

**Henderson, Katie**

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**From:** Torrence, Rufus  
**Sent:** Wednesday, August 04, 2010 8:33 AM  
**To:** 'Jeff Wages (jwages@syrgis.com)'  
**Subject:** AFIN 54-00092 ARP001013 Syrgis' Limits for Lead and Zinc  
**Attachments:** LTR SGS 20090904.1.doc; Domestic Pollutant Loadings.png



August 6, 2010

Mr. Jeff Wages  
Syrgis Performance Initiators, Inc.  
334 Phillips 311 Road  
Helena, AR 72342-9033

Re: Syrgis 2010 August Semi-Annual Pretreatment Report  
(Tracking Number: ARP001013 AFIN: 54-00429 City of Helena NPDES No.: AR0043389)

Dear Mr. Wages:

The Department has reviewed Syrgis' August 2010 semi-annual report. The report is complete. This report contained both categorical and additional sampling data required by the Department's letter dated September 4, 2009. A copy of this letter is attached for Syrgis' convenience.

In the September 4, 2009 letter the Department decided not to adjust Syrgis' limits for dilution because the August 2009 report showed no regulated organic parameters were detected in the effluent. However, the March (February) 2009 and 2010 semi-annual reports indicated benzene in the effluent. The August 2010 report listed benzene non-detect at <1.00 µg/l.

In reference to the telephone conversation (Torrence and Wages) on February 22, 2010, Syrgis appears to have no processes which contribute zinc to the wastewater. In reference to the Department's letter dated September 4, 2009, find this option for the 40 CFR 403.15 credit:

Option 1: Syrgis may discontinue all testing of the drinking water after May 2010. Syrgis metal concentrations in the effluent must not exceed by 20% the highest previous reported metal potable concentration. If Syrgis reports a concentration higher than this value or an ADEQ lab report shows a value higher than this value, the Department will deem that Syrgis has violated the 40CFR414 categorical pretreatment standard for zinc or lead.

Syrgis reported the following concentrations of lead and zinc in the intake water:

Date	Lead	Zinc
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08-10-2009	< 40 µg/l	89 µg/l
11-02-2009	48 µg/l	23000 µg/l
01-14-2010	2.25 µg/l	66.6 µg/l
07-07-2010	4.20 µg/l	112 µg/l

Find attached Appendix V – Domestic Pollutant Loadings from EPA Local Limits Development Guidance Appendices (EPA 833-R-04-002B). EPA sampled 638 residential/commercial trunklines (sewer lines) throughout the USA. Even though the drinking water had been contaminated by residential/commercial plumbing and various waste, the maximum reported concentration was only 1280 µg/l. Therefore, the Department has concluded that the 23000 µg/l of zinc is an “outlier” caused by lab error or inadvertent contamination. Note also that the average value reported by EPA was 231 µg/l. The EPA average is comparable to the 112 µg/l of zinc reported by Syrgis.

In accordance with Option 1 above, Syrgis limits for Lead and Zinc are:

$$\text{Lead} \Rightarrow 48 + 48 \times 0.2 = 48 + 9.6 = 57.6 \mu\text{g/l}$$

$$\text{Zinc} \Rightarrow 112 + 112 \times 0.2 = 112 + 22.4 = 134.4 \mu\text{g/l}$$

The Department appreciates Syrgis’ assistance with determining these limits.

If Syrgis has concerns or requires more details, please contact Rufus Torrence at (501) 682-0626 or [torrence@adeq.state.ar.us](mailto:torrence@adeq.state.ar.us).

Sincerely,



Rufus Torrence,  
ADEQ Water Division Engineer

Attachments: ADEQ Letter dated September 4, 2009  
Appendix V / EPA Local Limits Development Guidance Appendices