

Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2010

Solutia UK Limited

Ruabon Chemical Works
Former Flexsys Works
Cefn Mawr
Wrexham
LL14 3SL

Variation application number

EPR/NP3335GR/V006

Permit number

EPR/NP3335GR

	INITIALS	DATE
OK FOR PUBLIC REGISTER	BZK	7/11/12
COPIED TO PUBLIC REGISTER	JB	10/11/12

Ruabon Chemical Works

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 an environmental permit.

Solutia UK Limited operate three carbon filter units to treat contaminated groundwater which is abstracted for reasons of slope stability and to prevent the escape of the contaminated groundwater to surface water via other routes.

Iron (Fe) is a major component of the abstracted groundwater. Solutia UK Limited are required to monitor iron and other parameters at the outlet of three carbon filters to confirm that the groundwater is acceptable for discharge into the site Waste Water Treatment Plant (WWTP) operated by DA NanoMaterials Ltd. The primary function of the active carbon units is to absorb trace plant-related organic compounds in the groundwater. The activated carbon units are not designed to remove iron. Recent monitoring has confirmed that the majority of the iron is removed in the WWTP. The Solutia UK Limited permit originally contained an effluent monitoring program, which set an objective level for iron, rather than an absolute compliance limit. The purpose of the effluent monitoring program was to confirm the effectiveness of the carbon filters against the objective levels and to monitor breakthrough of iron from the filters.

In November 2010, the Solutia UK Ltd permit was formally partially surrendered. The only activity continuing to be listed was the treatment of groundwater by activated carbon. However, as there was some uncertainty over the future of the WWTP (DA NanoMaterials Ltd were intending to surrender their permit in 2013), the objective levels in the effluent monitoring program were changed to limits to ensure that emissions from the units remained within acceptable limits.

This variation authorises the reversal of the discharge limit for iron (Fe) from an emission limit value (ELV) to an objective level. This is required because the timescale associated with the DA NanoMaterials Ltd permit surrender has now changed, with the surrender now likely to take place at a later date. There is no change in environmental impact associated with this variation, because the change is purely administrative.

The schedules 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 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 & 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 application EPR/NP3335GR/T001 received	22/10/08	
Transfer application 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

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/NP3335GR

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

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

company registration number 03295486

to operate a regulated facility at

Ruabon Chemical Works
Former Flexsys Works
Cefn Mawr
Wrexham
LL14 3SL

to the extent set out in the schedules.

The notice shall take effect from 26/10/2012

Name	Date
Eirian Macdonald	26/10/2012

Principal Permitting Team Leader, National Permitting Service

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 S3.1 shall be amended to:

Table S3.1 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements						
Emission point ref. & location	Parameter	Source	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
Ground Water Carbon Filter	Micro-pollutants	Outlet of any of the 3 Carbon Filters	Two consecutive weekly or resample results not to exceed: Hydroxy-Benzo-Thiazole = 20ppb Flectol A = 2ppb Others = 2 ppb	For 95% of all measured values of periodic samples taken over one month	Weekly	Gas chromatography -mass spectrometry - SCA blue book 50. ISBN 0117516171 HPLC with electrochemical detector
Ground Water Carbon Filter	Iron	Outlet of any of the 3 Carbon Filters	No Limit Set ⁽¹⁾	For 95% of all measured values of periodic samples taken over one month	Weekly	BS EN ISO 11885:1998 BS EN ISO 17294- 2:2004
Ground Water Carbon Filter	Phenol - Monohydric	Outlet of any of the 3 Carbon Filters	0.2 mg/l	For 95% of all measured values of periodic samples taken over one month	Weekly	Gas chromatography -mass spectrometry - SCA blue book 50. ISBN 0117516171 HPLC with electrochemical detector
⁽¹⁾ An objective level of 25mg/l has been set to monitor effectiveness of carbon filters and detect Fe breakthrough from the outlet of the filters.						

Table S4.2 shall be amended to:

Table S4.2 Reporting forms		
Media/parameter	Reporting format	Date of form
Water and Land	Form water 1	26/10/2012

Schedule 3 – conditions to be added

None