

Wilson, Tabatha

From: Gilliam, Allen
Sent: Wednesday, May 21, 2014 2:46 PM
To: oshirley@amerimax.com; Seth Gately (SGately@trinityconsultants.com)
Cc: Wilson, Tabatha; Fuller, Kim; helenawater@sbcglobal.net
Subject: AR0043389_Amerimax ARP001044 February 2014 Semi-Annual Report Re Calcs and compliance determination_20140521

Follow Up Flag: Follow up
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Onika and Seth,

Based on re-calculating equivalent concentration limits (determined very close to your calculated monthly average limitations), this office has re-reviewed Amerimax February 2014 semi-annual Pretreatment report and deemed it compliant with the Coil Coating production based standards in CFR 465. See below for further discussions and comments.

Using EPA guidance and their “building block” approach to converting production based standards to equivalent concentration based limitations, please find the below. The slight discrepancy in the monthly averages can be attributed to our different decimal rounding practices.

Regardless of what you were previously told, “Maximum for any 1 day” limits also have to be listed on your semi-annual reports and met per the regulation’s written standards.

Given: 465.25 Pretreatment standards for the galvanized wastestream:

SUBPART B		
Pollutant or pollutant property	PSNS	
	Maximum for any 1 day	Maximum for monthly average
	pounds per 1 million ft ² of area processed	
Chromium	0.027	0.011
Copper	0.090	0.043
Cyanide	0.015	0.006
Zinc	0.072	0.030

Production reported: 10 million ft² (over 22 days/6 month period) = 0.4545 million ft²/day
Therefore, the mass limitations for the galvanized line:

Pollutant or pollutant property	Maximum for any 1 day (lbs)	Maximum for monthly average (lbs)
Chromium	0.012	0.005
Copper	0.041	0.02
Cyanide	0.007	0.003
Zinc	0.033	0.014

Flow reported during the galvanizing period 65,201 L/22 days = 2964 L/D = 0.000783 MGD

Convert to equivalent concentration limits mg/l = $\frac{\text{lbs}}{8.34 \times \text{MGD}}$

Therefore, the concentration limits for the galvanized line:

Pollutant or pollutant property	Maximum for any 1 day (mg/l)	Maximum for monthly average (mg/l)
Chromium	1.84	0.76
Copper	6.28	3.06
Cyanide	1.07	0.46
Zinc	5.05	2.14

Given: 465.35 Pretreatment standards for the Aluminum basis wastestream:

SUBPART C

Pollutant or pollutant property	PSNS	
	Maximum for any 1 day	Maximum for monthly average
	pounds per 1 million ft ² of area processed	
Chromium	0.037	0.015
Cyanide	0.02	0.008
Zinc	0.10	0.041

Production reported: 60.558 million ft² (over 127 days/6 month period) = 0.477 million ft²/day

Therefore, the mass limitations for the Aluminum basis line:

Pollutant or pollutant property	Maximum for any 1 day (lbs)	Maximum for monthly average (lbs)
Chromium	0.018	0.007
Cyanide	0.0095	0.004
Zinc	0.048	0.02

Flow reported during the Aluminum process period 376,390 L/127 days = 2964 L/D = 0.000783 MGD

Convert to equivalent concentration limits mg/l = $\frac{\text{lbs}}{8.34 \times \text{MGD}}$

Pollutant or pollutant property	Maximum for any 1 day (mg/l)	Maximum for monthly average (mg/l)
Chromium	2.76	1.07
Cyanide	1.45	0.61
Zinc	7.35	3.06

On Amerimax' semi-annual report it would be advisable to revise page 2, section (5)c. "Measurement of pollutants", split the table in two, one for the galvanized line and one for the Aluminum line's equivalent concentration limits the report would be more easily understood. Using this semi-annual reports', this office's calc'd limit values and American Interplex' analyticals for example:

Galvanized basis (CFR 465.25)

Aluminum basis (CFR 465.35)

Concentrations in mg/l	Cr	Cu	CN	Zn		Cr	CN	Zn
Max. for 1 day	1.84	6.28	1.07	5.05		2.76	1.45	7.35
Max. for Monthly Avg.	0.76	3.06	0.46	2.14		1.07	0.61	3.06
Max. Measured	<0.007	0.0067	<0.01	0.047		0.11	<0.01	0.11
*Avg. Monthly measured	<0.007	0.0067	<0.01	0.047		0.11	<0.01	0.11

*** A value here is the average of all samples taken during one (1) calendar month regardless of the number of samples taken. If only one (1) sample is taken it must meet the monthly average limitation**

The flows reported on that same page should correspond to those used in the above calculations per each semi-annual reporting period.

As it appears Amerimax' production is highly variable, it's deemed necessary to calculate the equivalent concentration limits for each report. Nothing in the Pretreatment regulations prevents Amerimax from conducting more sampling and reporting. And, this may be the case for Amerimax if its galvanized basis line only runs ~15% of the time compared to the Aluminum basis line.

Please include complete chains of custody for each sampling event in future reports.

One last item to address: This last semi-annual Pretreatment report indicated two samples were taken for both the galvanized and the aluminum line ~ four hours apart. Is it possible to have captured representative samples for both lines? Our phone conversations indicated the two lines run separately with their wastewater treated separately probably discharged at very different times (possibly weeks apart)?

Apologies for the length of this correspondence, but it took this office some time to "wander" through the semi-annual report without any previous background material to work with.

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

Sincerely,

Allen Gilliam
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ec: Terry McGinister, City of Helena General Manager
Seth Gately, Trinity Consultants to Amerimax

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