

ADEQ

ARKANSAS
Department of Environmental Quality

September 12, 2011

James Carlock
Wastewater Superintendent
Osceola Wastewater
P.O. Box 443
Osceola, AR 72370

Re: Osceola's (NPDES #AR0021580; AFIN #47-00956) Maximum Allowable Industrial Loadings/Necessity of Technically Based Local Limits

Mr. Carlock,

Under 40 CFR 403.8(f)(4) Pretreatment Program Requirements: Development and Implementation by POTW. (4) Local limits. The POTW shall develop local limits as required in §403.5(c)(1), or *demonstrate that they are not necessary.*"

Since the City of Osceola does not have a delegated Pretreatment Program ADEQ acts as the Control Authority and will provide calculations to satisfy the above requirements. Using the City's site specific data, EPA's Technically Based Local Limits (TBLL) guidance, and ADEQ's MS Excel spreadsheets, please find attached the final results sheet showing TBLLs are not necessary for EPA's minimum required parameters at this time.

All of the parameters' most restrictive criteria are driven by EPA's default "inhibition" values which have been proven to be conservative and obviously, not site specific.

ADEQ used Osceola's data for domestic background, influent and effluent values. For the parameters not detected by the City's contract lab, ADEQ used ½ the detection levels as per EPA guidance.

If there are further questions or comments please feel free to contact this office.

Sincerely,



Allen Gilliam
ADEQ State Pretreatment Coordinator
501.682.0625

Attachment: Final MS Excel Spreadsheet

E:\NPDES\NPDES\Pretreatment\Report

Osceola 9/11

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	%SF lbs/day	MAIL lbs/day	Max Inf MAHC	Exceedec WQS(mg/l)	Max Eff vs
Cadmium Total	67	30.7379	1786.7130	85	0.00	1.00	19.18	19.182	1.000	0.09	17.264	17.170	No	No	No
Copper Total	87	137.5713	20299.1789	4300	0.00	1.00	19.18	19.182	1.000	0.54	17.264	16.720	No	No	No
Lead Total	58	90.1290	4116.3209	840	0.00	1.00	19.18	19.182	1.000	0.06	17.264	17.206	No	No	No
Mercury Total	82	0.10316	10.9936	57	0.00	0.10	1.92	1.918	1.000	0.0019	1.726	1.724	No	No	No
Nickel Total	42	2485.4967	82201.3753	420	0.00	1.00	19.18	19.182	1.000	0.85	17.264	16.416	No	No	No
Selenium Total	50	42.9842	1649.0466	100	0.00	0.20	3.84	3.836	0.200	0.02	3.453	3.434	No	No	No
Silver Total	74	27.6619	2040.8076	0	0.00	0.25	4.80	4.796	0.250	0.19	4.316	4.127	No	No	No
Zinc Total	88	1129.2312	180507.6140	7500	0.00	0.50	9.59	9.591	0.500	2.77	8.632	5.861	No	No	No
Chromium Tote	82	6292.3933	670559.3838	3000	0.00	1.00	19.18	19.182	1.000	0.45	17.264	16.811	No	No	No
Cyanide Total	69	44.7036	2766.1428	0	0.00	0.10	1.92	1.918	0.100	0.08	1.726	1.651	No	No	No
Arsenic	45	2346.5013	81837.4336	75	0.00	0.10	1.92	1.918	0.100	0.47	1.726	1.255	No	No	No
Molybdenum	6	0.0000	0.0000	75	0.00	0.20	3.84	3.836	0.200	0.08	3.453	3.377	No	No	No
Beryllium	50	45.563274	1747.9894	0	0.00	0.10	1.92	1.9182	0.100	0.01	1.726	1.721	No	No	No

Dry tons/day of sludge 0.00 Safety Factor 0.10

[All conversions from mg/l to lbs/day used the City's avg. flow (2.3 MGD) from 1/1/2010 to 7/31/2011]

** Page 3-44 of EPA Guidance Mtri. (Be est. @ 0.10 mg/l)

*** EPA Default Numbers from page 3-56 of TBLL guidance manual except for Cu, Pb, Hg, Ag, Zn & Mo. (Be & Se est. @ 50%; Hg est. @ 95%)

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

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

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

MAHL = Maximum Allowable Headworks Loading

MAHC = Maximum Allowable Headworks Concentration

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