Peltier, Hannah

From:	Gilliam, Allen
Sent:	Thursday, May 16, 2013 2:06 PM
То:	Pam Smith
Cc:	Fuller, Kim; Peltier, Hannah
Subject:	AR0022187_Clarksvilles May 2013 updated TBLL calculations and influent effluent summary sheet_20130516
Attachments:	clarksTBLL513.xls; clarksville's 2013 inf eff summary sheet.doc

Pam,

As requested your technically based local limits (TBLL) spreadsheet was updated with 2011 and 2012 influent/effluent data. There were only a few parameter's maximum allowable headworks concentrations revised because of more valid removal efficiencies. Please find the TBLL spreadsheet attached.

Also for your convenience this office has attached a (slightly) revised influent/effluent summary sheet for your annual reports. Again you'll find very few changes from the '08 version.

Please take some time reviewing the spreadsheets and the footnotes on each. These will likely answer any questions you might have to complete that remaining section of your Pretreatment Program modification to be current with the Streamlining revisions to 40 CFR 403.

If you have any questions please feel free to contact this office.

Sincerely,

Allen Gilliam ADEQ State Pretreatment Coordinator 501.682.0625

				Clarksvi	lle 5/13		PAGE 1							
Pollutant	% Rem***	Water Quality	Water Quality*	Sludge	Sludge ****	Inhibition**	Inhibition++	MAHL	MAHC		Illocation for %SF	MAIL	Max Inf Exceed	
		mg/l	lbs/day	mg/kg	lbs/day	mg/l	lbs/day	lbs/day	mg/l	lbs/day	lbs/day^	lbs/day	MAHC	vs WQS(mg/l)
Cadmium Total	67	0.00529	0.1870	85	0.062	1.00	11.68	0.062	0.00535	0.03	0.053	0.0236	No	No
Copper Total	66	0.04575	1.5710	4300	3.205	1.00	11.68	1.571	0.13455	0.31	1.335	1.0204	No	No
Lead Total	64	0.02004	0.6501	840	0.646	1.00	11.68	0.646	0.05531	0.32	0.549	0.2339	No	No
Mercury Total	95	0.00001	0.0031	57	0.030	0.10	1.17	0.003	0.00027	0.0019	0.003	0.0007	2.7400	No
Nickel Total	36	0.51410	9.3791	420	0.574	1.00	11.68	0.574	0.04916	0.21	0.488	0.2796	No	No
Selenium Total	50	0.00558	0.1303	100	0.098	0.20	2.34	0.098	0.00843	0.12	0.084	0.0000	No	No
Silver Total	60	0.01444	0.4215	0	0.000	0.25	2.92	0.422	0.03610	0.13	0.358	0.2265	No	No
Zinc Total	56	0.44396	11.7811	7500	6.589	0.50	5.84	5.838	0.50000	1.46	4.962	3.5010	No	No
Chromium Total	82	1.19205	77.3241	3000	1.800	1.00	11.68	1.800	0.15416	0.36	1.530	1.1660	No	No
Cyanide Total	69	0.00580	0.2186	0	0.000	0.10	1.17	0.219	0.01872	0.04	0.186	0.1475	No	No
Arsenic	58	0.41112	11.4293	75	0.064	0.10	1.17	0.064	0.00545	0.03	0.054	0.0259	0.0097	No
Molybdenum	39	0.00000	0.0000	75	0.095	0.20	2.34	0.095	0.00810	0.09	0.080	0.0000	0.0290	No
Beryllium	50	0.00591	0.1381	0	0.000	0.10	1.17	0.138	0.01183	0.00	0.117	0.1168	No	No
	_		yellow denotes	MAHL/M	AIL driving c	riteria								

Dry tons/day of sludge

(avg from '03 thru '07)

* lbs/day = mg/l * 8.34 * average flow / (1-%Rem) ** Page 3-44 of EPA Guidance Mtrl. (Be est. @ 0.10 mg/l)

*** EPA Default Numbers from page 3-56 of TBLL guidance manual for Cd, Hg, Se, Cr, CN & Be (Be est. @ 50%; Hg est. @ 95%)

0.15

**** lbs/day = dry tons/day * 0.002 * CFR 503 criteria/ % removal from EPA Pret. Prog. Implementation workshop mtrl. ~ 6/93

++ lbs/day = mg/l * Flow * 8.34

 $^{\text{lbs/day}} = (1 - \text{SF}) * \text{MAHL}$

MAIL = Maximum allowable industrial loading = MAHL - Allocation for % SF - Domestic Ib/day

0.246 Safety Factor

MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT

 REPORTING YEAR:
 ______, 20
 TO ______, 20

 TREATMENT PLANT:
 City of Clarksville
 NPDES PERMIT #AR0022187

 AVERAGE POTW FLOW:
 MGD
 % IU FLOW:
 %

METALS,	МАНС	I	NFLUENT DA (µរ	WQ	EF	FLUENT DAT (µg		LABORATORY ANALYSIS					
CYANIDE and PHENOLS	(Total) (μg/l) (2)	(F-8)				level/ limit (µg/l)		Once/q		EPA MQL (μg/l) (1)	EPA Method Used (1)	Detection Level Achieved (µg/l)	
	Date Date Date Date	(2)	Date	Date	Date	Date							
Antimony	N/A					N/A					60		
Cadmium	5.35					5.29					0.5		
Copper	134					45.75					0.5		
Lead	55.3					20.04					0.5		
Mercury	0.27					0.013					.005		
Nickel	49.2					514					0.5		
Selenium	8.43					5.58					5		
Silver	36.1					14.44					0.5		
Zinc	500					444					20		
Chromium	154					1192					10		
Cyanide	18.7					5.8					10		
Arsenic	5.45					411					0.5		
Molybdenum	8.1					N/A							
Phenols	N/A					N/A					5		
Beryllium	11.8					5.91					0.5		
Thallium	N/A					N/A					0.5		
Flow, MGD	N/A					N/A							
(3)													

(1) It is advised that the influent and effluent samples are collected considering flow detention time through each plant. Analytical MQLs must be met for the effluent (and SHOULD be met for the influent) so the data can also be used for Local Limits assessment and NPDES application purposes.

(2) This value was calculated during the development of TBLL based on State WQ criteria, EPA guidance and either ADEQ Pretreatment staff Excel spreadsheets or the Permittee's consultant with concurrence from Pretreatment staff.

(3) Record the name of any pollutant [40 CFR 122, Appendix D, Table II and/or Table V] detected and the concentration at which they were detected.

MAHL - Maximum Allowable Headworks Level / MAHC - Maximum Allowable Headworks Concentration

WQ - "Water Quality Levels not to exceed" OR actual permit limit.