

Emissions to air from the former Bayer site at Hauxton, Cambridgeshire - 24 hour Monitoring Data

Compound (a)	Maximum air concentration (ppb) per 24hours (concentration exceeding 1ppb are reported only) (b)																								
	03/06/10	04/06/10	05/06/10	06/06/10	07/06/10	08/06/10	09/06/10	10/06/10	11/06/10	12/06/10	13/06/10	14/06/10	15/06/10	16/06/10	17/06/10	18/06/10	19/06/10	20/06/10	21/06/10	22/06/10	23/06/10	24/06/10	25/06/10		
Acetic Acid																									
Benzene, 1-chloro-2-methyl																									
Benzene, 1,3-dichloro					1.7	2.23						1.2		1.78	1.64	1.36				1.34					
Benzene, 1,3-dichloro-2-methyl												1.02													
Benzene, 1,2-dichloro																									
Benzene, 1,2-dichloro 3-methyl																									
Benzene, 1,4-dichloro																									
Benzene, 1,4-dichloro-2-methyl												2.54	3	3	1.67					1.39		1			
Benzene, 1-ethyl-3-methyl																									
Benzene, 1-methyl-4-(1-methylethyl)-																									
Benzene, 1,2,3-trichloro-4-methyl																									
Benzene, 1,2,4-trichloro-3-methyl																									
Benzene, 1,2,3-trichloro																									
Benzene, 1,2,4-trimethyl															1.28										
Benzene, 1,3,5-trimethyl																									
Benzeneacetic acid																									
Benzenepropanoic acid																									
Bis (2-chloroethyl) ether														1.02											
Butanoic acid																									
Butanoic acid, 3-methyl																									
Butyrolactone																									
Disulfide, dimethyl																									
N,N-Dimethyl-2-aminoethanol																									
Ethane, 1,1,2,2-tetrachloro-																									
Ethanol																									
Ethyl acetate																									
Ethylbenzene															1.76	1.22									
Furan, tetrahydro																									
Heptadecane																									
Heptadecane, 4-methyl																									
Heptane, 2-methyl																									
Heptane, 3-methyl																									
Heptane 2,2,4,6,6-pentamethyl																									
n-Hexadecanoic acid																									
cis-9-Hexadecenoic acid																									
Heptane																									
Hydroquinone																									
Indole																									
Isopropyl alcohol																									
Naphthalene															1.02	1.36	1.09								
Naphthalene 1-methyl																									
Naphthalene 2-methyl																									
Nonane																									
Octane																									
Pentadecane																									
Pentanoic acid, 2-methyl																									
Pentanoic acid, 4-methyl																									
2-Piperidinone																									
2,5-Piperazinedione, 3-methyl-6-(phenylmethyl)-																									
Phenol, 2,4-bis(1-methylpropyl)																									
Phenol, 2,4-dichloro-6-methyl																						1.11			
2-Pyrrolidinone																									
Pyrrolidinone																									
Pyrolo[1,2-a]pyrazine-1, 1,4-dione, hexahydro																									
o-Xylene															1.36	1.55									
p-Xylene						1.17						2.28	2.54	4	6	5				1.39	1.1	1.24	1.41		
mp-Xylene																									
Tetrachloroethylene	3.00				1.24	7.00	<1	<1	<1			5.00	5.00	7.00	4.00	3.00				4.00	5.00	4.00	8.00	8.00	
Tetradecanoic acid																									
Toluene	6				6	16	1.26	<1	1.92			18	17	29	50	46				21	17	17	20	16	
Trichloroethylene																									
Tridecane																									

Location of maximum concentration are identified using the following colour coding (values in **bold italics** exceed guideline):

- MH (Mill House)
- SS (substation)
- GA (gardens)

10/06/10 - no VOC results above 1ppb

Compound (a)	Maximum air concentration (ppb) per 24hours (concentration exceeding 1ppb are reported only) (b)																				
	26/06/10	27/06/10	28/06/10	29/06/10	30/06/10	01/07/10	02/07/10	03/07/10	04/07/10	05/07/10	06/07/10	07/07/10	08/07/10	09/07/10	10/07/10	11/07/10	12/07/10	13/07/10	14/07/10	15/07/10	16/07/10
Acetic Acid																					
Benzene, 1-chloro-2-methyl																					
Benzene, 1,3-dichloro			3								2.35	1.39	3	1.02							
Benzene, 1,3-dichloro-2-methyl																					
Benzene, 1,2-dichloro																					
Benzene, 1,2-dichloro 3-methyl										1.17	1.18		1.99					1.25			
Benzene, 1,4-dichloro				3	3	23	7														
Benzene, 1,4-dichloro-2-methyl																					
Benzene, 1-ethyl-3-methyl																					
Benzene, 1-methyl-4-(1-methylethyl)-																					
Benzene, 1,2,3-trichloro-4-methyl																					
Benzene, 1,2,4-trichloro-3-methyl																					
Benzene, 1,2,3-trichloro																					
Benzene, 1,2,4-trimethyl																					
Benzene, 1,3,5-trimethyl																					
Benzeneacetic acid																					
Benzenepropanoic acid																					
Bis (2-chloroethyl) ether													1.37								
Butanoic acid																					
Butanoic acid, 3-methyl																					
Butyrolactone																					
Disulfide, dimethyl																					
N,N-Dimethyl-2-aminoethanol																					7
Ethane, 1,1,2,2-tetrachloro-			1.04																		
Ethanol				43					16												
Ethyl acetate				1.1																	
Ethylbenzene																			1.24		
Furan, tetrahydro																					
Heptadecane																					
Heptadecane, 4-methyl																					
Heptane, 2-methyl																					
Heptane, 3-methyl																					
Heptane 2,2,4,6,6-pentamethyl																					
n-Hexadecanoic acid																					5
cis-9-Hexadecenoic acid																					2
Heptane																					
Hydroquinone																					5
Indole																					1.64
Isopropyl alcohol																					
Naphthalene																					
Naphthalene 1-methyl																					
Naphthalene 2-methyl																					
Nonane																					
Octane																					
Pentadecane				2																	
Pentanoic acid, 2-methyl																					
Pentanoic acid, 4-methyl																					
2-Piperidinone																					
2,5-Piperazinedione, 3-methyl-6-(phenylmethyl)-																					1.36
Phenol, 2,4-bis(1-methylpropyl)																					
Phenol, 2,4-dichloro-6-methyl																					
2-Pyrrolidinone																					6
Pyrrolidinone																					3
Pyrolo[1,2-a]pyrazine-1, 1,4-dione, hexahydro																					3
o-Xylene																					
p-Xylene			2.12								1.2		1.91				2.04		5	1.51	1.53
mp-Xylene				1.61	1.03	2.97	1.63														
Tetrachloroethylene			5.00	13.00	7.00	15.00	16.00			20.00	10.00	8.00	13.00	10.00			3.00	3.00	9.00	6.00	8.00
Tetradecanoic acid																					
Toluene			19	28	32	104	45			47	21	12	18	8			12	6	33	13	18
Trichloroethylene																					
Tridecane				2		4															

Location of maximum concentration are identified using
 MH (Mill House)
 SS (substation)
 GA (gardens)

Compound (a)	Maximum air concentration (ppb) per 24hours (concentration exceeding 1ppb are reported only) (b)																					
	17/07/10	18/07/10	19/07/10	20/07/10	21/07/10	22/07/10	23/07/10	24/07/10	25/07/10	26/07/10	27/07/10	28/07/10	29/07/10	30/07/10	31/07/10	01/08/10	02/08/10	03/08/10	04/08/10	05/08/10	06/08/10	
Acetic Acid																						
Benzene, 1-chloro-2-methyl							2.71						1.81				1.43				1.1	
Benzene, 1,3-dichloro			12	8	7	1.91	12											3.45				
Benzene, 1,3-dichloro-2-methyl																			1.61			
Benzene, 1,2-dichloro																						
Benzene, 1,2-dichloro 3-methyl							3										1.27					
Benzene, 1,4-dichloro										1.48	1.38		1.99				8.28		2.03	2.67	1.49	
Benzene, 1,4-dichloro-2-methyl												1.4					4.66		4.09	2.02		
Benzene, 1-ethyl-3-methyl																						
Benzene, 1-methyl-4-(1-methylethyl)-																						
Benzene, 1,2,3-trichloro-4-methyl																	1.35					
Benzene, 1,2,4-trichloro-3-methyl							2				1.2	1.04	5				3.07	1.17	2.54	2.08	1.02	
Benzene, 1,2,3-trichloro																						
Benzene, 1,2,4-trimethyl																			1.2			
Benzene, 1,3,5-trimethyl													1.61									
Benzeneacetic acid																						
Benzenepropanoic acid																						
Bis (2-chloroethyl) ether							1.58															
Butanoic acid																						
Butanoic acid, 3-methyl																						
Butyrolactone																						2.82
Disulfide, dimethyl																				5.06	2.37	
N,N-Dimethyl-2-aminoethanol																						
Ethane, 1,1,2,2-tetrachloro-																						69
Ethanol																						
Ethyl acetate																						
Ethylbenzene													3.06						1.95	1.55		
Furan, tetrahydro																						
Heptadecane											2											
Heptadecane, 4-methyl																						
Heptane, 2-methyl																						
Heptane, 3-methyl																						
Heptane 2,2,4,6,6-pentamethyl																						
n-Hexadecanoic acid																						
cis-9-Hexadecenoic acid																						
Heptane																						
Hydroquinone																						
Indole																						
Isopropyl alcohol																						
Naphthalene																						
Naphthalene 1-methyl																						
Naphthalene 2-methyl																						
Nonane																						
Octane																						
Pentadecane																						
Pentanoic acid, 2-methyl																						
Pentanoic acid, 4-methyl																						
2-Piperidinone																						
2,5-Piperazinedione, 3-methyl-6-(phenylmethyl)-																						
Phenol, 2,4-bis(1-methylpropyl)																						
Phenol, 2,4-dichloro-6-methyl																	1.12					
2-Pyrrolidinone																						
Pyrrolidinone																						
Pyrolo[1,2-a]pyrazine-1, 1,4-dione, hexahydro																						
o-Xylene											3.2	4	13							1.94		
p-Xylene		2.27	1.14	1.74			4			2.66							4.59	2.17	8.63	5.71		
mp-Xylene																						2.96
Tetrachloroethylene			8.00	10.00	9.00	11.00	18.00			7.00	12.00	9.00	16.00	8.00			19.41	11.75	15.44	14.00	17.00	
Tetradecanoic acid																						
Toluene			28	21	12	18	29			13	13	15	34	11			24.91	18.53	74.92	32	41	
Trichloroethylene																						
Tridecane																						

Location of maximum concentration are identified using:
 MH (Mill House)
 SS (substation)
 GA (gardens)

Compound (a)	Maximum air concentration (ppb) per 24hours (concentration exceeding 1ppb are reported only) (b)																					
	07/08/10	08/08/10	09/08/10	10/08/10	11/08/10	12/08/10	13/08/10	14/08/10	15/08/10	16/08/10	17/08/10	18/08/10	19/08/10	20/08/10	21/08/10	22/08/10	23/08/10	24/08/10	25/08/10	26/08/10	27/08/10	
Acetic Acid																					7.24	1.90
Benzene, 1-chloro-2-methyl				1.33		2.38	2.12															
Benzene, 1,3-dichloro										1.41	1.45		1.43	15			6	7		3.11	3.16	
Benzene, 1,3-dichloro-2-methyl																						
Benzene, 1,2-dichloro																						
Benzene, 1,2-dichloro 3-methyl																						
Benzene, 1,4-dichloro			1.06		1.89	3.38	1.17															
Benzene, 1,4-dichloro-2-methyl																						
Benzene, 1-ethyl-3-methyl																						
Benzene, 1-methyl-4-(1-methylethyl)-																						
Benzene, 1,2,3-trichloro-4-methyl																						
Benzene, 1,2,4-trichloro-3-methyl			1.1			1.5	1.73			1.26				1.03				1.1			1.21	
Benzene, 1,2,3-trichloro																		2.11				
Benzene, 1,2,4-trimethyl						1.76															2.48	
Benzene, 1,3,5-trimethyl																						
Benzeneacetic acid																		73				
Benzenepropanoic acid																		103				
Bis (2-chloroethyl) ether										1.32												
Butanoic acid																		84				
Butanoic acid, 3-methyl																		63				
Butyrolactone																						
Disulfide, dimethyl																						
N,N-Dimethyl-2-aminoethanol																						
Ethane, 1,1,2,2-tetrachloro-																						
Ethanol																						
Ethyl acetate																						
Ethylbenzene			1.21	1.79	1.08													1.17		1.03	10	
Furan, tetrahydro																						
Heptadecane																						
Heptadecane, 4-methyl																						
Heptane, 2-methyl																						
Heptane, 3-methyl																						
Heptane 2,2,4,6,6-pentamethyl																					5	
n-Hexadecanoic acid																		45				
cis-9-Hexadecenoic acid																						
Heptane						2.17																
Hydroquinone																						
Indole																		26				
Isopropyl alcohol			1.18		1.44																	
Naphthalene																		1.21				
Naphthalene 1-methyl																					1.56	
Naphthalene 2-methyl																						
Nonane						1.81																
Octane						2.27				1.14												
Pentadecane																						
Pentanoic acid, 2-methyl																			31			
Pentanoic acid, 4-methyl																			66			
2-Piperidinone																			333			
2,5-Piperazinedione, 3-methyl-6-(phenylmethyl)-																						
Phenol, 2,4-bis(1-methylpropyl)																						
Phenol, 2,4-dichloro-6-methyl																						
2-Pyrrolidinone																						
Pyrrolidinone																						
Pyrolo[1,2-a]pyrazine-1, 1,4-dione, hexahydro																						
o-Xylene																					1	8
p-Xylene										1.93				2.09			2.22	4.27		4.34	25	
mp-Xylene			3.64	4.36	2.87	3.77	3.54															
Tetrachloroethylene			12.00	13.00	9.00	53.00	17.00			12.00	7.00	3.95	9.00	14.00			8.00	17.00	<1	12.00	15.00	
Tetradecanoic acid																	17					
Toluene			24	18	12	9	26			30	9	3.74	13	28			9	22	<1	10	14	
Trichloroethylene						2.87	2.95			1.33											2.58	
Tridecane																						

Location of maximum concentration are identified using
 MH (Mill House)
 SS (substation)
 GA (gardens)

Compound (a)	Maximum air concentration (ppb) per 24hours (concentration exceeding 1ppb are reported only) (b)																					
	28/08/10	29/08/10	30/08/10	31/08/10	01/09/10	02/09/10	03/09/10	04/09/10	05/09/10	06/09/10	07/09/10	08/09/10	09/09/10	10/09/10	11/09/10	12/09/10	13/09/10	14/09/10	15/09/10	16/09/10	17/09/10	
Acetic Acid																					2.87	
Benzene, 1-chloro-2-methyl																					1.63	1.59
Benzene, 1,3-dichloro				3.27	6	3.78	7				1.76	3.08						14	16			
Benzene, 1,3-dichloro-2-methyl																						
Benzene, 1,2-dichloro																						26
Benzene, 1,2-dichloro 3-methyl				1.67			1.53				1.27										2.35	
Benzene, 1,4-dichloro																						
Benzene, 1,4-dichloro-2-methyl																						1.62
Benzene, 1-ethyl-3-methyl																						
Benzene, 1-methyl-4-(1-methylethyl)-																						
Benzene, 1,2,3-trichloro-4-methyl				1.82							1.21	1.8									2.11	2.44
Benzene, 1,2,4-trichloro-3-methyl				1.69	4	1.47	3.3			1.41	2.9	2.35				1.12		4.25	1.59	1.57	5	
Benzene, 1,2,3-trichloro																					2.01	
Benzene, 1,2,4-trimethyl																						
Benzene, 1,3,5-trimethyl				1.54																		
Benzeneacetic acid																						
Benzenepropanoic acid																						
Bis (2-chloroethyl) ether				1.29							2.76										2.7	
Butanoic acid																						
Butanoic acid, 3-methyl																						
Butyrolactone																						
Disulfide, dimethyl																						
N,N-Dimethyl-2-aminoethanol																						
Ethane, 1,1,2,2-tetrachloro-																						
Ethanol																						
Ethyl acetate																						
Ethylbenzene				1.18								4.16									1.87	
Furan, tetrahydro																						
Heptadecane																						
Heptadecane, 4-methyl																						
Heptane, 2-methyl																						
Heptane, 3-methyl																						
Heptane 2,2,4,6,6-pentamethyl					1.37															1.17		
n-Hexadecanoic acid																						
cis-9-Hexadecenoic acid																						
Heptane																						
Hydroquinone																						
Indole																						
Isopropyl alcohol																						
Naphthalene											3.46											
Naphthalene 1-methyl											5											
Naphthalene 2-methyl											1.65											
Nonane																						
Octane																						
Pentadecane																						
Pentanoic acid, 2-methyl																						
Pentanoic acid, 4-methyl																						
2-Piperidinone																						
2,5-Piperazinedione, 3-methyl-6-(phenylmethyl)-																						
Phenol, 2,4-bis(1-methylpropyl)																						
Phenol, 2,4-dichloro-6-methyl				1.22							2.11											
2-Pyrrolidinone																						
Pyrrolidinone																						
Pyrolo[1,2-a]pyrazine-1, 1,4-dione, hexahydro																						
o-Xylene				1.08		1.13						4.28										
p-Xylene				5.08	2.54	3.92	3.98				2.05	15	1.71	1.49				1.04	1.63	1.68	7	
mp-Xylene																						3.48
Tetrachloroethylene				15.00	24.00	8.00	23.00				16.00	25.00	17.00	4.01	11.00			10.00	13.00	13.00	26.00	35.00
Tetradecanoic acid																						
Toluene				24	12	4.3	10				3.52	11	10	3.82	28			9	20	20	42	30
Trichloroethylene							3.45					1.5										14
Tridecane																						

Location of maximum concentration are identified using:
 MH (Mill House)
 SS (substation)
 GA (gardens)

Compound (a)	Maximum air concentration (ppb) per 24hours (concentration exceeding 1ppb are reported only) (b)																					
	18/09/10	19/09/10	20/09/10	21/09/10	22/09/10	23/09/10	24/09/10	25/09/10	26/09/10	27/09/10	28/09/10	29/09/10	30/09/10	01/10/10	02/10/10	03/10/10	04/10/10	05/10/10	06/10/10	07/10/10	08/10/10	
Acetic Acid																						
Benzene, 1-chloro-2-methyl				1.16														2.19				
Benzene, 1,3-dichloro																						
Benzene, 1,3-dichloro-2-methyl																						
Benzene, 1,2-dichloro			5				1.15			2.24								1.5				
Benzene, 1,2-dichloro 3-methyl																						
Benzene, 1,4-dichloro																						
Benzene, 1,4-dichloro-2-methyl				1.22														1.19				
Benzene, 1-ethyl-3-methyl																						
Benzene, 1-methyl-4-(1-methylethyl)-																						
Benzene, 1,2,3-trichloro-4-methyl			2.5	2.37														1.76				
Benzene, 1,2,4-trichloro-3-methyl			1.12	1.27																		
Benzene, 1,2,3-trichloro																						
Benzene, 1,2,4-trimethyl																						
Benzene, 1,3,5-trimethyl																						
Benzeneacetic acid																						
Benzenepropanoic acid																						
Bis (2-chloroethyl) ether				1.68														2.27				
Butanoic acid																						
Butanoic acid, 3-methyl																						
Butyrolactone																						
Disulfide, dimethyl																						
N,N-Dimethyl-2-aminoethanol																						
Ethane, 1,1,2,2-tetrachloro-																						
Ethanol																						
Ethyl acetate																						
Ethylbenzene											1.04	1.13										
Furan, tetrahydro																						
Heptadecane																						
Heptadecane, 4-methyl				1.67																		
Heptane, 2-methyl																						
Heptane, 3-methyl																						
Heptane 2,2,4,4,6,6-pentamethyl														2.31								1.23
n-Hexadecanoic acid																						
cis-9-Hexadecenoic acid																						
Heptane																						
Hydroquinone																						
Indole																						
Isopropyl alcohol																						
Naphthalene												1.01										
Naphthalene 1-methyl																						
Naphthalene 2-methyl																						
Nonane																						
Octane																						
Pentadecane																						
Pentanoic acid, 2-methyl																						
Pentanoic acid, 4-methyl																						
2-Piperidinone																						
2,5-Piperazinedione, 3-methyl-6-(phenylmethyl)-																						
Phenol, 2,4-bis(1-methylpropyl)											2.04											
Phenol, 2,4-dichloro-6-methyl																		1.16				
2-Pyrrolidinone																						
Pyrrolidinone																						
Pyrolo[1,2-a]pyrazine-1, 1,4-dione, hexahydro																						
o-Xylene											1.48	1.59	1.19									
p-Xylene																						
mp-Xylene			2.68	4.35		1.32				1.84	5.39	5.65	4.11				1.2	3.07				
Tetrachloroethylene			28.00	39.00	7.00	8.00	5.00			10.00	5.00	3.53	6.00	2.54			21.00	51.00	4.15	1.04	2.32	
Tetradecanoic acid																						
Toluene			13	12	5.56	8	1.02			6.54	5.6	2.3	2.69	2.85			55	100	5.44	1.32	1.53	
Trichloroethylene			4.12	14	1.89	2.19	2.59			4.64	1.03						4.95			8	1.11	
Tridecane																						

Location of maximum concentration are identified using:
 MH (Mill House)
 SS (substation)
 GA (gardens)

Compound (a)	Maximum air concentration (ppb) per 24hours (concentration exceeding 1ppb are reported only) (b)																				
	09/10/10	10/10/10	11/10/10	12/10/10	13/10/10	14/10/10	15/10/10	16/10/10	17/10/10	18/10/10	19/10/10	20/10/10	21/10/10	22/10/10	23/10/10	24/10/10	25/10/10	26/10/10	27/10/10	28/10/10	29/10/10
Acetic Acid																					
Benzene, 1-chloro-2-methyl																					
Benzene, 1,3-dichloro																					
Benzene, 1,3-dichloro-2-methyl																					
Benzene, 1,2-dichloro			1.68	1.05	1.22		9														
Benzene, 1,2-dichloro 3-methyl																					
Benzene, 1,4-dichloro																					
Benzene, 1,4-dichloro-2-methyl																					
Benzene, 1-ethyl-3-methyl										1.3											
Benzene, 1-methyl-4-(1-methylethyl)-																					
Benzene, 1,2,3-trichloro-4-methyl																	1.36				
Benzene, 1,2,4-trichloro-3-methyl																					
Benzene, 1,2,3-trichloro																					
Benzene, 1,2,4-trimethyl					1.37					2.33											
Benzene, 1,3,5-trimethyl																					
Benzeneacetic acid																					
Benzenepropanoic acid																					
Bis (2-chloroethyl) ether																					
Butanoic acid																					
Butanoic acid, 3-methyl																					
Butyrolactone																					
Disulfide, dimethyl																					
N,N-Dimethyl-2-aminoethanol																					
Ethane, 1,1,2,2-tetrachloro-																					
Ethanol																					
Ethyl acetate																					
Ethylbenzene			1.65	1.63	4.68	1.43															
Furan, tetrahydro				1.89																	
Heptadecane																					
Heptadecane, 4-methyl																					
Heptane, 2-methyl														1.24					1.82		
Heptane, 3-methyl										1.2				2.21				3.05			
Heptane 2,2,4,4,6,6-pentamethyl																					2.13
n-Hexadecanoic acid																					
cis-9-Hexadecenoic acid																					
Heptane																			1.53		
Hydroquinone																					
Indole																					
Isopropyl alcohol																					
Naphthalene			1.31	1.31	2.36	1.44								1.7							
Naphthalene 1-methyl			1.11		1.07																
Naphthalene 2-methyl						1.12															
Nonane																					
Octane																			1.24		
Pentadecane																					
Pentanoic acid, 2-methyl																					
Pentanoic acid, 4-methyl																					
2-Piperidinone																					
2,5-Piperazinedione, 3-methyl-6-(phenylmethyl)-																					
Phenol, 2,4-bis(1-methylpropyl)																					
Phenol, 2,4-dichloro-6-methyl																					
2-Pyrrolidinone																					
Pyrrolidinone																					
Pyrolo[1,2-a]pyrazine-1, 1,4-dione, hexahydro																					
o-Xylene			2.28	2.12	4.47	1.75	1.08														
p-Xylene																					
mp-Xylene			7	7	16	6.01	3.51			2.67			1.27	1.71			2.83		1.23	1.06	
Tetrachloroethylene			5.00	11.00	12.00	10.00	11.00			7.00	1.25	<1	7.00	6.00			13.00	3.01	6.00	4.15	2.41
Tetradecanoic acid																					
Toluene			2.39	5.15	4.02	2.81	13			19	5.52	<1	8	8			18	5.49	8	6.69	2.77
Trichloroethylene			18	7	13	15	1.28							1.13			1.26				
Tridecane																					

Location of maximum concentration are identified using:
 MH (Mill House)
 SS (substation)
 GA (gardens)

Compound (a)	Maximum air concentration (ppb) per 24hours (concentration exceeding 1ppb are reported only) (b)																				
	30/10/10	31/10/10	01/11/10	02/11/10	03/11/10	04/11/10	05/11/10	06/11/10	07/11/10	08/11/10	09/11/10	10/11/10	11/11/10	12/11/10	13/11/10	14/11/10	15/11/10	16/11/10	17/11/10	18/11/10	19/11/10
Acetic Acid																					
Benzene, 1-chloro-2-methyl																					
Benzene, 1,3-dichloro																					
Benzene, 1,3-dichloro-2-methyl																					
Benzene, 1,2-dichloro																					
Benzene, 1,2-dichloro 3-methyl																					
Benzene, 1,4-dichloro																					
Benzene, 1,4-dichloro-2-methyl																					
Benzene, 1-ethyl-3-methyl																					
Benzene, 1-methyl-4-(1-methylethyl)-																					
Benzene, 1,2,3-trichloro-4-methyl																					
Benzene, 1,2,4-trichloro-3-methyl																					
Benzene, 1,2,3-trichloro																					
Benzene, 1,2,4-trimethyl																					
Benzene, 1,3,5-trimethyl																					
Benzeneacetic acid																					
Benzenepropanoic acid																					
Bis (2-chloroethyl) ether																					
Butanoic acid																					
Butanoic acid, 3-methyl																					
Butyrolactone																					
Disulfide, dimethyl																					
N,N-Dimethyl-2-aminoethanol																					
Ethane, 1,1,2,2-tetrachloro-																					
Ethanol																					
Ethyl acetate																					
Ethylbenzene																					
Furan, tetrahydro																					
Heptadecane																					
Heptadecane, 4-methyl																					
Heptane, 2-methyl																					
Heptane, 3-methyl						1.78	3.17														
Heptane 2,2,4,6,6-pentamethyl																					
n-Hexadecanoic acid																					
cis-9-Hexadecenoic acid																					
Heptane							1.71														
Hydroquinone																					
Indole																					
Isopropyl alcohol																					
Naphthalene																					
Naphthalene 1-methyl																					
Naphthalene 2-methyl																					
Nonane																					
Octane						1	1.88														
Pentadecane																					
Pentanoic acid, 2-methyl																					
Pentanoic acid, 4-methyl																					
2-Piperidinone																					
2,5-Piperazinedione, 3-methyl-6-(phenylmethyl)-																					
Phenol, 2,4-bis(1-methylpropyl)																					
Phenol, 2,4-dichloro-6-methyl																					
2-Pyrrolidinone																					
Pyrrolidinone																					
Pyrolo[1,2-a]pyrazine-1, 1,4-dione, hexahydro																					
o-Xylene																					
p-Xylene																					
mp-Xylene			1.47		1.63	1.23							1.21				1.28			1.06	
Tetrachloroethylene			3.00	2.82	2.24	2.92	<1			<1	<1	<1	1.33	8.80		10.02	2.72	<1	1.47	1.65	
Tetradecanoic acid																					
Toluene			2.36	3.42	5.53	4.81	<1			<1	<1	<1	8	8.61		9.9	5.93	2.8	9	7.12	
Trichloroethylene																					
Tridecane																					

Location of maximum concentration are identified using:
 MH (Mill House)
 SS (substation)
 GA (gardens)

Compound (a)	Maximum air concentration (ppb) per 24hours (concentration exceeding 1ppb are reported only) (b)																				
	20/11/10	21/11/10	22/11/10	23/11/10	24/11/10	25/11/10	26/11/10	27/11/10	28/11/10	29/11/10	30/11/10	01/12/10	02/12/10	03/12/10	04/12/10	05/12/10	06/12/10	07/12/10	08/12/10	09/12/10	10/12/10
Acetic Acid																					
Benzene, 1-chloro-2-methyl																					
Benzene, 1,3-dichloro																					
Benzene, 1,3-dichloro-2-methyl																					
Benzene, 1,2-dichloro																					
Benzene, 1,2-dichloro 3-methyl																					
Benzene, 1,4-dichloro																					
Benzene, 1,4-dichloro-2-methyl																					
Benzene, 1-ethyl-3-methyl																					
Benzene, 1-methyl-4-(1-methylethyl)-																					
Benzene, 1,2,3-trichloro-4-methyl																					
Benzene, 1,2,4-trichloro-3-methyl																					
Benzene, 1,2,3-trichloro																					
Benzene, 1,2,4-trimethyl																					
Benzene, 1,3,5-trimethyl																					
Benzeneacetic acid																					
Benzenepropanoic acid																					
Bis (2-chloroethyl) ether																					
Butanoic acid																					
Butanoic acid, 3-methyl																					
Butyrolactone																					
Disulfide, dimethyl																					
N,N-Dimethyl-2-aminoethanol																					
Ethane, 1,1,2,2-tetrachloro-																					
Ethanol																					
Ethyl acetate																					
Ethylbenzene							1.45				2.84	2.35									
Furan, tetrahydro																					
Heptadecane																					
Heptadecane, 4-methyl																					
Heptane, 2-methyl																					
Heptane, 3-methyl																					
Heptane 2,2,4,6,6-pentamethyl																					
n-Hexadecanoic acid																					
cis-9-Hexadecenoic acid																					
Heptane																					
Hydroquinone																					
Indole																					
Isopropyl alcohol																					
Naphthalene																					
Naphthalene 1-methyl																					
Naphthalene 2-methyl																					
Nonane																					
Octane																					
Pentadecane																					
Pentanoic acid, 2-methyl																					
Pentanoic acid, 4-methyl																					
2-Piperidinone																					
2,5-Piperazinedione, 3-methyl-6-(phenylmethyl)-																					
Phenol, 2,4-bis(1-methylpropyl)																					
Phenol, 2,4-dichloro-6-methyl																					
2-Pyrrolidinone																					
Pyrrolidinone																					
Pyrolo[1,2-a]pyrazine-1, 1,4-dione, hexahydro																					
o-Xylene							2.46				1.06										
p-Xylene							10				2.16	1.86					3.44				
mp-Xylene					1.02																
Tetrachloroethylene			1.69	<1	<1	<1	13.00			<1	1.46	<1	<1	1.35			2.91	1.37			
Tetradecanoic acid																					
Toluene			5.77	4.92	9	2.59	34			<1	<1	<1	<1	9			19	5.36			
Trichloroethylene																					
Tridecane																					

Location of maximum concentration are identified using:
 MH (Mill House)
 SS (substation)
 GA (gardens)

Available Guidelines and Standards

Compound (a)	WHO Air Quality Guidelines (ppb) (c)	UK long term Environmental Assessment Level (ppb) (d)	Irritation threshold (ppb) 8hrs exposure unless stated (e)	Workplace Exposure Levels (WELs). Long Term Exposure Level (8hour) (ppb) (f)	Acute Exposure Guideline Level (AeGL) Level 1 8hour (ppb) (g)	VOC concentrations in indoor air (h) (ppb)		
						Existing Residential	New Residential	Office
Acetic Acid	N/A	101.8	10000	(10000 ACGIH TLV TWA)	N/A	81	280	
Benzene, 1-chloro-2-methyl	N/A	N/A	50000	(50000 ACGIH TLV TWA)	N/A			
Benzene, 1,3-dichloro	N/A	N/A	80000 (10ppb US ATSDR Chronic ≥1 year MRL)	25000 (para-dichlorobenzene)	N/A			
Benzene, 1,3-dichloro-2-methyl	N/A	N/A		N/A	N/A			
Benzene, 1,2-dichloro	N/A	N/A	100000	25000	N/A	0.9	0.54	2.2
Benzene, 1,2-dichloro 3-methyl	N/A	N/A		N/A	N/A			
Benzene, 1,4-dichloro	N/A	254	80000	25000	N/A	26		7
Benzene, 1,4-dichloro-2-methyl	N/A	N/A		N/A	N/A			
Benzene, 1-ethyl-3-methyl	N/A	N/A	(no irritant data in literature)	N/A	N/A			
Benzene, 1-methyl-4-(1-methylethyl)-	N/A	N/A	(no irritant data in literature)	N/A	N/A			
Benzene, 1,2,3-trichloro-4-methyl	N/A	10.25 (1,2,4 trichlorobenzene)	3000 (total trichlorobenzenes)	N/A	N/A			
Benzene, 1,2,4-trichloro-3-methyl	N/A	10.25 (1,2,4 trichlorobenzene)	3000 (total trichlorobenzenes)	N/A	N/A			
Benzene, 1,2,3-trichloro	N/A	N/A	3000-5000	1000 (1,2,4 trichlorobenzene)	N/A			
Benzene, 1,2,4-trimethyl	N/A	254 total trimethylbenzenes	25000 (no effect for 2 hrs) total trimethylbenzenes	25000 (trimethylbenzene all isomer or mixtures)	45000			2.9
Benzene, 1,3,5-trimethyl	N/A	254 total trimethylbenzenes	25000 (no effect for 2 hrs) total trimethylbenzenes	25000 (trimethylbenzene all isomer or mixtures)	45000	6.5		1.1
Benzeneacetic acid	N/A	N/A		N/A	N/A			
Benzenepropanoic acid	N/A	N/A		N/A	N/A			
Bis (2-chloroethyl) ether	N/A	N/A	(no irritation at <35000ppm)	(5000 ACGIH TLV TWA)	N/A			
Butanoic acid	N/A	N/A	(mild skin irritant levels at which irritation could occur not noted in literature)	N/A	N/A			
Butanoic acid, 3-methyl	N/A	N/A	(levels at which irritation could occur not noted in literature)	N/A	N/A			
Butyrolactone	N/A	N/A		N/A	N/A			
Disulfide, dimethyl	N/A	N/A		(500 ACGIH TLV TWA)	N/A			
N,N-Dimethyl-2-aminoethanol	N/A	N/A		2000	N/A			
Ethane, 1,1,2,2-tetrachloro-	N/A	N/A	145000 (for 30 mins - irritation)	(1000 ACGIH TLV TWA)	N/A			
Ethanol	N/A	N/A	8840000 (for 1 hour - nasal irritation and momentary intolerable odour)	1000000	N/A			
Ethyl acetate	N/A	N/A	(>400000 for 3-5 minutes can lead to irritation of eye, nose and throat)	200000	N/A			
Ethylbenzene	N/A	1016	100000 irritant for long term exposure (total ethyl benzenes)	100000	33000			
Furan, tetrahydro	N/A	N/A	(levels at which irritation could occur not noted in literature)	(50000 ACGIH TLV TWA)	N/A			
Heptadecane	N/A	N/A		N/A	N/A			
Heptadecane, 4-methyl	N/A	N/A		N/A	N/A			
Heptane, 2-methyl	N/A	N/A		N/A	N/A			
Heptane, 3-methyl	N/A	N/A		N/A	N/A			
Heptane 2,2,4,4,6,6-pentamethyl	N/A	N/A		N/A	N/A			
n-Hexadecanoic acid	N/A	N/A		N/A	N/A			
cis-9-Hexadecenoic acid	N/A	N/A		N/A	N/A			
Heptane	N/A	N/A		500000	N/A			
Hydroquinone	N/A	N/A	(levels at which irritation could occur not noted in literature)	110	N/A			
Indole	N/A	N/A		N/A	N/A			
Isopropyl alcohol	N/A	N/A	400000	400000	N/A			
Naphthalene	N/A	N/A	75000	(10000 Naphthalene ACGIH TLV TWA)	N/A	0.95		1.9
Naphthalene 1-methyl	N/A	N/A	75000	(10000 Naphthalene ACGIH TLV TWA)	N/A			
Naphthalene 2-methyl	N/A	N/A	75000	(10000 Naphthalene ACGIH TLV TWA)	N/A			
Nonane	N/A	N/A	(levels at which irritation could occur not noted in literature)	(200000 ACGIH TLV TWA)	N/A			
Octane	N/A	N/A	310224	(300000 ACGIH TLV TWA)	N/A			
Pentadecane	N/A	N/A	(levels at which irritation could occur not noted in literature)	N/A	N/A			
Pentanoic acid, 2-methyl	N/A	N/A	(no human data)	N/A	N/A			
Pentanoic acid, 4-methyl	N/A	N/A	(no irritant data in literature)	N/A	N/A			
2-Piperidinone	N/A	N/A		N/A	N/A			
2,5-Piperazinedione, 3-methyl-6-(phenylmethyl)-	N/A	N/A		N/A	N/A			
Phenol, 2,4-bis(1-methylpropyl)	N/A	N/A		N/A	N/A			
Phenol, 2,4-dichloro-6-methyl	N/A	N/A	5000	N/A	N/A			
2-Pyrrolidinone	N/A	N/A		N/A	N/A			
Pyrrolidinone	N/A	N/A		N/A	N/A			
Pyrolo[1,2-a]pyrazine-1, 1,4-dione, hexahydro	N/A	N/A		N/A	N/A			
o-Xylene	N/A	1016 (total xylenes)	110000 (total xylenes)	50000	130000	14	4.4	3.5
p-Xylene	N/A	1016 (total xylenes)	110000 (total xylenes)	50000	130000	67	11	10
mp-Xylene	N/A	1016 (total xylenes)	110000 (total xylenes)	50000	130000	67	11	10
Tetrachloroethylene	37	509	50000	50000	35000			
Tetradecanoic acid	N/A	N/A	(moderate irritant but levels at which irritation could occur not noted in	N/A	N/A			
Toluene	69	507	50000	50000	200000			
Trichloroethylene	43000, 4300, 430 *	205	200000 (transient eye irritation)	100000	77000			
Tridecane	N/A	N/A	(levels at which irritation could occur not noted in literature)	N/A	N/A			

Based on excess lifetime risk of 1:10 000, 1:100 000 and 1:1 000 000

Location of maximum concentration are identified usi

MH (Mill House) US ATSDR = United States Agency For Toxic Substances And Disease Registry, MRL = Minimum Risk Level
 SS (substation) ACGIH = American Conference of Governmental Industrial Hygienists, TLV = Threshold Limit Values
 GA (gardens) OEL = Occupational exposure limit, US CDC = United States Centre for Disease Control.

Guide to the VOC monitoring results summary sheet

This summary presents the results of 24 hour VOC monitoring results from 3 locations: Mill House to the north of the site, gardens to the south of the site and substation on the site. The maximum VOCs found at levels above 1 part per billion are listed. The names of the chemicals, the levels found and data about the identified VOCs are presented in horizontal rows across the table.

Column (a) - Lists the individual VOCs identified above 1ppb.

Column (b) - Lists the maximum monitoring results for these VOCs and identifies the location of the maximum concentration.

Column (c) - Lists the World Health Organisation air quality guideline levels for the VOCs, where available. These guideline levels provide a basis for protecting public health from adverse effects of air pollution. They are calculated to protect the health of the whole population, including susceptible groups, based on a lifetime exposure to the chemicals.

Column (d) - Lists the Environmental assessment levels (EALs) for the identified VOCs. EALs are calculated for the protection of health by the Environment Agency. They are used to provide direction in the risk management decisions for industrial processes under the Environmental Permitting (England and Wales) Regulations 2010.

Column (e) - Lists the results of studies of health effects arising from exposure to VOCs. The levels shown indicate the amount of the VOC required in the air to lead to health effects such as irritation. Taken from Bingham et al, Patty's Toxicology 5th Ed, Wiley Ltd, 2001

Column (f) - List Long Term Workplace Exposure Levels (WELs) as detailed in Health and Safety Executive (HSE) EH40 Workplace exposure limits, updated 2007. Values in brackets are American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV) based on 8hour time weighted average (TWA)

Column (g) - Lists the US Environmental Protection Agency's (US EPA) Acute Exposure Guideline Levels (AEGLs). AEGLs represent threshold exposure limits via inhalation for the general public and are applicable to emergency exposure periods ranging from 10 minutes to 8 hours. AEGL-1 is the airborne concentration, expressed as parts per billion of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure.

(<http://www.epa.gov/opptintr/aegl/>)

**Column (h) - Lists the maximum levels of the VOCs found in a study of indoor air quality in the US. taken from A.T. Hodgson and H. Levin, 2003. Classification of Measured Indoor Volatile Organic Compounds Based on Noncancer Health and Comfort Considerations. LBNL 53308. Berkeley.
<http://eetd.lbl.gov/ied/pdf/LBNL-53308.pdf>. Affairs in 2002**