EASTMAN CHEMICAL COMPANY, TENNESSEE OPERATIONS

Biosludge Constituent Concentrations (without grit), TOTALS Analyses

June 2001 to November 2001

	11/26/2001		10/22/2001		09/25/2001		08/20/2001		07/23/2001		06/28/2001	
Chemical Name	**1st 30 min**	**2nd 30 min**	**1st 30 min**	**2nd 30 min**	**1st 30 min**	**2nd 30 min**	**1st 30 min**	**2nd 30 min**	**1st 30 min**	**2nd 30 min**	**1st 30 min**	**2nd 30 min**
	TOTALS mg/kg		**TOTALS mg/kg**		**TOTALS mg/kg**		**TOTALS mg/kg**		**TOTALS mg/kg**		**TOTALS mg/kg**	
Inorganics:												
Antimony	8.57	8.01	3.16	4	3.05	2.96	2.11	2.75	3.53	3.58	3.34	4.76
Arsenic	9.54	8.78	10.2	13	7.84	4.92	3.15	3.01	4.61	5.58	9.19	6.36
Barium	18.4	16.6	28.4	31.1	8.18	8.1	7.98	8.15	7.05	10.8	13	13.1
Beryllium	0.246	0.269	0.312	0.344	0.11	0.114	0.0623	0.091	0.0983	0.11	0.095	0.138
Cadmium	0.251	0.209	0.241	0.348	0.07	0.101	0.145	0.179	0.154	0.177	0.177	0.133
Chromium	59.4	53.3	56.3	63.6	95.6	101	97.3	94.6	123	123	64.4	65
Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	114	106	65.6	73.6	67.8	71.1	85.3	84	75	74.7	63.5	63.4
Copper	98.7	90.4	80.9	92.4	87.7	91.6	95.9	90.3	60.5	60	65.9	67
Lead	6.05	5.63	5.1	5.54	1.85	2.02	1.78	1.78	1.85	2.23	1.64	2.05
Mercury	0.097	0.088	0.075	0.078	0.227	0.266	0.068	0.057	0.081	0.075	0.126	0.183
Nickel	33	30.3	25.2	27.6	27.6	29.5	26.4	26.1	26	26.3	23.4	22.2
Selenium	2.6	2.78	4.39	4.86	0.592	1.37	1.72	1.43	2.67	2.05	2.47	2.56
Tin	17	14.9	27.4	30.5	22.1	22.6	40.5	40.2	45.4	46.1	32.8	31.6
Thallium	0.974	0.784	<0.296	0.0506	<0.3	<0.3	<0.279	<0.0279			<0.29	<0.29
Vanadium*	2.42	2.15	3.91	4.47	0.85	0.94	6.72	6.53	6.66	6.65	5.03	5.08
Zinc*	77.1	71.1	77	79.7	71.4	77.2	72.5	70.4	80.3	83.7	79.6	79.7
Silver	0.324	0.179	<0.0592	<0.0566	<0.06	<0.059	<0.0557	0.163		0.045	<0.06	<0.06
Semivolatile Organics:												
Aniline	2.55	2.38	5.04	4.67	0.546	0.235						
Bis(2-ethylhexyl)phthalate	25D	27.7D	20.2D	8.43	101D	101D	23D	11.4	5.13	11.6	2.68	3.78
o-Dichlorobenzene			0.185J	0.146J	0.174J	0.143J						
p-Dichlorobenzene										0.111J		
Di-n-butyl phthalate	1.47	1.6	5.49	3.21	1.09	3.65	4.68	2.93	0.814J	1.97	2.76J	3.58J
Diethyl phthalate	0.877B	0.828B	1.99	1.12		0.237J	0.204J	0.148J		0.595		
2,4-Dimethylphenol												
Dimethyl phthalate												
Naphthalene	0.691	0.668	0.187J	0.123J								
Phenol												
Phenanthrene	0.146J	0.152J										
Volatile Organics:												
Acetone	1.59JB	2.08JB										
Carbon disulfide												
Ethyl benzene	0.153J	0.145J	0.181J	0.188J						0.202J		
Methyl ethyl ketone	4.84Jb	5.01Jb	4.72Jb	4.390Jb	3.74Jb	3.83Jb	2.61Jb	2.95Jb	3.06Jb	2.9Jb	2.94J	2.82J
Methyl Isobutyl ketone												
Methylene Chloride									0.171Jb	0.182Jb		
Toluene	0.217J	0.230J	0.139J	0.140J								
m- & p-Xylene	0.774b	0.800B	1.22b	1.35b	0.296J	0.309J	0.159J	0.167J	0.992	0.485J	3.79Jb	2.42Jb
o-Xylene	0.182J	0.188J	0.356J	0.420J					0.188J			
2-Hexanone												
1,1,2,2-Tetrachloroethane												

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D = Concentration based upon secondary dilution

MDL = Method Detection Limit

PQL = Practical Quantitation Limit

EQL = Estimated Quantitation Limit

A blank cell indicates a nondetect

*These constituents are not underlying hazardous constituents

	EASTMAN CHEMICAL COMPANY, TENNESSEE OPERATIONS											
	Biosludge Constituent Concentrations (without grit), TCLP Analyses											
	June 2001 to November 2001											
	11/26/2001		10/22/2001		09/25/2001		08/20/2001		07/23/2001		06/28/2001	
Chemical Name	**1st 30 min**	**2nd 30 min**	**1st 30 min**	**2nd 30 min**	**1st 30 min**	**2nd 30 min**	**1st 30 min**	**2nd 30 min**	**1st 30 min**	**2nd 30 min**	**1st 30 min**	**2nd 30 min**
	TCLP mg/L		**TCLP mg/L**		**TCLP mg/L**		**TCLP mg/L**		**TCLP mg/L**		**TCLP mg/L**	
Inorganics:												
Antimony	~0.0258	~0.0225	~0.00859	~0.00429	~0.00257	~0.00205	<0.001	<0.001	0.00198J	0.00366J	~0.00598	~0.00623
Arsenic	~0.0377	~0.0347	0.0102	~0.00776	~0.0246	~0.0202	~0.0243	~0.0212	0.0238	0.0218	0.0341	0.0335
Barium	0.0916	0.0808	0.212	0.21	0.102	0.0925	0.0698	0.0678	0.0864	0.115	0.0873	0.0842
Beryllium	<0.0001	<0.0001	<0.0001	<0.0001	~0.000158	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Cadmium	~0.00115	~0.00108	<0.0004	~0.00151	~0.00124	~0.00106	<0.0004	<0.0004	<0.0004	<0.0004	~0.000618	~0.000438
Chromium	~0.022	~0.0221	~0.0172	~0.0172	0.0401	0.0354	0.022	0.0229	0.0786	0.075	0.0414	0.0353
Cyanide												
Cobalt	0.968	0.87	0.957	0.914	0.7	0.637	1.01	1.03	1.44	1.42	1.27	0.945
Copper	0.083	0.0665	0.0996	0.0618	0.117	0.103	0.0508	0.0558	0.0572	0.0611	0.0518	0.0436
Lead	<0.001	<0.001	<0.001	<0.001	~0.00393	~0.00151	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Mercury	~0.000086	<0.00002	~0.00003	0.000044	0.000376	0.000214	~0.000099	~0.000063	~0.000083	~0.000035	0.000119	0.000079
Nickel	0.304	0.275	0.285	0.254	0.329	0.303	0.164	0.163	0.28	0.278	0.189	0.158
Selenium	~0.00872	~0.00854	~0.00885	~0.00363	~0.0194	~0.0102	~0.0144	~0.0104	0.0163J	0.0211J	~0.00882	~0.00897
Tin	~0.00495	~0.00282	<0.002	<0.002	~0.0157	~0.0103	~0.00936	~0.00669	0.00828J	0.00824	<0.002	<0.002
Thallium	~0.0063	~0.00555	<0.003	~0.00722	~0.00941	~0.00891	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Vanadium*	~0.00297	~0.00254	~0.000488	~0.00091	~0.0016	~0.00145	0.0212	0.0201	0.0179	0.0186	0.0148	0.00994
Zinc*	1.04	0.901	1.26	1.16	1.24	1.13	0.728	0.725	1.47	1.48	1.4	1.21
Silver	~0.000407	~0.000482	<0.0004	<0.0004	<0.0004	~0.000986	0.0448	0.0354	0.00151J	0.00408	~0.000547	0.000633
Semivolatile Organics:												
Aniline	0.0104	0.00934	0.00861	0.00949	0.00338J	0.00599						
Bis(2-ethylhexyl)phthalate	0.0125J	0.0193	0.00607J		0.0326	0.0681	0.00992J	0.0128J	0.0336	0.0226	0.0134J	0.0194
o-Dichlorobenzene												
p-Dichlorobenzene												
Di-n-butyl phthalate												
Diethyl phthalate	0.00374JB	0.00347JB										
2,4-Dimethylphenol												
Dimethyl phthalate												
Naphthalene												
Phenol												
Phenanthrene												
Volatile Organics:												
Acetone	1.79BD	1.77BD	1.02Db	1.08Db	1.23Db	1.25Db	0.844Db	0.836Db	0.848Db	0.505Db	0.666Db	0.718Db
Carbon disulfide				0.0014J	0.00118J	0.00118J						
Ethyl benzene			0.00106J							0.00107J		
Methyl ethyl ketone	0.127	0.126	0.0565	0.0557	0.0382J	0.0397J	0.0318J	0.0306J	0.0394J	0.0438J	0.0317J	0.0324J
Methyl Isobutyl ketone	0.00321J	0.00355J	0.00301J	0.00227J	0.00261J	0.00298J	0.00271J	0.00262J	0.00259J	0.00294J	0.00278J	0.00228J
Methylene Chloride							0.00178Jb	0.00202Jb	0.00339Jb	0.00379Jb		
Toluene	0.00188J	0.00186J							0.00137J	0.00165J		
m- & p-Xylene	0.00228J	0.00205J	0.00479J	0.00408J			0.00103J	0.00102J	0.00182J	0.00277J		
o-Xylene			0.002J	0.0018J								
2-Hexanone			0.0025J	0.00226J								
1,1,2,2-Tetrachloroethane			0.00193J	0.00172J								

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EASTMAN CHEMICAL COMPANY, TENNESSEE OPERATIONS
Biosludge Constituent Concentrations (without grit)
July 1999 to January 2002
(excluding June 2001 to November 2001, shown on other spreadsheets)

Chemical Name	Unit of Measure	01/14/2002	04/10/2001	01/23/2001	10/09/2000	8/23/2000	5/1/2000	10/14/1999	7/12/1999	PQL	MDL	Nonwastewater UTS
Inorganics:												
Antimony	mg/L	~0.0137	~0.00824	0.01	0.0188	<0.002	0.017	~0.00738	~0.0238		0.002	1.15
Arsenic	mg/L	~0.0335	0.0219	~0.0132	0.0208	<0.002	0.034	0.0119	~0.0157		0.002	5
Barium	mg/L	0.0738	0.1	0.055	0.117	0.585	0.587	0.588	0.759		0.0001	21
Beryllium	mg/L	<0.0001	~0.000179	ND	ND	<0.001	<0.001	~0.000289	~0.00354		0.0001	1.22
Cadmium	mg/L	~0.000777	~0.00147	~0.000766	~0.00127	<0.0003	~0.00359	~0.00109	~0.00258		0.0003	0.11
Chromium	mg/L	0.0384	0.024	0.0315	0.0198	0.0197	0.0258	0.015	0.0428		0.0006	0.6
Cyanide	**mg/kg**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		0.01	30-590 mg/kg
Cobalt												
Copper												
Lead	mg/L	~0.0016	ND	~0.0023	~0.00335	<0.002	~0.00392	~0.00453	~0.0186		0.002	590
Mercury	mg/L	~0.000015	ND	ND	ND	<0.0001	<0.0001	0.00011	<0.0001		0.0001	0.025
Nickel	mg/L	0.376	0.288	0.205	0.178	0.256	0.318	0.167	0.239		0.002	11
Selenium	mg/L	~0.00887	~0.00644	~0.00474	~0.00363	<0.0009	~0.00432	~0.00478	~0.00635		0.0009	5.7
Tin												
Thallium	mg/L	~0.0108	0.0122	0.011	~0.00314	<0.002	0.0147	ND	0.0137		0.002	0.2
Vanadium*	mg/L	~0.00069	0.0164	0.011	0.0132	0.0157	0.00845	0.00938	0.0136		0.0005	1.6
Zinc*	mg/L	1.7	3.52	0.946	2.63	1.48	2.6	2.44	2.76		0.001	4.3
Silver	mg/L	<0.0004	~0.0015	ND	~0.00112							
Semivolatile Organics:												
Aniline	mg/kg	1.22	2.18	1.06	2.19	0.527	3.52	2.13	1.66	0.5	0.1	14
Bis(2-ethylhexyl)phthalate	mg/kg	46.3D	17.5D	2.23	11.5	6.69	3.11	3.98	6.09	1.5	0.3	28
o-Dichlorobenzene	mg/kg		0.222J		0.267J							
p-Dichlorobenzene												
Di-n-butyl phthalate	mg/kg	1.54	3.95	0.494J	0.749J	0.524J	1.05	0.862J	0.575J	1	0.2	28
Diethyl phthalate	mg/kg	0.776	0.509		5.32	4.25	0.823	0.184J	0.244J	0.5	0.1	28
2,4-Dimethylphenol	mg/kg		ND		0.154J							
Dimethyl phthalate	mg/kg		ND		0.846							
Naphthalene	mg/kg	0.394J	0.134J		0.377J							
Phenol	mg/kg			0.348J								
Volatile Organics:												
Acetone	mg/kg	1.31JB	ND	3.01JB	ND	1.93JB	ND	ND	6.95B	6.25	1.25	160
Carbon disulfide	mg/kg		ND		ND	ND	ND	ND	2.53JB	0.625	0.125	4.8 mg/l TCLP
Ethyl benzene	mg/kg		ND		ND	ND	0.334	ND	ND	0.625	0.125	10
Methyl ethyl ketone	mg/kg	4	2.49Jb	4.14JB	3.43Jb	3.21JB	4.73	2.98JB	5.87JB	6.25	1.25	36
Methyl Isobutyl ketone	mg/kg	4.88Jb	ND		ND	0.358J	ND	ND	ND	0.625	0.125	33
Methylene Chloride												
Toluene	mg/kg	0.145J	0.177Jb	0.310Jb	0.204Jb	0.131JB	0.964	0.36J	0.138J	0.625	0.125	10
m- & p-Xylene	mg/kg	0.802b	0.274Jb	0.331J	0.535J	0.187	1.87	ND	0.247J	0.625	0.125	30
o-Xylene	mg/kg	.222J	ND		0.243J	ND	0.545	ND	ND	0.625	0.125	30

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