

EASTMAN

Cefn Mawr

8th April 2015

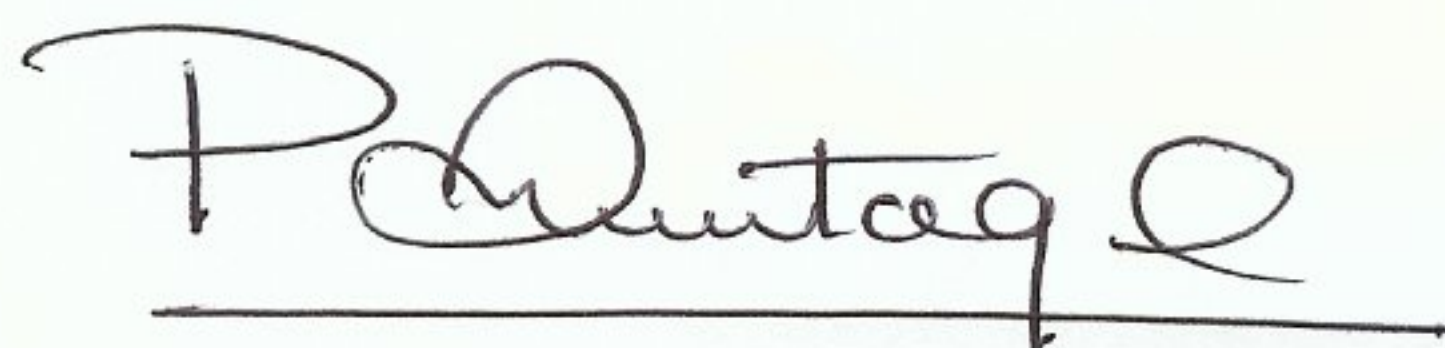
Ian Oakes
Natural Resources Wales
Chester Road
Buckley
Flintshire
CH7 3AJ

Dear Ian,

Re: Permit No: EPR/NP3335GR
Reporting of Monitoring Data

Please find enclosed the Monitoring Data Report for the period 01/01/2015 to 31/03/2015.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'P. Armitage', with a horizontal line underneath.

P. Armitage

WTP Production Engineer

Permit Number: EPR/NP3335GR

Operator:

Solutia UK Limited

Facility: Ruabon Chemical Works

Form Number: Water 1

Reporting of Emissions to Water (other than to Sewer) for the period from 01/01/2015 to 31/03/2015

Emissions to Water

Emission Point	Substance/Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
Pontcysyllte Adit (Note 1)	Total Organic Carbon (TOC) mg/l	No Limit	Quarterly	2.41	TOC Analysis using Hach Lange Tubes	16/03/2015 11:00:00	
	Total Phenol (mg/l)	No Limit	Quarterly	0.01	HPLC with Electrochemical Detector	19/01/2015 11:00:00	Method uncertainty is ± 0.007 mg/l at 0.06 mg/l
	Micro Pollutants (ppb)	No Limit	Quarterly	0	Solvent Extraction with analysis by GCMS		See repeatability data for micropollutants
	2,4 Dimethylphenol		Quarterly	0			
	2,6 Dimethylphenol		Quarterly	0			
	Aniline		Quarterly	0			
	Benzothiazole		Quarterly	0			
	Hydroxybenzothiazole		Quarterly	0			
	2,4-Dichloroaniline		Quarterly	0			
	2,4-Dichlorophenol		Quarterly	0			
	4-Ethylmorpholine		Quarterly	0			
	Flectol A		Quarterly	0			
	Methyl Benzothiazole		Quarterly	0			
	O-Cresol		Quarterly	0			
	O-phenetidine		Quarterly	0			
	P-Cresol		Quarterly	0			
	Phenylisocyanate		Quarterly	0			
	P-Phenetidine		Quarterly	0			
	Sulphur (Mol)		Quarterly	0			
	Tetrachloroethylene		Quarterly	0			
	2,4,6 Trichlorophenol		Quarterly	0			
	Toluene		Quarterly	0			
	Xylene		Quarterly	0			

Note 1: This is an off-site environmental monitoring condition

[1] The result is maximum value (or the minimum value in the case of a limit expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum - maximum' measured values

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. colorimetry.

[3] For non continuous measurements the date and time of the sample that produced the result is given. For continuous measurements, or flow/time proportional samples the percentage of the process operating time covered by the monitoring is given.

[4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated. The following uncertainties are quoted on a different basis as stated

Signed:



(authorised to sign as representative of the Operator)

Date:

08/04/2015

Permit Number: EPR/NP3335GR

Facility: Ruabon Chemical Works

Reporting of Emissions to Water (other than to Sewer) for the period from 01/01/2015 to 31/03/2015

Operator:

Solutia UK Limited

Form Number: Water 1

Emissions to Water

Emission Point	Substance/Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
Trefnant Brook (Note1)	Total Organic Carbon (TOC) mg/l	No Limit	Quarterly	5.43	TOC Analysis using Hach Lange Tubes	16/02/2015 11:00:00	
	Total Phenol (mg/l)	No Limit	Quarterly	0.01	HPLC with Electrochemical Detector	19/01/2015 11:00:00	Method uncertainty is ± 0.007 mg/l at 0.06 mg/l
	Micro Pollutants (ppb)	No Limit			Solvent Extraction with analysis by GCMS		See repeatability data for micropollutants
	2,4-Dimethylphenol		Quarterly	0			
	2,6-Dimethylphenol		Quarterly	0			
	Aniline		Quarterly	0			
	Benzothiazole		Quarterly	0			
	Hydroxybenzothiazole		Quarterly	0			
	2,4-Dichloroaniline		Quarterly	0			
	2,4-Dichlorophenol		Quarterly	0			
	4-Ethylmorpholine		Quarterly	0			
	Flectol A		Quarterly	0			
	Methyl Benzothiazole		Quarterly	0			
	O-Cresol		Quarterly	0			
	O-phenetidine		Quarterly	0			
	P-Cresol		Quarterly	0			
	Phenylisocyanate		Quarterly	0			
	P-Phenetidine		Quarterly	0			
	Sulphur (Mo)		Quarterly	0			
	Tetrachloroethylene		Quarterly	0			
	2,4,6 Trichlorophenol		Quarterly	0			
	Toluene		Quarterly	0			
	Xylene		Quarterly	0			

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Emissions to Water							
Emission Point	Substance/Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
Factory Borehole Middle (Note 1)	Total Organic Carbon (TOC) mg/l	No Limit	Quarterly	8.12	TOC Analysis using Hach Lange Tubes	23/03/2015 09:00:00	
	Total Phenol (mg/l)	No Limit	Quarterly	0.03	HPLC with Electrochemical Detector	23/03/2015 09:00:00	Method uncertainty is ± 0.007 mg/l at 0.06 mg/l
	Micro Pollutants (ppb)	No Limit			Solvent Extraction with analysis by GCMS		See repeatability data for micropollutants
	2,6 Dimethylphenol		Quarterly	0			
	4-Acetylmorpholine		Quarterly	0			
	Aniline		Quarterly	0			
	Hydroxybenzothiazole		Quarterly	1751		23/03/2015 09:00:00	
	2,4-Dichloroaniline		Quarterly	0			
	2,4-Dichlorophenol		Quarterly	0			
	Ethoxybenzene		Quarterly	0			
	4-Ethylmorpholine		Quarterly	0			
	Flectol A		Quarterly	8		26/01/2015 09:00:00	
	O-phenetidine		Quarterly	101		26/01/2015 09:00:00	
	Phenyl Salicylate		Quarterly	0			
	Phthalimide		Quarterly	0			
	P-Phenetidine		Quarterly	200		26/01/2015 09:00:00	
	Tetrachloroethylene		Quarterly	0			
	2,4,6 Trichlorophenol		Quarterly	0			
	Toluene		Quarterly	0			
	Xylene		Quarterly	0			

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- [2] Where an internationally recognised standard test method is used the reference number is given. Where another method has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. colorimetry.
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Facility: Ruabon Chemical Works

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Emissions to Water

Emission Point	Substance/Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
Factory Borehole South (Note 1)	Total Organic Carbon (TOC) mg/l	No Limit	Quarterly	7.03	TOC Analysis using Hach Lange Tubes	23/03/2015 09:00:00	
	Total Phenol (mg/l)	No Limit	Quarterly	0.03	HPLC with Electrochemical Detector	23/03/2015 09:00:00	Method uncertainty is ± 0.007 mg/l at 0.06 mg/l
	Micro Pollutants (ppb)	No Limit			Solvent Extraction with analysis by GCMS		See repeatability data for micropollutants
	2,6 Dimethylphenol		Quarterly	0			
	4-Acetylmorpholine		Quarterly	0			
	Aniline		Quarterly	0			
	Hydroxybenzothiazole		Quarterly	3649		23/02/2015 09:00:00	
	2,4-Dichloroaniline		Quarterly	0			
	2,4-Dichlorophenol		Quarterly	0			
	Ethoxybenzene		Quarterly	0			
	4-Ethylmorpholine		Quarterly	0			
	Flectol A		Quarterly	37		23/03/2015 09:00:00	
	O-phenetidine		Quarterly	6		23/02/2015 09:00:00	
	Phenyl Salicylate		Quarterly	0			
	Phthalimide		Quarterly	0			
	P-Phenetidine		Quarterly	0			
	Tetrachloroethylene		Quarterly	0			
	2,4,6 Trichlorophenol		Quarterly	0			
	Toluene		Quarterly	0			
	Xylene		Quarterly	0			

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Emissions to Water

Emission Point	Substance/Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]		Uncertainty ^[4]
Brook Culvert Sump (Note 1)	Total Organic Carbon (TOC) mg/l	No Limit	Quarterly	12	TOC Analysis using Hach Lange Tubes	12/01/2015	09:30:00	
	Total Phenol (mg/l)	No Limit	Quarterly	0.03	HPLC with Electrochemical Detector	09/02/2015	09:30:00	Method uncertainty is ± 0.007 mg/l at 0.06 mg/l
	Micro Pollutants (ppb)	No Limit			Solvent Extraction with analysis by GCMS			See repeatability data for micropollutants
	2,4-Dimethylphenol		Quarterly	0				
	2,6-Dimethylphenol		Quarterly	0				
	Aniline		Quarterly	0				
	Benzothiazole		Quarterly	0				
	Hydroxybenzothiazole		Quarterly	4539		09/03/2015	09:30:00	
	2,4-Dichloroaniline		Quarterly	0				
	2,4-Dichlorophenol		Quarterly	0				
	4-Ethylmorpholine		Quarterly	0				
	Flectol A		Quarterly	87		09/03/2015	09:30:00	
	Methyl Benzothiazole		Quarterly	3		09/03/2015	09:30:00	
	O-Cresol		Quarterly	0				
	O-phenetidine		Quarterly	153		09/03/2015	09:30:00	
	P-Cresol		Quarterly	0				
	Phenylisocyanate		Quarterly	0				
	P-Phenetidine		Quarterly	2529		09/03/2015	09:30:00	
	Sulphur (Mol)		Quarterly	0				
	Tetrachloroethylene		Quarterly	0				
	2,4,6 Trichlorophenol		Quarterly	0				
	Toluene		Quarterly	0				
	Xylene		Quarterly	0				

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Facility: Ruabon Chemical Works

Form Number: Water 1

Reporting of Emissions to Water (other than to Sewer) for the period from 01/01/2015 to 31/03/2015

Emissions to Water							
Emission Point	Substance/Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
Road Culvert Sump (Note1)	Total Organic Carbon (TOC) mg/l	No Limit	Quarterly	7.11	TOC Analysis using Hach Lange Tubes	09/02/2015 09:30:00	
	Total Phenol (mg/l)	No Limit	Quarterly	0.01	HPLC with Electrochemical Detector	12/01/2015 09:30:00	Method uncertainty is ± 0.007 mg/l at 0.06 mg/l
	Micro Pollutants (ppb)	No Limit			Solvent Extraction with analysis by GCMS		See repeatability data for micropollutants
	2,4-Dimethylphenol		Quarterly	0			
	2,4,6-Dimethylphenol		Quarterly	0			
	Aniline		Quarterly	0			
	Benzothiazole		Quarterly	0			
	Hydroxybenzothiazole		Quarterly	0			
	2,4-Dichloroaniline		Quarterly	0			
	2,4-Dichlorophenol		Quarterly	0			
	4-Ethylmorpholine		Quarterly	0			
	Flectol A		Quarterly	0			
	Methyl Benzothiazole		Quarterly	0			
	O-Cresol		Quarterly	0			
	O-phenetidine		Quarterly	0			
	P-Cresol		Quarterly	0			
	Phenylisocyanate		Quarterly	0			
	P-Phenetidine		Quarterly	0			
	Sulphur (Mol)		Quarterly	0			
	Tetrachloroethylene		Quarterly	0			
	2,4,6 Trichlorophenol		Quarterly	0			
	Toluene		Quarterly	0			
	Xylene		Quarterly	0			

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Solutia UK Limited

Facility: Ruabon Chemical Works

Form Number: Water 1

Reporting of Emissions to Water (other than to Sewer) for the period from 01/01/2015 to 31/03/2015

Emissions to Water							Uncertainty [5]
Emission Point	Substance/ Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	
Rhosymedre Quarry Leachate (Note 1)	Total Organic Carbon (TOC) mg/l	No Limit	Quarterly	57.2	TOC Analysis using Hach Lange Tubes	02/03/2015 11:00:00	Method uncertainty is ± 0.007 mg/l at 0.06 mg/l
	Total Phenol (mg/l)	No Limit	Quarterly	0.06	HPPLC with Electrochemical Detector	05/01/2015 11:00:00	
	Micro Pollutants (ppb)	No Limit			Solvent Extraction with analysis by GCMS		See repeatability data for micropollutants
	2,6-Dimethylphenol		Quarterly	0			
	4-Acetylmorpholine		Quarterly	24		05/01/2015 11:00:00	
	Aniline		Quarterly	0			
	Hydroxybenzothiazole		Quarterly	4610		02/03/2015 11:00:00	
	2,4-Dichloroaniline		Quarterly	0			
	2,4-Dichlorophenol		Quarterly	0			
	Dimorpholinyl Ketone		Quarterly	0			
	Ethoxybenzene		Quarterly	55		02/03/2015 11:00:00	
	4-Ethylmorpholine		Quarterly	28.2		02/03/2015 11:00:00	
	Flectol A		Quarterly	25		02/03/2015 11:00:00	
	Methyl Benzothiazole		Quarterly	24		05/01/2015 11:00:00	
	O-phenetidine		Quarterly	805		02/03/2015 11:00:00	
	Phenyl Salicylate		Quarterly	0			
	Phthalimide		Quarterly	0			
	P-Phenetidine		Quarterly	7434		05/01/2015 11:00:00	
	Sulphur (Mol)		Quarterly	0			
	Tetrachloroethylene		Quarterly	0			
	2,4,6-Trichlorophenol		Quarterly	0			
	Toluene		Quarterly	0			
	Xylene		Quarterly	0			

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Date:

08/04/2015

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Operator:

Solutia UK Limited

Facility: Ruabon Chemical Works

Form Number: Water 1

Reporting of Emissions to Water (other than to Sewer) for the period from 01/01/2015 to 31/03/2015

Emissions to Water						
Emission Point	Substance/Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]
Rhosymedre Quarry b/h B3 (Note 1)	Total Organic Carbon (TOC) mg/l	No Limit	Quarterly	28.6	TOC Analysis using Hach Lange Tubes	05/01/2015 11:00:00
	Total Phenol (mg/l)	No Limit	Quarterly	0.03	HPPLC with Electrochemical Detector	02/03/2015 11:00:00
	Micro Pollutants (ppb)	No Limit			Solvent Extraction with analysis by GCMS	
	2,6-Dimethylphenol		Quarterly	0		
	4-Acetylmorpholine		Quarterly	0		
	Aniline		Quarterly	0		
	Hydroxybenzothiazole		Quarterly	492		05/01/2015 11:00:00
	2,4-Dichloroaniline		Quarterly	0		
	2,4-Dichlorophenol		Quarterly	0		
	Dimorpholinyl Ketone		Quarterly	0		
	Ethoxybenzene		Quarterly	10.7		02/03/2015 11:00:00
	4-Ethylmorpholine		Quarterly	0		
	Flectol A		Quarterly	0		
	Methyl Benzothiazole		Quarterly	9		02/02/2015 11:00:00
	O-phenetidine		Quarterly	0		
	Phenyl Salicylate		Quarterly	0		
	Phthalimide		Quarterly	0		
	P-Phenetidine		Quarterly	0		
	Sulphur (Mo)		Quarterly	0		
	Tetrachloroethylene		Quarterly	0		
	2,4,6-Trichlorophenol		Quarterly	0		
	Toluene		Quarterly	0		
	Xylene		Quarterly	0		

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Emissions to Water						
Emission Point	Substance/Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]
River Dee Upstream (Note 1)	Micro Pollutants (ppb)	No Limit			Solvent Extraction with analysis by GCMS	
	Aniline		Quarterly	0		
	Benzothiazole		Quarterly	0		
	2,4-Dichlorophenol		Quarterly	0		
	Dimorpholinyl Ketone		Quarterly	0		
	Ethoxybenzene		Quarterly	0		
	4-Ethylmorpholine		Quarterly	0		
	Flectol A		Quarterly	0		
	Methyl BTH Sulphone		Quarterly	0		
	Methyl Sulphyl BTH		Quarterly	0		
	Methyl-4-morpholinocarbothioate		Quarterly	0		
	O-Cresol		Quarterly	0		
	P-Cresol		Quarterly	0		
	Phenylisothiocyanate		Quarterly	0		
	Phthalimide		Quarterly	0		
	Tetrachloroethylene		Quarterly	0		
	2,4,6 - Trichlorophenol		Quarterly	0		
	Toluene		Quarterly	0		
	Xylene		Quarterly	0		

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- [3] For non continuous measurements the date and time of the sample that produced the result is given. For continuous measurements, or flow/time proportional samples the percentage of the process operating time covered by the monitoring is given.
- [4] The accreditation status of the equipment and/or the monitoring organisation, as appropriate, for the methods used for both sampling and analysis.
- [5] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated. The following uncertainties are quoted on a different basis (basis as stated).

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Emissions to Water						
Emission Point	Substance/Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]
River Dee Downstream (Note 1)	Micro Pollutants (ppb)	No Limit			Solvent Extraction with analysis by GCMS	
	Aniline		Quarterly	0		
	Benzothiazole		Quarterly	0		
	2,4-Dichlorophenol		Quarterly	0		
	Dimorpholinyl Ketone		Quarterly	0		
	Ethoxybenzene		Quarterly	0		
	4-Ethylmorpholine		Quarterly	0		
	Flectol A		Quarterly	0		
	Methyl BTH Sulphone		Quarterly	0		
	Methyl Sulphyl BTH		Quarterly	0		
	Methyl-4-morpholinocarbodithioate		Quarterly	0		
	O-Cresol		Quarterly	0		
	P-Cresol		Quarterly	0		
	Phenylisothiocyanate		Quarterly	0		
	Phthalimide		Quarterly	0		
	Tetrachloroethylene		Quarterly	0		
	2,4,6 - Trichlorophenol		Quarterly	0		
	Toluene		Quarterly	0		
	Xylene		Quarterly	0		

Note 1: This is an off-site environmental monitoring condition

- [1] The result is maximum value (or the minimum value in the case of a limit expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum - maximum' measured values
- [2] Where an internationally recognised standard test method is used the reference number is given. Where another method has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. colorimetry.
- [3] For non continuous measurements the date and time of the sample that produced the result is given. For continuous measurements, or flow/time proportional samples the percentage of the process operating time covered by the monitoring is given.
- [4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated. The following uncertainties are quoted on a different basis (basis as stated).

Signed:


(authorised to sign as representative of the Operator)

Date:

08/04/2015

Permit Number: EPR/NP3335GR

Operator:

Solutia UK Limited

Facility: Ruabon Chemical Works

Form Number: Water 1

Reporting of Emissions to Water (other than to Sewer) for the period from 01/01/2015 to 31/03/2015

Emissions to Water							
Emission Point	Substance/Parameter	Emission Limit Value	Reporting Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
Ground Water Carbon Filter (Brook & Road Culvert)	Total Phenol (mg/l)	0.2	Quarterly	0.01	HPLC with Electrochemical Detector	05/01/2015 09:00:00	Method uncertainty is ± 0.007 mg/l at 0.06 mg/l
	Total Iron (mg/l)	No Limit Set ^[5]	Quarterly	0.11	SCA Blue Book Method	16/02/2015 09:00:00	
	Micro Pollutants (ppb)	Note 1			Solvent Extraction with analysis by GCMS		See repeatability data for micropollutants
	2,6-Dimethylphenol		Quarterly	0			
	4-Acetylmorpholine		Quarterly	0			
	Aniline		Quarterly	0			
	Hydroxybenzothiazole		Quarterly	27		30/03/2015 09:00:00	
	2,4-Dichloroaniline		Quarterly	0			
	2,4-Dichlorophenol		Quarterly	0			
	Dimorpholinyl Ketone		Quarterly	0			
	Ethoxybenzene		Quarterly	0			
	4-Ethylmorpholine		Quarterly	0			
	Flectol A		Quarterly	0			
	Methyl Benzothiazole		Quarterly	0			
	O-phenetidine		Quarterly	0			
	Phenyl Salicylate		Quarterly	0			
	Phthalimide		Quarterly	0			
	P-Phenetidine		Quarterly	0			
	Sulphur (Mo)		Quarterly	0			
	Tetrachloroethylene		Quarterly	0			
	2,4,6 - Trichlorophenol		Quarterly	0			
	Toluene		Quarterly	0			
	Xylene		Quarterly	0			

Note 1: Two consecutive weekly or resample results not to exceed :Hydroxybenzothiazole = 20 ppb, Flectol A = 2ppb, others = 2ppb

[1] The result is maximum value (or the minimum value in the case of a limit expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum - maximum' measured values

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. colorimetry.

[3] For non continuous measurements the date and time of the sample that produced the result is given. For continuous measurements, or flow/time proportional samples the percentage of the process operating time covered by the monitoring is given.

[4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated. The following uncertainties are quoted on a different basis (basis as stated).

[5] No limit set - an objective level of 25 mg/l set to monitor effectiveness of carbon filters & detect Fe breakthrough from the outlet of the filters [October 2012]

Signed:



 (authorised to sign as representative of the Operator)

Date:

08/04/2015

Permit Number: EPR/NP3335GR

Operator:

Solutia UK Limited

Facility: Ruabon Chemical Works

Form Number: Water 1

Reporting of Emissions to Water (other than to Sewer) for the period from 01/01/2015 to 31/03/2015

Emissions to Water							
Emission Point	Substance/Parameter	Emission Limit Value	Reporting Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
Ground Water Carbon Filter (Middle Borehole)	Total Phenol (mg/l)	0.2	Quarterly	0.01	HPLC with Electrochemical Detector	05/01/2015 09:00:00	Method uncertainty is ± 0.007 mg/l at 0.06 mg/l
	Total Iron (mg/l)	No Limit Set ^[5]	Quarterly	18.8	SCA Blue Book Method	16/02/2015 09:00:00	
	Micro Pollutants (ppb)	Note 1			Solvent Extraction with analysis by GCMS		See repeatability data for micropollutants
	2,6-Dimethylphenol		Quarterly	0			
	4-Acetylmorpholine		Quarterly	0			
	Aniline		Quarterly	0			
	Hydroxybenzothiazole		Quarterly	0			
	2,4-Dichloroaniline		Quarterly	0			
	2,4-Dichlorophenol		Quarterly	0			
	Dimorpholinyl Ketone		Quarterly	0			
	Ethoxybenzene		Quarterly	0			
	4-Ethylmorpholine		Quarterly	0			
	Flectol A		Quarterly	0			
	Methyl Benzothiazole		Quarterly	0			
	O-phenetidine		Quarterly	0			
	Phenyl Salicylate		Quarterly	0			
	Phthalimide		Quarterly	0			
	P-Phenetidine		Quarterly	0			
	Sulphur (Mo)		Quarterly	0			
	Tetrachloroethylene		Quarterly	0			
	2,4,6 - Trichlorophenol		Quarterly	0			
	Toluene		Quarterly	0			
	Xylene		Quarterly	0			

Note 1: Two consecutive weekly or resample results not to exceed :Hydroxybenzothiazole = 20 ppb, Flectol A = 2ppb, others = 2ppb

[1] The result is maximum value (or the minimum value in the case of a limit expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum - maximum' measured values

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. colorimetry.

[3] For non continuous measurements the date and time of the sample that produced the result is given. For continuous measurements, or flow/time proportional samples the percentage of the process operating time covered by the monitoring is given.

[4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated. The following uncertainties are quoted on a different basis (basis as stated).

[5] No limit set - an objective level of 25 mg/l set to monitor effectiveness of carbon filters & detect Fe breakthrough from the outlet of the filters [October 2012]

Signed:

(authorised to sign as representative of the Operator)

Date: 08/04/2015

Permit Number: EPR/NP3335GR

Operator:

Solutia UK Limited

Facility: Ruabon Chemical Works

Form Number: Water 1

Reporting of Emissions to Water (other than to Sewer) for the period from 01/01/2015 to 31/03/2015

Emissions to Water

Emission Point	Substance/ Parameter	Emission Limit Value	Reporting Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]		Uncertainty ^[4]
Ground Water Carbon Filter (South Borehole)	Total Phenol (mg/l)	0.2	Quarterly	0.01	HP/LC with Electrochemical Detector	05/01/2015	09:00:00	Method uncertainty is ± 0.007 mg/l at 0.06 mg/l
	Total Iron (mg/l)	No Limit Set ^[5]	Quarterly	6.3	SCA Blue Book House	23/02/2015	09:00:00	
	Micro Pollutants (ppb)	Note 1			Solvent Extraction with analysis by GC/MS			See repeatability data for micropollutants
	2,6-Dimethylphenol		Quarterly	0				
	4-Acetyl morpholine		Quarterly	0				
	Aniline		Quarterly	0				
	Hydroxybenzothiazole		Quarterly	0				
	2,4-Dichloroaniline		Quarterly	0				
	2,4-Dichlorophenol		Quarterly	0				
	Dimorpholinyl Ketone		Quarterly	0				
	Ethoxybenzene		Quarterly	0				
	4-Ethylmorpholine		Quarterly	0				
	Flectol A		Quarterly	0				
	Methyl Benzothiazole		Quarterly	0				
	O-phenetidine		Quarterly	0				
	Phenyl Salicylate		Quarterly	0				
	Phthalimide		Quarterly	0				
	P-Phenetidine		Quarterly	0				
	Sulphur (Mol)		Quarterly	0				
	Tetrachloroethylene		Quarterly	0				
	2,4,6 -Trichlorophenol		Quarterly	0				
	Toluene		Quarterly	0				
	Xylene		Quarterly	0				

Note 1: Two consecutive weekly or resample results not to exceed: Hydroxybenzothiazole = 20 ppb, Flectol A = 2ppb, others = 2ppb

[1] The result is maximum value (or the minimum value in the case of a limit expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum - maximum' measured values

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. colorimetry.

[3] For non continuous measurements the date and time of the sample that produced the result is given. For continuous measurements, or flow/time proportional samples the percentage of the process operating time covered by the monitoring is given.

[4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated. The following uncertainties are quoted on a different basis (basis as stated).

[5] No limit set - an objective level of 25 mg/l set to monitor effectiveness of carbon filters & detect Fe breakthrough from the outlet of the filters [October 2012]

Signed:


(authorised to sign as representative of the Operator)

Date: 08/04/2015

REPEATABILITY DATA FOR MICROPOLLUTANTS

Component	Linearity 95% confidence through zero, R ²	Repeatability, r			
		6mg/l	10mg/l	16mg/l	40mg/l
	Range: 5 - 40 mg/l				
Toluene	0.999	0.10	0.40	0.40	3.25
P.C.E	0.998	0.23	0.26	0.15	2.61
p-Xylene	0.998	0.24	0.22	0.30	1.80
Ethylmorpholine	0.997	0.48	0.87	0.41	1.79
Aniline	0.998	0.47	0.83	0.63	3.60
Phenol	0.995	0.31	0.72	0.48	3.46
Ethoxybenzene	0.998	0.34	0.21	0.55	2.92
o-Cresol	0.994	0.30	0.47	0.38	1.83
p-Cresol	0.996	0.19	0.28	0.32	2.81
Dichlorophenol	0.996	0.18	0.09	0.17	1.44
Phenylisothiocyanate	0.995	0.16	0.78	0.28	1.89
Benzothiazole	0.999	0.24	0.34	0.01	2.02
Trichlorophenol	0.996	0.21	0.25	0.70	2.26
Flectol A	0.999	0.30	0.21	0.30	4.00
Phthalimide	0.994	0.20	0.78	0.39	1.67
Methyl-4-morpholinylcarbodithioate	0.998	0.43	0.21	0.18	1.94
Dimorpholinyl Ketone	0.998	0.31	0.54	0.73	1.81
Me Sulphyl BTH	0.996	0.14	0.49	1.12	3.05
Me BTH Sulphone	0.997	0.20	0.46	0.95	2.84