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November 29, 2018

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,

Please find the following biweekly report for the Georgia-Pacific (GP) Crossett Mill hydrogen sulfide (H<sub>2</sub>S) and meteorological monitoring program covering the calendar period of October 31, 2018 through November 13, 2018.

## Summary of Results

Included in this report are three plots presenting H<sub>2</sub>S concentrations across different rolling average periods (30-minute, 8-hour, and 24-hour), daily 1-point quality control (QC) checks with precision and bias estimates and time series plots for all recorded meteorological (met) parameters for the two week period.

## **Data Quality**

The Quality Assurance Project Plan (QAPP) establishes measurement quality objectives (MQOs) for H<sub>2</sub>S regarding precision and bias expressed 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. Precision and bias calculations are presented on page six of this report.

Results for available automated daily 1-point QC checks were within the accuracy objective,  $\pm$  10%, indicating the H<sub>2</sub>S monitor was operating in accordance with MQOs as stated in the QAPP.

During this reporting period two automated zero checks were performed. The results for these zero checks are presented on the following page.



Date	Zero Check Response (ppb)				
10/31/2018	-0.3				
11/7/2018	-0.4				

## Data Capture

There were no occurrences of H<sub>2</sub>S data loss this monitoring period, other than those resulting from automated daily 1-point QC and weekly calibration checks.

Fourteen-day time series plots for all recorded meteorological (met) parameters are presented in the final charts. All met parameters have 100% data capture for this report period.

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

Sincerely,

Jonathan Bowser

Manager, Air Quality and Meteorological Monitoring

Air Measurements – Gainesville Office 6312 NW 18th Drive, Suite 100 Gainesville, Florida 32653

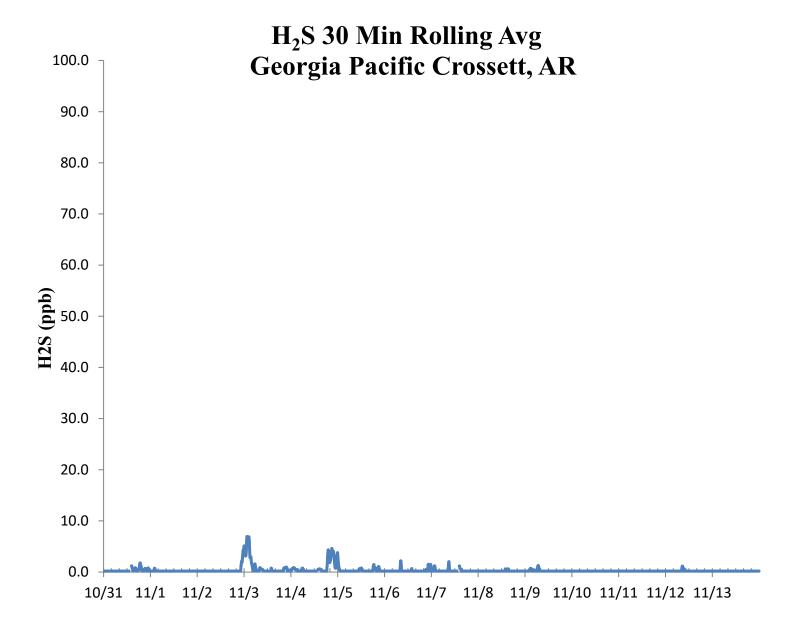
(352) 260-1162

Email: jbowser@trcsolutions.com

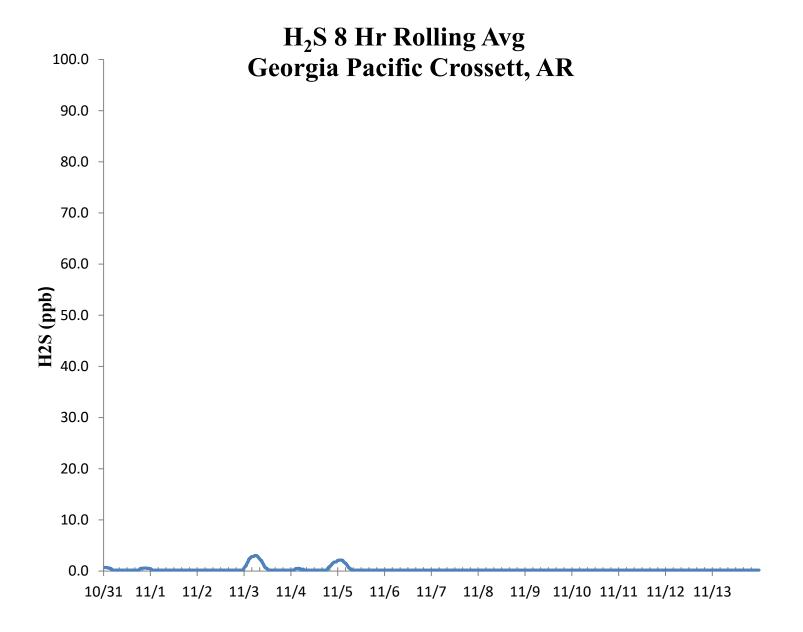
CC: Becky Keough, ADEQ Director via email: keogh@adeq.state.ar.us Kara Allen, Environmental Engineer, USEPA Region 6 via email Allen.Kara@epa.gov



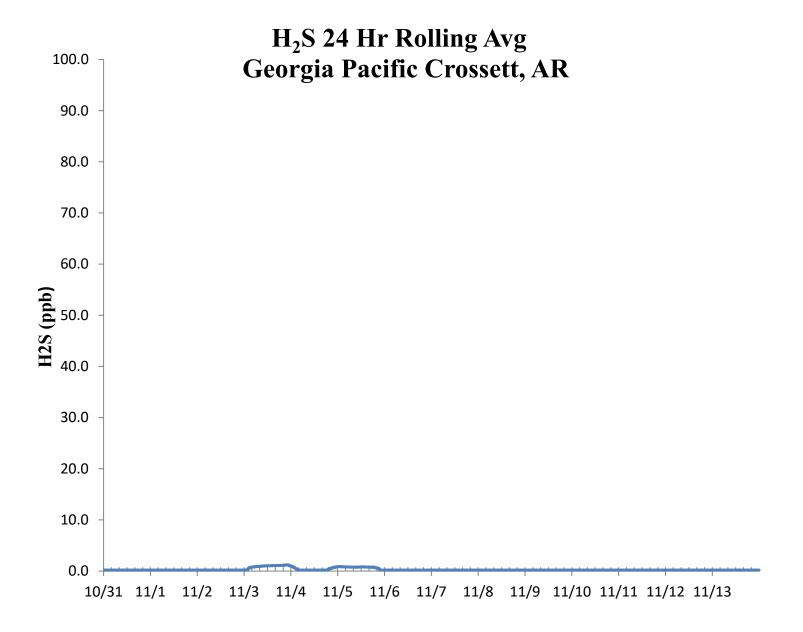














H<sub>2</sub>S Assessment

GI	P - Crossett, AF	ł	Compound	of Interest: H <sub>2</sub> S				CV <sub>ub</sub> (%)		Bias (%)	
Date	Meas Val (Y)	Input Val (X)	d (Eqn. 1)	25th Percentile	d²	d	d  <sup>2</sup>				
10/31/2018 13:00	71.1	70.0	1.6	-0.357	2.469	1.571	2.469				
11/1/2018 13:00	71.1	70.0	1.6	75th Percentile	2.469	1.571	2.469 <b>n</b>	S <sub>d</sub>	S <sub>d2</sub>	$\Sigma$  d	"AB" (Eqn 4)
11/2/2018 13:00	70.8	70.0	1.1	1.107	1.306	1.143	1.306 1	4 1.035	0.928	12.571	0.898
11/3/2018 13:00	70.5	70.0	0.7		0.510	0.714	0.510 <b>n-</b>	1 ∑d	$\sum d^2$	$\sum  \mathbf{d} ^2$	"AS" (Eqn 5)
11/4/2018 13:00	70.7	70.0	1.0		1.000	1.000	1.000 1	3 3.429	14.776	14.776	0.518
11/5/2018 13:00	70.8	70.0	1.1		1.306	1.143	1.306				
11/6/2018 13:00	70.3	70.0	0.4		0.184	0.429	0.184			Bias (%) (Eqn 3)	Both Signs Positive
11/7/2018 13:00	70.3	70.0	0.4		0.184	0.429	0.184			1.14	FALSE
11/8/2018 13:00	69.9	70.0	-0.1		0.020	0.143	0.020	CV (%) (Eqn 2)		Signed Bias (%)	Both Signs Negative
11/9/2018 13:00	69.7	70.0	-0.4		0.184	0.429	0.184	1.41		+/-1.14	FALSE
11/10/2018 13:00	68.9	70.0	-1.6		2.469	1.571	2.469				
11/11/2018 13:00	69.3	70.0	-1.0		1.000	1.000	1.000	Upper Probabili	ty Limit	Lower Probability	/ Limit
11/12/2018 13:00	69.9	70.0	-0.1		0.020	0.143	0.020	2.27		-1.78	
11/13/2018 13:00	69.1	70.0	-1.3		1.653	1.286	1.653				

