

Torrence, Rufus

From: Torrence, Rufus
Sent: Wednesday, February 24, 2010 2:50 PM
To: 'Jeff Wages'
Subject: AFIN 54-00092 ARP001013 Syrgis Performance Initiators: February 2010 Semi-Annual Report

ADEQ

ARKANSAS
 Department of Environmental Quality

February 26, 2010

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

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

Dear Mr. Wages:

The Department has reviewed Syrgis' February 2010 semi-annual report. 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 enclosed for Syrgis' convenience.

In the September 4, 2009 letter the Department decided not to adjust Syrgis' limits for dilution because the current August 2009 report showed no regulated organic parameters were detected in the effluent. However, the March 2010 semi-annual report shows Benzene at 1.44 ug/l. Checking back, the Department determined that the March 2009 report also shows Benzene in the effluent at 8.9 ug/l. In accordance with 40 CFR 403.6 (e), the alternative limits for Benzene are 131 ug/l (MEC) and 56 ug/l (AEC) for the February 2010 report. The Department calculated the alternative limits using the combined wastestream formula in 40 CFR 403.6(e):

$$C_T = \left(\frac{\sum_{i=1}^N C_i F_i}{\sum_{i=1}^N F_i} \right) \left(\frac{F_T - F_D}{F_T} \right) = \frac{(134)(26066)}{26066} \left(\frac{26066}{26069.1} \right) = (134)(0.976) = 131 \mu\text{g/l}$$

Referring to Semi-Annual report form (Section 5 Measurement of Pollutants), Syrgis must list these alternative limits for benzene in the chart. Note that if Syrgis samples only once during the six month period, then the AMAC (Actual Measured Ave Conc) is the same as the AMMC (Actual Measured Max Conc). For the March 2010 report the AMAC and AMMC both equal 1.44 ug/l which implies that Syrgis is compliant with the benzene limits.

In reference to our telephone conversation on February 22, 2010, at this time Syrgis appears to have no processes which contribute zinc to the wastewater. The zinc in the effluent may be entering with the intake water or being contaminated by other industrial activities unrelated to Syrgis' facility. Nonetheless, must determine the source of the zinc in the effluent.

Before the Department makes a final determination on Syrgis' status, please continue to sample the intake water for the remaining quarter (April – June 2010) for zinc and lead. The contract lab must use **EPA Method 200.8** for the metal analyses.

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

Sincerely,



Rufus J. Torrence, Water Division Engineer

Encl: ADEQ Letter dated 9-4-2009



ARKANSAS
Department of Environmental Quality

September 4, 2009

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

Re: Syrgis (Tracking Number: ARP001013 AFIN: 54-00429) Pretreatment Inspection

Dear Mr. Wages:

On July 15, 2009 the Department pretreatment staff conducted a sampling inspection of the Syrgis Helena facility. The Department appreciates Syrgis' efforts and time in assisting with the inspection. Please find enclosed the pretreatment inspection report. Please review the report and let the Department know if Syrgis finds any errors. Also enclosed is the Department lab analysis from the collected sample. The Department's lab analysis shows zinc at 0.615 mg/l and lead at 0.025 mg/l in the effluent entering the Helena POTW. In the past Syrgis has not tested for lead. Please note that Syrgis must test the effluent for ALL regulated parameters including lead.

In previous correspondence, the Department considered adjusting Syrgis' limits to allow for dilution (Syrgis combines sanitary wastewater with regulated wastewater). Syrgis declared that the Helena facility does not contain a metal bearing stream listed in Appendix A in 40 CFR 414. Since the only parameters detected in the effluent are metals, 40 CFR 403.6(e) is not applicable and Syrgis must demonstrate that these metals enter the facility in the intake potable water.

At this time Syrgis appears to have no processes which contribute zinc to the wastewater. The zinc in the effluent may be entering with the intake water and may be simply passing through the plant unaltered. Before the Department makes a final determination, please sample the intake water on a calendar quarterly basis for a period of one year. The attached analysis may serve as the required analysis for the July- Sep 2009 quarter. Syrgis must sample (only zinc and lead) the intake water for three additional quarters (Oct- Dec 2009, Jan- Mar 2010 & April - May 2010). If these sampling results confirm that the zinc and lead are in the intake water, Syrgis will not be required to sample the intake water in the future.

In accordance with 40 CFR 403.15, Syrgis can take credit for the metals in the intake water. For the February 2010 report, Syrgis' effluent must not exceed by 20% the highest previous potable metal concentrations. The contract lab must use **EPA Method 200.8** instead of Method 200.7.

Syrgis has two options for future reports:

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.

Option 2: If the metal concentration in the effluent remains consistently higher than the metal concentration in the intake water, Syrgis may actually have a process which contributes metals to the wastewater. According to 40 CFR 414.85 (b), "the Control Authority [the Department] on a case-by-case basis" can identify "additional process wastewater streams...as metal or cyanide bearing" streams. Syrgis may petition the Department to have a particular metal bearing stream(s) designated as a 40 CFR 414 metal bearing stream. If the petition is successful, the 40 CFR 414 zinc limits (1.05 & 2.61 mg/l) and lead limits (0.32 & 0.69 mg/l) would be applicable to Syrgis' effluent.

Please note that under Option 1, Syrgis currently has violations for 40 CFR 414 pretreatment standards for lead and zinc. These violations may be mitigated by future intake water analyses.

Please note that before the Department considers Option 2, Syrgis must demonstrate that a BMP (Best Management Practices) will not significantly impact "non-process" sources of zinc and lead.

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

Sincerely,

Rufus J. Torrence, Water Division Engineer

Encl: Pretreatment Inspection Report dated July 15, 2009
ADEQ Lab Report 2009-1761
Syrgis (Rineco 9094) Lab Report
EPA Local Limits Development Guidance Appendices; Appendix V Domestic Pollutant Loading