

**Torrence, Rufus**

---

**From:** Torrence, Rufus  
**Sent:** Tuesday, March 17, 2009 10:19 AM  
**To:** 'Vincent Miles'  
**Subject:** AFIN 35-00149 AR0033316 City of Pine Bluff MAHCs

Vincent,

I have attached the TBLL spreadsheet which shows your current MAHCs. You can find these MAHCs on the "Local Limits" page in the spreadsheet; they are highlighted in yellow. Also your current effluent water quality levels are on the same sheet and are also highlighted in yellow. After you review the logics in the spreadsheet and if you agree, you should use these current MAHCs and Water Quality Levels in your future annual reports. These new MAHCs are comparable to the ones developed in the August 2003 spreadsheet (Appendix P in the approved program).

Your new permit will require you to review your current water quality standards and either (1) certify that the current local limits are adequate to protect the receiving stream or (2) provide notification to ADEQ of Pine Bluff's intent to update the current local limits.

Pine Bluff does have current local limits listed in the City codes. Since the City has already notified ADEQ that these limits are no longer applicable, Pine Bluff must update the local limits.

We can discuss your options during the audit.

See you next week,

Rufus

NPDES PERMIT FILE  
NPDES # AR0033316  
AFIN # 35-00149  
\_\_\_\_\_  
Permit PN  
\_\_\_\_\_  
Correspondence  
\_\_\_\_\_  
Technical Backup  
3/18/09 Date Scanned



**WQ Limits for the PNBL**

Aquatic Life  
AML, ug/l

Cadmium Total	54.60
Chromium (hex)	45.42
Copper Total	172.46
Lead Total	200.15
Mercury Total	0.14
Nickel Total	5012.50
Selenium Total	57.81
Silver Total	47.53
Zinc Total	1365.51
Chromium (Tri)	9366.54
Cyanide Total	60.74
Beryllium Total	61.90
Arsenic	1944.68

**PNBL MAHC**

Pollutant	% Rem***	Water Quality mg/l	Water Quality lbs/day	Sludge mg/kg	Sludge+ lbs/day	Inhibition** mg/l	Inhibition** lbs/day	MAHL lbs/day	MAHC mg/l	Domestic Allocation for %SF lbs/day	MAIL lbs/day	Max Inf Exceeder MAHC	Max Effluent vs WQS(mg/l)
Cadmium Total	67	0.0546	14.86	85	0.00	1.00	89.82	14.86	0.16546	0.20	11.688	No	No
Copper Total	79	0.1725	73.77	4300	0.00	1.00	89.82	73.77	0.82125	4.09	54.924	No	No
Lead Total	61	0.2002	46.10	840	0.00	1.00	89.82	46.10	0.51322	3.30	33.578	No	No
Mercury Total	60	0.00014	0.0315	57	0.00	0.10	89.82	0.0315	0.00035	0.0202	0.005	No	No
Nickel Total	42	5.0125	776.26	420	0.00	1.00	89.82	89.82	1.00000	1.41	70.443	No	No
Selenium Total	50	0.0578	10.39	100	0.000	0.20	17.96	10.39	0.11563	0.34	7.972	No	No
Silver Total	75	0.0475	17.08	0	0.00	0.25	22.46	17.08	0.19012	0.34	13.325	No	No
Zinc Total	67	1.3655	371.67	7500	0.00	0.370	33.23	33.23	0.37000	24.93	1.662	No	No
Chromium Total	82	9.3665	4674.00	3000	0.00	1.00	89.82	89.82	1.00000	3.37	68.489	No	No
Cyanide Total	69	0.0607	17.60	0	0.00	0.10	8.98	8.98	0.10000	2.76	4.424	No	No
Arsenic	45	1.9447	317.59	75	0.00	0.10	8.98	8.98	0.10000	0.20	6.984	No	No
Molybdenum	50	0.0000	0.00	75	0.000	0.20	17.96	17.96	0.20000	0.67	13.698	No	No
Beryllium	50	0.061904	11.12	0	0.00	0.10	8.98	8.98	0.10000	0.03	7.152	No	No

Dry tons/day of sludge \*\*\*\*  Safety Factor

\* lbs/day = mg/l \* 8.34 \* average flow / (1-%Rem)  
 \*\* Page 3-44 of EPA 833B87202 Be est @ 0.10 mg/l.  
 + lbs/day = (dry tons/day \* 0.002 \* critria(mg/kg)) / % Rem  
 ++ lbs/day = mg/l \* Flow \* 8.34  
 ^ lbs/day = (1 - SF) \* MAHL  
 MAIL = Maximum allowable industrial loading = Allocation for % SF - Domestic  
 \*\*\*Rem Eff from Page 3-56 EPA 833B87202, Be & Mo est @ 50; Cu & Zn from "Rem", spreadsheet in this Workbook. Use EPA default value for cyanide; the 2004 data did not contain enough detected amounts to be reliable.  
 \*\*\*\* Dry tons/day of sludge based on page 3 of checklist in Audit Report dated July 11, 2006.



### Domestic Calculations for PNBL

Pollutants	EPA, P3-59* mg/l	Avg Reported** mg/l	Loading lbs/day
Cadmium Total	0.003		0.20
Copper Total	0.061		4.09
Lead Total	0.049		3.30
Mercury Total	0.000		0.02
Nickel Total	0.021		1.41
Selenium Total	-	0.00500	0.34
Silver Total	0.005		0.34
Zinc Total	0.175	0.37000	24.93
Chromium Total	0.050		3.37
Cyanide Total	0.041		2.76
Arsenic	0.003		0.20
Molybdenum	0.000	0.01000	0.67
Beryllium	0.000	0.00050	0.03

\*EPA Page 3-59 of 833-B87-202

\*\*Domestic concentrations are the smaller of EPA Typical Levels and average influent values reported in the annual reports.  
For zinc the samples for the 2006 & 2007 annual were contaminated; use 0.37 mg/l from 8-29-03 spreadsheet.  
For beryllium, molybdenum & selenium used the MQL to get a "loading".