes introduced by IED
Application EPR/MP3335GR/V008 (variation and consolidation)	Duly made 11/12/14	Application to vary and update the permit to modern conditions.

Variation determined	23/06/15	Varied and consolidated permit issued in modern condition format
----------------------	----------	--

**Status log of Permit B: EPR/PP3232WL**

<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application BV2689	Received 14/08/03	
Additional Information	Received Nov. 03- Jan.04	Further Site Report information
Additional Information	Received 17/12/03	Ion exchange vessel proposal
Additional Information	Received 22/01/04	Report of emissions sampling
Additional Information	Received 26/01/04	Pilot line proposal
Additional Information	Received 05/03/04	Site plan
Additional Information	Received 12/03/04	Energy information
Permit BV2689IE	13/04/04	
Variation YP3931MV	Received 12/01/07	
Variation YP3931MV	06/06/07	
Application EPR/BV2689IE/V003	Duly Made 05/06/09	
Schedule 5 Request for Further Information	Sent 07/08/09	
Additional Information	Received 14/08/09	Response to Schedule 5 Notice, MSDSs for boiler water treatment chemicals
Additional Information	Received 21/08/09 & 24/08/09	Noise attenuation calculations for boilers and air compressors
Variation Notice determined EPR/BV2689IE/V003	01/09/09	Addition of 2 new gas-fired package boilers and 2 new air compressors
Variation and consolidation application EPR/BV2689IE/V004 – consolidation with EPR/FP3939KF	Duly Made 08/06/09	
EA request to extend determination date to 31/10/09	Sent 04/09/09	
Extension request agreed	Received 04/09/09	
EA request to extend determination date to 30/11/09	Sent 11/11/09	
EA request for further information	Sent 11/11/09	



Extension request agreed	Received 13/11/09	
Additional Information	Received 13/11/09	Monthly performance data for Chemical Oxygen Demand, Free Cyanide, Monohydric Phenols, Sodium Acetate, TMAH and DTPA
EA request to extend determination date to 26/02/10	Sent 28/01/10	
Extension request agreed	Received 29/01/10	
EA request to extend determination date to 26/03/10	Sent 24/02/10	
Extension request agreed	Received 24/02/10	
EA request for further information	Sent 24/02/10	
Additional Information	Received 03/03/10	Interpretation of past monitoring results
EA request to extend determination date to 24/04/10	Sent 26/03/10	
Extension request agreed	Received 29/03/10	
EA request for further information	Sent 23/04/10	
Additional Information	Received 23/04/10 & 30/04/10	Sulphate monitoring data
EA request to extend determination date to 30/04/10	Sent 26/04/10	
Extension request agreed	Received 27/04/10	
EA request to extend determination date to 07/05/10	Sent 05/05/10	
Extension request agreed	Received 06/05/10	
Variation and consolidation determined – consolidated permit number EPR/BV2689IE/V004	07/05/10	
Agency variation determined EPR/BV2689IE/V005	22/03/13	Agency variation to implement the changes introduced by IED

Application EPR/PP3231WL/T001 (part transfer of permit EPR/BV2689IE)	Duly made 11/12/14	Application to transfer effluent treatment plant and final discharge line to the River Dee to Solutia UK Ltd.
Part Transfer determined EPR/BV2689IE/T006	02/04/15	
Part Transfer (New Operator) determined EPR/PP3231WL/T001 Permit number EPR/PP3231WL	02/04/15	Part transfer of effluent lines, effluent treatment plant and final discharge line to River Dee complete.
Application EPR/MP3335GR/V008 (variation and consolidation)	Duly made 11/12/14	Application to vary and update the permit to modern conditions.
Variation determined	23/06/15	Varied and consolidated permit issued in modern condition format

#### **Other Part A installation permits relating to installation A**

<b>Operator</b>	<b>Permit number</b>	<b>Date of issue</b>
Air Products Electronics Advanced Materials Europe Limited	EPR/BV2689IE	13/04/04

End of introductory note

## Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2010

The Natural Resources Body for Wales ("Natural Resources Wales") in exercise of its powers under regulations 18 and 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates environmental permits

Permit numbers  
**EPR/NP3335GR**  
**EPR/PP3231WL**

issued to  
**Solutia UK Limited** ("the operator")

whose registered office is  
**Corporation Road**  
**Newport**  
**South Wales**  
**NP19 4XF**

company registration number **03295486**

to operate regulated facilities at

**Eastman**  
**Cefn Mawr (former Flexys 'Ruabon' Works)**  
**Wrexham**  
**LL14 3SL**


to the extent set out in the schedules.

The notice shall take effect from 23/06/2015

**The number of the consolidated permit is EPR/NP3335GR**

Name

Date

	<b>23/06/2015</b>
---	-------------------

Eirian Macdonald, Principal Permitting Team Leader, NRW Permitting Service

Authorised on behalf of Natural Resources Wales

### **Schedule 1 – changes in the permit**

**Note:** The conditions numbers used in this schedule refer to those in the consolidated permit.

All conditions have been varied by the consolidated permit as a result of the application made by the operator.

### **Schedule 2 – consolidated permit**

Consolidated permit issued as a separate document.