



ARKANSAS
Department of Environmental Quality

NOV 5 2012

Mr. Lance A. McAvoy, Environmental Manager
City of Fort Smith
Utility Department
3900 Kelly Hwy
Fort Smith, AR 72904

Re: City of Fort Smith Proposed Streamlining Mod and TBLL Development/Demonstration
(Permit Nos. AR0021750, AFIN 66-00226 & AR0033278, AFIN 66-01653)

Dear Mr. McAvoy:

In reference to the City of Fort Smith's letter dated September 28, 2012, the Department has reviewed the proposed pretreatment program and has the following comments.

A. TBLL DEVELOPMENT REVIEW

1. The Department will not contest limits and restrictions in general sewer use ordinances which have no firm technical basis as most cities elect to include BOD₅ and TSS limits (for surcharges, etc.) in these ordinances. In reference to Ordinance #80-11, find in Section 25-209(c)(2) the following limits:

“Substances, which may solidify or become viscous at temperatures between thirty-two (32) and one hundred four (104) degrees F are prohibited.”

These limits along with the BOD₅ and TSS limits in Section 25-209(c)(3) appear to have no firm technical basis, so the Department considered them as part of the general sewer use ordinance during the 2008 program review. The 1995 TBLL development document for these limits has “uniform” concentration limits (450/430) for BOD₅ and TSS but does not have a “uniform” mass limit (180 ppd)¹ for either

¹ Referring to the 1995 TBLL Development, in Table 15 on page 15 find a MAHL of 13,900 lbs/day for the Massard POTW. Using a 10% safety factor, the MAIL is 0.9 X 13,900 or 12,510 lbs/day. Since 12 SIUs discharge to Massard POTW, the “uniform” mass limit is 12,510/12 or 1042.5 lbs/day. The “uniform” mass limit for the P Street is 3127.5 lbs/day.

BOD₅ or TSS. The 1980's EPA *Guidance Manual on the Development and Implementation of Local Discharge Limitations Under the Pretreatment Program (December 1987)* pertained primarily to incompatible pollutants (cadmium, chromium, copper, lead, nickel, zinc, arsenic, cyanide, silver and mercury). BOD and TSS are compatible pollutants. In 2004 EPA published a manual, "*Local Limits Development Guidance*", for compatible pollutants (see page 5-22). Unfortunately, the City used the methodology in the 1980 manual for the 1995 TBLL development of concentration limits for BOD₅ and TSS. The City must either update the BOD₅ and TSS limits based on the 2004 guidance or demonstrate that these limits are not necessary.

2. Because five years have passed since the Department required the City to update the program, EPA and the Department have made a number of significant improvements to comply with the intent of the General Pretreatment Regulations since reviewing the ordinance in 2008. Currently, the Department is making a more in depth review of TBLL developments to include BOD, TSS, NH₃-N and BMPs to ensure that local limits are/aren't necessary for these provisions. Based on 40 CFR 403.8(f)(4) and the recently submitted BOD and TSS data, local **numerical** limits for all reviewed provisions (metals, cyanide, BOD & TSS) for the City of Fort Smith appear unnecessary at this time. The City has good compliance history over the past five years (2007 -2012) with BOD & TSS and the recent annual reports suggest that metals and cyanide in the influent on a long term basis are below the respective MAHCs. The City has demonstrated that local limits for reviewed pollutants are not necessary at this time (see paragraph 4 below). The Department will continue to review all annual reports for cities which have demonstrated that local limits are not necessary to ensure no significant changes.
3. Referring to the attached annual reports, the City will note that the Department was concerned about possible slug loads of metals at the Massard WWTP. The City may be getting slug loads from an unknown source or the removal efficiencies may need to be updated. The City should update removal efficiencies every quarter. When a removal efficiency changes by more than 20%, the City should consider revising the respective MAHL.

4. The City may employ BMPs in lieu of **numerical** limits. If the City discovers the source of the metal slug loads, a BMP may provide better control than a **numerical** limit. To ensure continued compliance with BOD₅ and TSS limits, the City should request/require high-strength BOD₅/TSS dischargers to comply with BMPs. The City should set goals for the BMPs based on current MAHLs. In other words, the goals may be the actual **numerical** local limit based on an allocation of the MAHL or more stringent goals not only to preserve existing loading but also to reduce future loadings. Based on the submitted BOD₅/TSS data, the recommended MAHLs² for the P Street and Massard POTWs are 39,156 and 35,618 lbs/day, respectively. If the City requests voluntary compliance with BMPs and goals, the procedure is completely local. However, in accordance with 40 CFR 403.5(c)(4), if the City elects to place BMPs in SIU permits (no **numerical** limits for related BMP goals should be in the permits) as pretreatment requirements, the City must submit the BMPs and goals to the Department for review and approval as local limits. Since the local SIUs are having little impact on organic loadings to both WWTPs, the Department recommends that the City ask for voluntary compliance at this time. Referring to the P Street BOD₅ data attached, the current peak loading is only 13,338 lbs/day while the plant is designed to handle over 39,156 lbs/day.
5. Please note that the local limit process is not only proactive but dynamic. If the City elects not to use any local limits (or only BMPs) at this time, the City should continue to monitor loading at the POTW. The City always has the option in the future to employ **numerical** limits (MAHL allocation, performance-based, etc.) to control problematic SIUs.

B. PROGRAM NARRATIVE REVIEW

1. The City must add language to the narrative on BMPs. EPA guidance can be reviewed at:

http://www.epa.gov/npdes/pubs/pretreatment_streamlining_7.0.pdf

2. The City must review the pretreatment narrative and EMS attachment to the email dated October 25, 2012 and make the necessary corrections.

² Referring to the EPA Local Limits Development Guidance (page 5-22), find that the MAHL should be based on the Design Loading Capacity or the Actual Peak Loading whichever is higher. In reference to the P Street Design Criteria (Camp Dresser & McKee, May 2007 Preliminary Engineering Report, Tables 3-9 & 5-10), the design load is 313 mg/l X 15 MGD X 8.34 = 39,156 lbs/day which is greater than the current peak loading of only 13,338 lbs/day. The current peak loading at the Massard plant is 35,618 lbs/day.

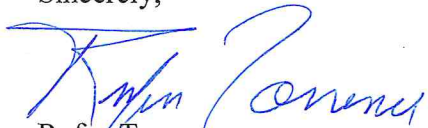
3. Finally, the Attorney letter submitted with the pretreatment narrative (Attachment A) does not confirm that the City has adequate legal authority to carry out the pretreatment program. This letter pertains to SIUs outside the City's jurisdiction. Please refer to the letter dated September 30, 1991 (submitted with the 1995 approved program) for proper content.

In conclusion, the Department apologizes for any confusion and will not require the City to strike any "local limits" in Section 25-209(c). However, when the permits with these BOD₅ and TSS limits (450/430/180) expire, the City must not issue any new permits with **numerical** local limits until the Department approves new MAHLs. The City intends to update the MAHLs in 2013 and may wish to verify the MAHLs for BOD₅ & TSS in this letter are sufficient (even if the City elects to use BMPs, updating the MAHLs is recommended to have current "goals"). If the City concurs that the 450/430/180 limits have no firm technical basis, the City can update the MAHLs in the future without striking Section 25-209(c)(3) (in other words without passing a new ordinance). However, if the City does not concur, the City must pass a new ordinance to remove Section 25.209(c)(3) before the Department can approve new MAHLs for BOD₅ and TSS.

Please submit the Attorney letter and updated narrative by **December 15, 2012**. If the City concurs with the TBLL findings in this letter, no local limit development is required at this time.

If you have any questions or concerns, please contact the Department at (501) 682-0626 or by email at torrence@adeq.state.ar.us .

Sincerely,



Rufus Torrence,
ADEQ Engineer