

6312 NW 18th Drive Suite 100 Gainesville, FL 32653

352.378.0332 PHONE 352.378.0354 FAX

www.TRCsolutions.com

January 27, 2016

Ms. Lori Simmons Arkansas Department of Health 4815 West Markham Street Little Rock, Arkansas 72205 Via email Lori.Simmons@arkansas.gov

Re: Georgia-Pacific, Crossett Mill - Biweekly Air Monitoring Report for Hydrogen Sulfide

Dear Ms. Simmons,

Following is the biweekly data summary for the Georgia-Pacific (GP) hydrogen sulfide (H₂S) and meteorological monitoring program, at the GP Crossett mill, covering the calendar period of December 30th through January 12th.

Summary of Results

Included in this report are three plots presenting H_2S concentrations calculated with varied rolling average periods (30-minute, 8-hour, and 24-hour). Also included in this report is a summary of results from the daily 1-point QC checks performed during this biweekly period. The QAPP establishes goals for precision and bias as a coefficient of variation (CV) <10% and \pm 10%, respectively. Precision and bias are calculated in accordance with 40 CFR Part 58 Appendix A, Section 4.1.

Fourteen-day time series plots for all recorded meteorological (met) parameters are presented in the final table. A power surge at the meteorological site on December 26th disabled the data logger, resulting in an extended period of data loss. The data logger was reset on January 5th.

There was a single occurrence of data loss during this two week period, as well as those resulting from automated daily 1-point QC and weekly calibration checks. On January 1st the LAN connection was interrupted resulting in approximately 13 hours of data loss. Automated calibration checks were not performed on the 1st. Results for all available automated daily 1-point QC checks fall within the acceptable range, indicating the H₂S monitor was operating in accordance with the QAPP.

Please feel free to contact me if you have any questions or need any additional data.

Sincerely,



2 Brus

Jonathan Bowser

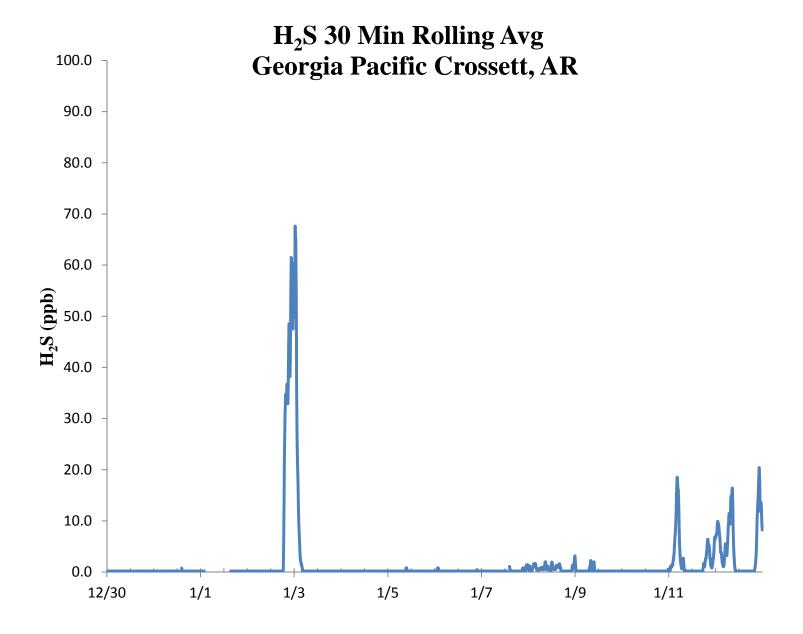
Manager, Air Quality and Meteorological Monitoring

Air Measurements – Gainesville Office 6312 NW 18th Drive, Suite 100 Gainesville, Florida 32653 (352) 260-1162

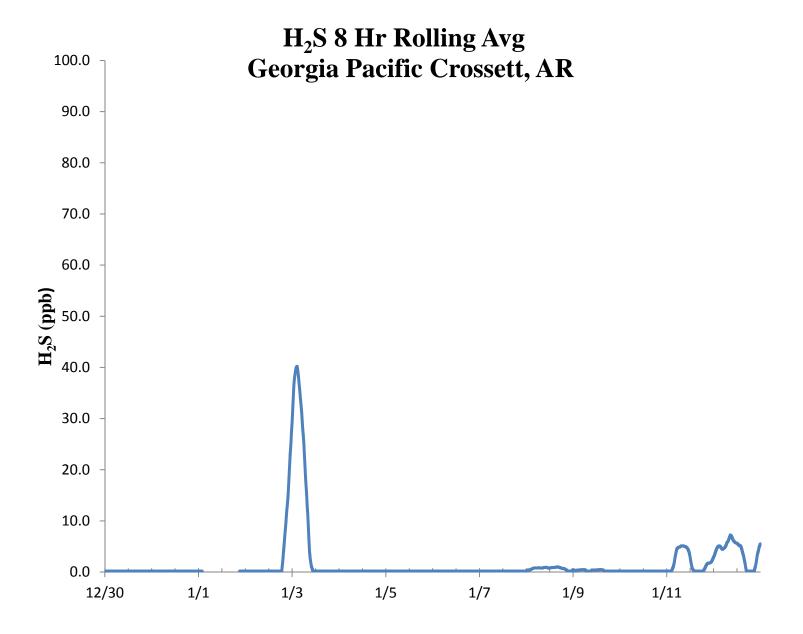
Email: jbowser@trcsolutions.com

CC: Becky Keough, ADEQ Director via email: keogh@adeq.state.ar.us Kara Allen, Environmental Engineer, USEPA Region 6 via email <u>Allen.Kara@epa.gov</u>

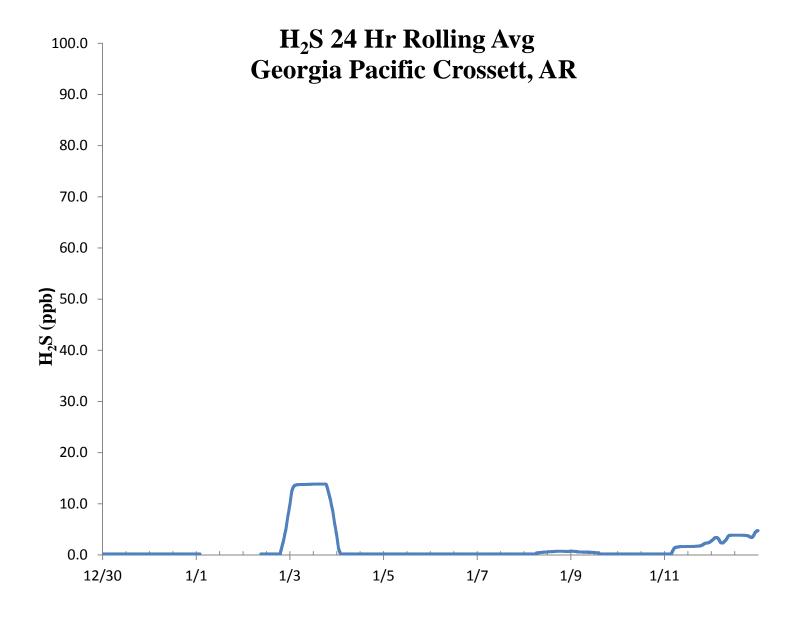














H ₂ S Assessment											
GP - Crossett, AR		Constituent type: H ₂ S				CV		CV _{ub} (%)		Bias (%)	
Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	25th Percentile	d²	[d]	d ²					
70.0	70.0	0.0	-2.676	0.000	0.000	0.000					
69.3	70.0	-1.0	75th Percentile	1.000	1.000	1.000	n	S _d	S _{d2}	∑ d	"AB" (Eqn 4)
69.0	70.0	-1.4	-0.571	2.041	1.429	2.041	13	1.198	4.127	20.247	1.55
69.3	70.0	-1.0		1.000	1.000	1.000	n-1	∑d	$\sum d^2$	$\sum d ^2$	"AS" (Eqn 5)
68.5	70.0	-2.1		4.592	2.143	4.592	12	-19.962	47.876	47.876	1.16
68.0	70.0	-2.9		8.163	2.857	8.163					
68.9	70.0	-1.6		2.469	1.571	2.469				Bias (%) (Eqn 3)	Both Signs Positive
69.7	70.0	-0.4		0.184	0.429	0.184				2.13	FALSE
70.1	70.0	0.1		0.020	0.143	0.020		CV (%) (Eqn 2)		Signed Bias (%)	Both Signs Negative
69.6	70.0	-0.6		0.327	0.571	0.327		1.65		-2.13	TRUE
67.5	70.0	-3.6		12.755	3.571	12.755					
68.0	70.0	-2.9		8.163	2.857	8.163		Upper Probabili	ty Limit	Lower Probabilit	y Limit
69.1	71.0	-2.7		7.161	2.676	7.161		0.81		-3.88	
					-1	5.0 0.0 5.0 0.0		Percent	Differ	ences	
	Meas Val (Y) 70.0 69.3 69.0 69.3 68.5 68.0 68.9 69.7 70.1 69.6 67.5 68.0	Meas Val (Y) Audit Val (X) 70.0 70.0 69.3 70.0 69.3 70.0 68.5 70.0 68.0 70.0 68.9 70.0 69.7 70.0 70.1 70.0 69.6 70.0 67.5 70.0 68.0 70.0	Meas Val (Y) Audit Val (X) d (Eqn. 1) 70.0 70.0 0.0 69.3 70.0 -1.0 69.0 70.0 -1.4 69.3 70.0 -2.1 68.5 70.0 -2.1 68.0 70.0 -2.9 68.9 70.0 -0.4 70.1 70.0 0.1 69.6 70.0 -0.6 67.5 70.0 -3.6 68.0 70.0 -2.9	Meas Val (Y) Audit Val (X) d (Eqn. 1) 25th Percentile 70.0 70.0 0.0 -2.676 69.3 70.0 -1.0 75th Percentile 69.0 70.0 -1.4 -0.571 69.3 70.0 -1.0 68.5 70.0 -2.1 68.0 70.0 -2.9 68.9 70.0 -1.6 69.7 70.0 -0.4 70.1 70.0 0.1 69.6 70.0 -0.6 67.5 70.0 -3.6 68.0 70.0 -2.9	P- Crossett, AR Constituent type: H ₂ S d ² 70.0 70.0 0.0 -2.676 0.000 69.3 70.0 -1.0 75th Percentile 1.000 69.3 70.0 -1.4 -0.571 2.041 69.3 70.0 -1.0 1.000 68.5 70.0 -2.1 4.592 68.0 70.0 -2.9 8.163 68.9 70.0 -1.6 2.469 69.7 70.0 -0.4 0.184 70.1 70.0 0.1 0.020 69.6 70.0 -3.6 12.755 68.0 70.0 -2.9 8.163	Neas Val (Y) Audit Val (X) d (Eqn. 1) 25th Percentile d ² d 70.0 70.0 0.0 -2.676 0.000 0.000 69.3 70.0 -1.0 75th Percentile 1.000 1.000 69.0 70.0 -1.4 -0.571 2.041 1.429 69.3 70.0 -1.0 1.000 1.000 68.5 70.0 -2.1 4.592 2.143 68.0 70.0 -2.9 8.163 2.857 68.9 70.0 -1.6 2.469 1.571 69.7 70.0 -0.4 0.184 0.429 70.1 70.0 0.1 0.020 0.143 69.6 70.0 -3.6 12.755 3.571 68.0 70.0 -2.9 8.163 2.857 69.1 71.0 -2.7 7.161 2.676 7.161 2.676 7.161 7.	Constituent type: H ₂ S Constituent type: H ₂ S Meas Val (Y) Audit Val (X) d (Eqn. 1) 25th Percentile d ² d d ² (d d ² (d) (d d) ² (d) (d)	P- Crossett, AR Constituent type: H ₂ S d d d d d d d d d	Constituent type: H ₂ S	Constituent type: H ₂ S	Neas Val (Y) Audit Val (X) d (Eqn. 1) 25th Percentile d ² d d ² d d ² d d ² d d ² d d ² d d ² d d ² d d ² d d ² d d ² d d ² d d ² d d



