

Peltier, Hannah

From: Gilliam, Allen
Sent: Thursday, May 16, 2013 2:06 PM
To: 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

| 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 lbs/day | Allocation for %SF lbs/day^ | MAIL lbs/day | Max Inf Exceedec MAHC | Max Effluent 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/MAIL driving criteria

Dry tons/day of sludge 0.246 Safety Factor 0.15
(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%)

**** lbs/day = dry tons/day * 0.002 * CFR 503 criteria/ % removal from EPA Pret. Prog. Implementation workshop mtrl. ~ 6/95

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

^ lbs/day = (1 - SF) * MAHL

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

