0190100008--Champaign County
Champaign/IP Town Gas Site
Site Remediation/Technical

Dunn, Greg

From: Sazama, Peter (PSC) [PSazama@pscnow.com]
Sent: Friday, June 24, 2011 3:18 PM
To: Dunn, Greg
Subject: RAP Addendum Clarification to to Table 1
Attachments: Ameren Champaign Soil Confirmation Samples.pdf

Greg,

Attached is the updated Table 1 to clarify the exceedances above a Tier 1 Residential for Ingestion and Inhalation.

If you need or require any additional information or clarifications please call me.

Thanks,

Pete

PSC Industrial Outsourcing, LP
Peter T. Sazama, P.G.
Senior Project Manager
210 West Sand Bank Road
Columbia, Illinois 62236
618-281-1575 (O)
618-281-7020 (F)
618-616-4418 (C)
psazama@pscnow.com

Table 1
Exceedances of Tier 1 Remedial Objectives for Ingestion and Inhalation
Excavation Wall Samples in the 0 to 3 Foot Depth INterval
Champaign MGP

Constituent	Soil Ingestion Residential	Soil Ingestion Commercial	Soil Ingestion Construction	Soil Inhalation Residential	Soil Inhalation Commercial	Soil Inhalation Construction	Indoor Air Residential	Indoor Air Commercial	Soil Component to Groundwater[3]	IEPA Accepted Background Levels for MSA	Project Remediation Objectives	Sample Location:	P1-A1-W	P1-A2-W	P1-A3-W	P1-A4-W	P1-A5-W	P2-A1-W	P2-A2-W	P2-A3-W	P3-A1-W
												Sample ID:	P1-A1-W (0-3)	P1-A2-W (0-3)	P1-A3-W (3)	P1-A4-W (3)	P1-A5-W(3)	P2-A1-W (3)	P2-A2-W (3)	P2-A3-W (3)	P3-A1-W (3)
												Sample Date:	6/30/2009	6/30/2009	7/7/2009	7/7/2009	7/15/2009	10/23/2009	10/27/2009	10/26/2009	1/12/2010
												Sample Depth (feet):	0-3'	0-3'	3'	3'	3	3	3	3	3
BTEX Constituents (mg/kg)																					
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	—	0.069		0.303	3.96	154	0.115	1.39	15.8	0.684	<0.99	11.7
Ethylbenzene	7,800	200,000	20,000	400	400	58	130	130	13	—	58		0.330	16.9	72.0	0.207	22.2	6.8	0.53	3.5	2.4
Toluene	16,000	410,000	410,000	650	650	42	240	240	12	—	42		0.660	<5.76	<97.7	0.047	<5.17	10	0.44	<4.95	9.99
m,p-Xylenes	16,000	410,000	41,000	420[1]	420[1]	5.9[2]	75[2]	120[2]	200[2]	—	—		0.540	8.77	50.0	0.194	8.54	25.5	1.1	1	14
o-Xylene	16,000	410,000	41,000	410	410	6.5	98	140	190	—	—		0.270	5.7	<97.7	0.120	7.77	13	0.63	1.3	5.6
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	—	5.6		0.810	14.470	50.0	0.314	16.310	38.5	1.73	2.3	19.6
PNA Constituents (mg/kg)																					
Acenaphthene	4,700	120,000	120,000	—	—	—	—	—	570	0.13	4,700		4.21	56.3	160	0.31	60.7	13.1	0.42	31.6	6.14
Acenaphthylene	2,300[4]	61,000[4]	61,000[4]	—	—	—	—	—	85[4]	0.07	2,300		64.8	7.59	17	0.12	4.63	12.8	0.61	8.18	27.7
Anthracene	23,000	610,000	610,000	—	—	—	—	—	12,000	0.4	—		16.1	33.2	86	0.21	26.3	11.6	0.785	14.4	52.1
Benzo(a)anthracene	0.90	8	170	—	—	—	—	—	2	1.8	2					0.22			1.08		
Benzo(a)pyrene	0.09	0.80	17	—	—	—	—	—	8	2.1	2.1					0.3			0.886		
Benzo(b)fluoranthene	0.90	8	170	—	—	—	—	—	5	2.1	2.1					0.25			1.08		
Benzo(g,h,i)perylene	2,300[4]	61,000[4]	61,000[4]	—	—	—	—	—	27,000[4]	1.7	—		106	4.94	21	0.18	4.86	2.07	0.245	7.27	83.6
Benzo(k)fluoranthene	9	78	1,700	—	—	—	—	—	49	1.7	9			4.31		0.087	3.02	3.06	0.432	3.68	
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	31,000	—	—	3,600	—	—		<16.6	<8.67	<55	<0.092	<8.61	<7.82	<2.4	<4.43	<47.1
Chrysene	88	780	17,000	—	—	—	—	—	160	2.7	88		70	16.1	49	0.24	13.3	9.77	1.2	12.7	
Dibenzo(a,h)anthracene	0.09	0.80	17	—	—	—	—	—	2	0.42	0.42					0.044			<0.122		
Fluoranthene	3,100	82,000	82,000	—	—	—	—	—	4,300	4.1	—		81.7	36.8	110	0.37	28.8	24.3	2.55	20.8	321
Fluorene	3,100	82,000	82,000	—	—	—	—	—	560	0.18	3,100		6.66	38.3	65	0.16	25.2	17.3	0.775	13.6	21.7
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	—	—	—	—	—	14	1.6	1.6					0.14			0.297		
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8		10.8	141		0.38		44.9	1.59	37.1	45.2
Phenanthrene	2,300[4]	61,000[4]	61,000[4]	—	—	—	—	—	200[4]	2.5	2,300		17.5	104	260	0.48	77.8	43.6	2.68	50.5	161
Pyrene	2,300	61,000	61,000	—	—	—	—	—	4,200	3	—		160	47.3	150	0.49	39.9	17.2	1.86	30.4	275
Metals (mg/kg)																					
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	0.1		0.09	0.064	0.096	0.048	0.046	0.029	0.044	0.043	0.043
Selenium	390	10,000	1,000	—	—	—	—	—	3.3	0.48	—		0.934	<0.588	1.78	3.78	0.49	0.582	7.02	0.587	0.46
Arsenic	13.0	13.0	61.0	750	1,200	25,000	—	—	30	13	13		3.17	<2.5	3.29	<1.3	1.2	1.2	2.4	2.51	3.43
Barium	5,500	140,000	14,000	690,000	910,000	870,000	—	—	1,800	110	—		69.9	115	66	92.5	101	107	94.5	105	124
Cadmium	78	2,000	200	1,800	2,600	59,000	—	—	59	0.6	—		0.74	0.11	0.52	0.83	0.15	0.42	0.68	0.18	0.34
Chromium	230	6,100	4,100	270	420	690	—	—	32	16.2	230		12.4	24.9	23.2	19.9	25.5	20.1	19.1	24.4	18.3
Lead	400	800	700	—	—	—	—	—	107	38	400		52.5	15.7	16.5	19.8	18.3	14.8	29.6	23.4	16.8
Silver	390	10,000	1,000	—	—	—	—	—	39	0.55	—		<0.53	<0.55	<0.52	<0.52	0.53	<0.53	<0.52	<0.52	<0.51
Cyanide, Amenable to Chlorir	1,600	41,000	4,100	—	—	—	—	—	40	0.51	1,600		<0.627	<2.65	8.89	Interference	Interference	Interference	Interference	Interference	6.67
Cyanide (Total)											—		3.68	16.5	68.7	4.14	0.65	2.3	9.3	3.85	7.66

Notes:
[1] Objective is for m-xylene
[2] Objective is for p-xylene
[3] Objectives are for Class I groundwater.
[4] Non-TACO or provisional ROs provided by the IEPA.
— No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.
Concentration exceeds Soil Ingestion Pathway for Residential project remediation objective.
Concentration exceeds Soil Inhalation Pathway for Residential project remediation objective.
Concentration exceeds both Soil Ingestion and Soil Inhalation Pathways for Residential project remediation objective.

Table 1
Exceedances of Tier 1 Remedial Objectives for Ingestion and Inhalation
Excavation Wall Samples in the 0 to 3 Foot Depth Interval
Champaign MGP

Constituent	Soil Ingestion Residential	Soil Ingestion Commercial	Soil Ingestion Construction	Soil Inhalation Residential	Soil Inhalation Commercial	Soil Inhalation Construction	Indoor Air Residential	Indoor Air Commercial	Soil Component to Groundwater[3]	IEPA Accepted Background Levels for MSA	Project Remediation Objectives	Sample Location: / Sample ID: / Sample Date: / Sample Depth (feet):	P3-A2.5-W (3) 1/27/2010 3	P3-A3-W (3) 1/12/2010 3	P3-A4-W (3) 1/13/2010 3	P3-F.5-W (3) 2/3/2010 3	P3-G-W (3) 2/4/2010 3	P3-G.5-W (3) 2/4/2010 3	P3-H-W (3) 2/5/2010 3	P3-H.5-W (3) 2/5/2010 3	P4-A1-W (3) 3/31/2010 3
BTEX Constituents (mg/kg)																					
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	--	0.069		3.59	2.26	5.61	1.2	29.7	31.7	0.0082	0.0065	3.65
Ethylbenzene	7,800	200,000	20,000	400	400	58	130	130	13	--	58		5.83	1.89	1.91	<5.99	4.6	<2.55	0.0024	0.0026	9.75
Toluene	16,000	410,000	410,000	650	650	42	240	240	12	--	42		2.04	5.52	2	<5.99	31.1	<2.55	0.0029	0.0048	<6.5
m,p-Xylenes	16,000	410,000	41,000	420[1]	420[1]	5.9[2]	75[2]	120[2]	200[2]	--	--		13.2	13.1	2.38	<5.99	16.7	<2.55	0.0041	0.0056	2.4
o-Xylene	16,000	410,000	41,000	410	410	8.5	98	140	190	--	--		1.72	5.54	1.43	<5.99	7.45	<2.55	0.0023	0.0022	<6.5
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	--	5.6		14.92	18.64	3.81	<5.99	24.15	<2.55	0.0064	0.0078	2.4
PNA Constituents (mg/kg)																					
Acenaphthene	4,700	120,000	120,000	--	--	--	--	--	570	0.13	4,700		2.95	10.3	24.8	0.53	2.21	0.638	0.037	0.345	22.4
Acenaphthylene	2,300[4]	61,000[4]	61,000[4]	--	--	--	--	--	85[4]	0.07	2,300		1.81	18.6	9.2	1.27	7.79	2.01	0.456	1.0	1.43
Anthracene	23,000	610,000	610,000	--	--	--	--	--	12,000	0.4	--		4.99	29.7	26.3	1.87	5.26	1.67	0.25	1.91	6.59
Benzo(a)anthracene	0.90	8	170	--	--	--	--	--	2	1.8	2							1.09	1.43		
Benzo(a)pyrene	0.09	0.80	17	--	--	--	--	--	8	2.1	2.1							1.03	1.62		
Benzo(b)fluoranthene	0.90	8	170	--	--	--	--	--	5	2.1	2.1							0.852			
Benzo(g,h,i)perylene	2,300[4]	61,000[4]	61,000[4]	--	--	--	--	--	27,000[4]	1.7	--		0.854	5.53	19.8	1.86	1.29	0.427	1.34	7.52	1.33
Benzo(k)fluoranthene	9	78	1,700	--	--	--	--	--	45	1.7	9		0.889	6.59		1.78	0.822	0.294	0.835	6.27	0.85
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	31,000	--	--	3,600	--	--		<14.3	<11.1	<13.7	<11.2	<2.3	<2.19	<0.762	<1.55	<4.93
Chrysene	88	780	17,000	--	--	--	--	--	160	2.7	88		2.96	19	40.4	3.78	2.95	1.03	1.7	12.4	3.36
Dibenzo(a,h)anthracene	0.09	0.80	17	--	--	--	--	--	2	0.42	0.42		<0.726				0.315	0.11	0.369		0.377
Fluoranthene	3,100	82,000	82,000	--	--	--	--	--	4,300	4.1	--		8.91	50.8	95.9	6.35	6.01	2.19	1.97	18	7.18
Fluorene	3,100	82,000	82,000	--	--	--	--	--	560	0.18	3,100		5.95	37.9	21.9	1.59	6.31	1.6	0.113	0.518	8.75
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	--	--	--	--	--	14	1.6	1.6		1.1				1.01	0.341	1.2		1.11
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8		19.2	140	14.7	10.6	52.6	15.9	0.338	0.386	65.5
Phenanthrene	2,300[4]	61,000[4]	61,000[4]	--	--	--	--	--	200[4]	2.5	2,300		15.2	90.4	94.9	5.61	18	5.27	0.825	6.86	23.1
Pyrene	2,300	61,000	61,000	--	--	--	--	--	4,200	3	--		6.74	37.5	82.5	5.77	8.16	2.77	2.18	17.1	9.79
Metals (mg/kg)																					
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	0.1		0.034	0.042	0.059	0.052	0.012	0.008	0.328	0.307	0.049
Selenium	390	10,000	1,000	--	--	--	--	--	3.3	0.48	--		<0.556	0.799	3.56	<0.566	<0.545	<0.556	<0.566	<0.588	<0.577
Arsenic	13.0	13.0	61.0	750	1,200	25,000	--	--	30	13	13		5.54	2.91	4.08	7.41	7.24	5.01	2.84	<2.4	<2.45
Barium	5,500	140,000	14,000	690,000	910,000	870,000	--	--	1,600	110	--		47.5	43.5	79.7	81.6	58.7	17.5	118	136	134
Cadmium	78	2,000	200	1,800	2,800	59,000	--	--	59	0.6	--		0.1	0.17	0.72	0.21	0.22	0.12	0.61	0.57	0.35
Chromium	230	6,100	4,100	270	420	690	--	--	32	16.2	230		13.9	16	13.1	15.1	16.8	15.7	21.9	26.8	22.8
Lead	400	800	700	--	--	--	--	--	107	36	400		15.7	15.5	45.2	29.6	13	10.1	76.9	78.2	16.1
Silver	390	10,000	1,000	--	--	--	--	--	39	0.55	--		<0.52	<0.51	<0.56	<0.53	<0.55	<0.5	<0.5	<0.53	<0.54
Cyanide, Amenable to Chlorin	1,600	41,000	4,100	--	--	--	--	--	40	0.51	1,600		<0.726	4.22	6.23	Interference	<0.578	<0.552	1.49	4.34	<0.723
Cyanide (Total)											--		0.51	12.8	6.88	1.21	0.37	<0.55	10	5.19	1.36

Notes:
[1] Objective is for m-xylene
[2] Objective is for p-xylene
[3] Objectives are for Class I groundwater.
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-- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.
Concentration exceeds Soil Ingestion Pathway for Residential project remediation objective.
Concentration exceeds Soil Inhalation Pathway for Residential project remediation objective.
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Constituent	Soil Ingestion Residential	Soil Ingestion Commercial	Soil Ingestion Construction	Soil Inhalation Residential	Soil Inhalation Commercial	Soil Inhalation Construction	Indoor Air Residential	Indoor Air Commercial	Soil Component to Groundwater[3]	IEPA Accepted Background Levels for MSA	Project Remediation Objectives	Sample Location: / Sample ID: / Sample Date: / Sample Depth (feet):	P4-A2-W (3) 3/29/2010 3	P4-A3-W (3) 3/29/2010 3	P4-A4-W (3) 3/26/2010 3	P4-A5-W (3) 3/26/2010 3	P5-A3-W (3) 7/14/2010 3	P5-A4-W (3) 7/14/2010 3	P5-A5-W (3) 7/13/2010 3	P6-A4.5-W (3) 10/12/2010 3	P6-A5.5-W (3) 10/12/2010 3
BTEX Constituents (mg/kg)																					
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	—	0.069		7.3	<6.42	1.82	4.95	5.73	<1.05	<0.0919	0.0566	0.0052
Ethylbenzene	7,800	200,000	20,000	400	400	58	130	130	13	—	58		49.6	72.8	15.7	26.7	62.1	6.21	0.578	0.561	0.0652
Toluene	16,000	410,000	410,000	650	650	42	240	240	12	—	42		<29	<32.1	<6.32	<10.8	<6.31	1.4	<0.46	0.044	0.0054
m,p-Xylenes	16,000	410,000	41,000	420[1]	420[1]	5.5[2]	75[2]	120[2]	200[2]	—	—		13.7	22.5	2.4	6.05	14.9	2.4	<0.46	0.052	0.0072
o-Xylene	16,000	410,000	41,000	410	410	6.5	98	140	190	—	—		15.6	26.8	4.14	9.25	23.2	4.2	0.21	0.216	0.0449
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	—	5.6		29.3	49.3	6.54	15.3	38.1	6.6	0.21	0.268	0.0521
PNA Constituents (mg/kg)																					
Acenaphthene	4,700	120,000	120,000	—	—	—	—	—	570	0.13	4,700		117	189	23.4	7.86	106	40.8	4.82	17.6	0.726
Acenaphthylene	2,300[4]	61,000[4]	61,000[4]	—	—	—	—	—	85[4]	0.07	2,300		6.72	12.3	1.87	0.499	6.42	2.76	1.98	1.64	0.303
Anthracene	23,000	610,000	610,000	—	—	—	—	—	12,000	0.4	—		40.3	72.1	8.58	2.73	38.5	16.7	5.35	8.84	0.417
Benzo(a)anthracene	0.90	8	170	—	—	—	—	—	2	1.8	2		[redacted]	[redacted]	[redacted]	1.27	[redacted]	[redacted]	[redacted]	[redacted]	0.273
Benzo(a)pyrene	0.09	0.80	17	—	—	—	—	—	8	2.1	2.1		[redacted]	[redacted]	[redacted]	1.07	[redacted]	[redacted]	[redacted]	[redacted]	0.363
Benzo(b)fluoranthene	0.90	8	170	—	—	—	—	—	5	2.1	2.1		[redacted]	[redacted]	[redacted]	0.899	[redacted]	[redacted]	[redacted]	[redacted]	0.288
Benzo(g,h,i)perylene	2,300[4]	61,000[4]	61,000[4]	—	—	—	—	—	27,000[4]	1.7	—		6.94	12.2	2.15	0.46	6.57	2.99	1.86	1.67	0.296
Benzo(k)fluoranthene	9	78	1,700	—	—	—	—	—	49	1.7	9		4.05	7.18	1.19	0.284	4.09	1.75	0.796	0.868	<0.111
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	31,000	—	—	3,600	—	—		<9.3	<9.47	<2.31	<0.912	<8.98	<8.17	<4.26	<2.17	<2.19
Chrysene	88	780	17,000	—	—	—	—	—	160	2.7	88		20	32.2	4.96	1.24	18.3	8.15	3.85	4.11	0.179
Dibenzo(a,h)anthracene	0.09	0.80	17	—	—	—	—	—	2	0.42	0.42		[redacted]	[redacted]	[redacted]	0.131	[redacted]	[redacted]	[redacted]	0.419	<0.111
Fluoranthene	3,100	82,000	82,000	—	—	—	—	—	4,300	4.1	—		43.7	75	9.62	2.92	38.4	21.5	8.46	9.92	0.436
Fluorene	3,100	82,000	82,000	—	—	—	—	—	560	0.18	3,100		62.1	80.5	9.68	3.26	52.8	21.6	5.11	9.2	0.513
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	—	—	—	—	—	14	1.6	1.6		[redacted]	[redacted]	[redacted]	0.386	[redacted]	[redacted]	1.31	1.28	0.201
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8		[redacted]	544	18.8	16.3	287	58.2	0.613	4.57	0.208
Phenanthrene	2,300[4]	61,000[4]	61,000[4]	—	—	—	—	—	200[4]	2.5	2,300		147	240	28.8	9.85	131	55.1	17	29.5	1.6
Pyrene	2,300	61,000	61,000	—	—	—	—	—	4,200	3	—		62.6	110	13.8	4.01	58.3	25	10.7	13.6	0.731
Metals (mg/kg)																					
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	0.1		0.032	0.034	0.129	0.032	0.029	0.028	—	0.038	0.022
Selenium	390	10,000	1,000	—	—	—	—	—	3.3	0.48	—		0.42	<0.6	0.9	0.928	0.658	<0.566	—	<3.7	<3.64
Arsenic	13.0	13.0	61.0	750	1,200	25,000	—	—	30	13	13		<2.31	1.6	<2.5	1.6	1.6	6.88	—	1.4	[redacted]
Barium	5,500	140,000	14,000	690,000	910,000	870,000	—	—	1,600	110	—		153	139	156	161	197	132	—	150	179
Cadmium	78	2,000	200	1,800	2,800	59,000	—	—	59	0.6	—		0.34	0.4	0.41	0.34	0.27	0.39	—	1.12	0.88
Chromium	230	6,100	4,100	270	420	690	—	—	32	16.2	230		20.3	20.1	19.7	21.7	23.6	23.2	—	26.7	16.6
Lead	400	800	700	—	—	—	—	—	107	36	400		15.9	16.3	32	16.1	16.6	16.2	—	16.9	19.6
Silver	390	10,000	1,000	—	—	—	—	—	39	0.55	—		<0.51	<0.55	<0.55	<0.55	<0.49	<0.55	—	<0.51	<0.5
Cyanide, Amenable to Chlorin	1,600	41,000	4,100	—	—	—	—	—	40	0.51	1,600		0.831	Interference	Interference	Interference	0.44	Interference	—	0.831	0.36
Cyanide (Total)											—		1.62	0.54	0.89	0.52	0.83	<0.59	—	0.99	0.39

Notes:
[1] Objective is for m-xylene
[2] Objective is for p-xylene
[3] Objectives are for Class I groundwater.
[4] Non-TACO or provisional ROs provided by the IEPA.
'— No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.
Concentration exceeds Soil Ingestion Pathway for Residential project remediation objective.
Concentration exceeds Soil Inhalation Pathway for Residential project remediation objective.
Concentration exceeds both Soil Ingestion and Soil Inhalation Pathways for Residential project remediation objective.

Table 1
Exceedances of Tier 1 Remedial Objectives for Ingestion and Inhalation
Excavation Wall Samples in the 0 to 3 Foot Depth INterval
Champaign MGP

Constituent	Soil Ingestion Residential	Soil Ingestion Commercial	Soil Ingestion Construction	Soil Inhalation Residential	Soil Inhalation Commercial	Soil Inhalation Construction	Indoor Air Residential	Indoor Air Commercial	Soil Component to Groundwater[3]	IEPA Accepted Background Levels for MSA	Project Remediation Objectives	Sample Location: / Sample ID: / Sample Date: / Sample Depth (feet):	P6-BC5.5-W (3) 10/13/2010 3	P7-B1-SW (3) 2/15/2011 3	P7-BC1-SW (3) 2/15/2011 3	P7-C1-SW (3) 2/15/2011 3	P7-CD1-SW (3) 2/17/2011 3	P7-D1-W (3) 3/2/2011 3	P7-DE1-W (3) 3/2/2011 3	P8-H1-W (3) 4/6/2011 3	P8-H4-W (3) 4/6/2011 3
BTEX Constituents (mg/kg)																					
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	--	0.069		0.0022	<1.12	<0.0227	<0.886	<0.774	<0.0252	<0.0243	0.0433	0.0498
Ethylbenzene	7,800	200,000	20,000	400	400	58	130	130	13	--	58		0.0016	13.9	0.089	26	17	0.968	0.759	0.093	1.02
Toluene	16,000	410,000	410,000	650	650	42	240	240	12	--	42		0.0046	<5.62	<0.113	<4.43	<3.87	0.082	0.078	0.031	0.032
m,p-Xylenes	16,000	410,000	41,000	420[1]	420[1]	5.9[2]	75[2]	120[2]	200[2]	--	--		0.0034	5.6	<0.113	4.63	3.1	0.137	0.125	0.415	0.11
o-Xylene	16,000	410,000	41,000	410	410	8.5	98	140	190	--	--		0.0015	8.85	0.03	10.3	4.8	0.395	0.365	0.185	0.527
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	--	5.6		0.0049	14.45	0.03	14.93	7.9	0.532	0.49	0.6	0.637
PNA Constituents (mg/kg)																					
Acenaphthene	4,700	120,000	120,000	--	--	--	--	--	570	0.13	4,700		<0.021	53.6	4.7	34.3	22.6	1.71	1.61	1.93	35.6
Acenaphthylene	2,300[4]	61,000[4]	61,000[4]	--	--	--	--	--	85[4]	0.07	2,300		0.58	8.95	1.37	3.35	2.14	2.89	2.73	<0.419	3.01
Anthracene	23,000	610,000	610,000	--	--	--	--	--	12,000	0.4	--		0.07	31.2	3.83	19.5	11.1	1.17	0.981	1.03	17.6
Benzo(a)anthracene	0.90	8	170	--	--	--	--	--	2	1.8	2		0.129	[redacted]				0.421	0.313	0.617	[redacted]
Benzo(a)pyrene	0.09	0.80	17	--	--	--	--	--	8	2.1	2.1		0.874						[redacted]	<0.419	
Benzo(b)fluoranthene	0.90	8	170	--	--	--	--	--	5	2.1	2.1		0.618						2.03	<0.419	
Benzo(g,h,i)perylene	2,300[4]	61,000[4]	61,000[4]	--	--	--	--	--	27,000[4]	1.7	--		0.786	10.1	1.44	3.2	2.54	2.62	2.57	<0.419	2.35
Benzo(k)fluoranthene	9	78	1,700	--	--	--	--	--	49	1.7	9		0.158	4.84	0.703	2.28	1.22	0.523	0.522	<0.419	1.78
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	31,000	--	--	3,600	--	--		<0.422	<4.24	<0.849	<7.99	<1.95	<2.06	<2.1	<8.27	<2.07
Chrysene	88	780	17,000	--	--	--	--	--	160	2.7	88		0.061	20.6	2.78	10.6	5.4	1.37	1.34	0.37	8.13
Dibenzo(a,h)anthracene	0.09	0.80	17	--	--	--	--	--	2	0.42	0.42		0.146	[redacted]	0.379	[redacted]		0.407	<0.419	[redacted]	
Fluoranthene	3,100	82,000	82,000	--	--	--	--	--	4,300	4.1	--		0.108	40.5	5.53	23.2	11.9	0.421	0.365	0.905	16.6
Fluorene	3,100	82,000	82,000	--	--	--	--	--	560	0.18	3,100		0.044	30.8	3.92	19.4	11.9	1.8	1.65	1.36	18.4
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	--	--	--	--	--	14	1.6	1.6		0.569	[redacted]	1.27	[redacted]		[redacted]	[redacted]	<0.419	[redacted]
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8		<0.021	36.6	0.319	49.9	46.5	1.3	1.41	6.25	1.89
Phenanthrene	2,300[4]	61,000[4]	61,000[4]	--	--	--	--	--	200[4]	2.5	2,300		<0.021	104	12.9	67.6	36.5	1.58	1.33	4.44	55
Pyrene	2,300	61,000	61,000	--	--	--	--	--	4,200	3	--		0.404	65.6	8.75	34.3	18.8	2	1.84	1.4	24.9
Metals (mg/kg)																					
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	0.1		0.036	0.031	0.038	0.017	0.013	0.049	0.051	0.036	0.032
Selenium	390	10,000	1,000	--	--	--	--	--	3.3	0.48	--		3.7	<0.558	<0.556	<0.577	<0.556	<0.6	<0.566	<0.577	<0.545
Arsenic	13.0	13.0	61.0	750	1,200	25,000	--	--	30	13	13		2	3.62	5.65	5.47	5.14	9.52	11.8	6.57	7.02
Barium	5,500	140,000	14,000	690,000	910,000	870,000	--	--	1,800	110	--		147	118	118	59.4	31.4	98	119	138	114
Cadmium	78	2,000	200	1,800	2,800	59,000	--	--	59	0.6	--		0.94	0.43	0.52	<0.2	<0.18	0.18	0.24	0.51	0.19
Chromium	230	6,100	4,100	270	420	690	--	--	32	16.2	230		23.4	22	23.1	14.7	14.5	19	24.3	21.9	17.5
Lead	400	800	700	--	--	--	--	--	107	36	400		16	15.1	18	14.2	18.3	14.7	16.8	17.3	18.1
Silver	390	10,000	1,000	--	--	--	--	--	39	0.55	--		<0.54	<0.52	<0.53	<0.55	<0.5	<0.54	<0.54	<0.55	<0.55
Cyanide, Amenable to Chlorin	1,600	41,000	4,100	--	--	--	--	--	40	0.51	1,600		0.778	1.64	37.4	1.06	1.62	26.8	1.3	<2.8	6.26
Cyanide (Total)											--		0.84	2.34	47.1	1.55	3.46	30.8	3.84	1.8	10.9

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