

May 24, 2019

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 (H₂S) and meteorological monitoring program covering the calendar period of May 1, 2019 through May 14, 2019.

Summary of Results

Included in this report are three plots presenting H₂S 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 H₂S 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 H₂S 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 in the following table.

Date	Zero Check Response (ppb)				
5/1/2019	-0.7				
5/8/2019	-0.3				



Data Capture

There were no occurrences of H₂S 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. Precipitation data has been invalidated onward from April 4th, due to a malfunction with the tipping bucket. TRC cleaned the tipping bucket and precipitation data is considered valid as of May 20, 2019.

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

Sincerely,

Jonathan Bowser

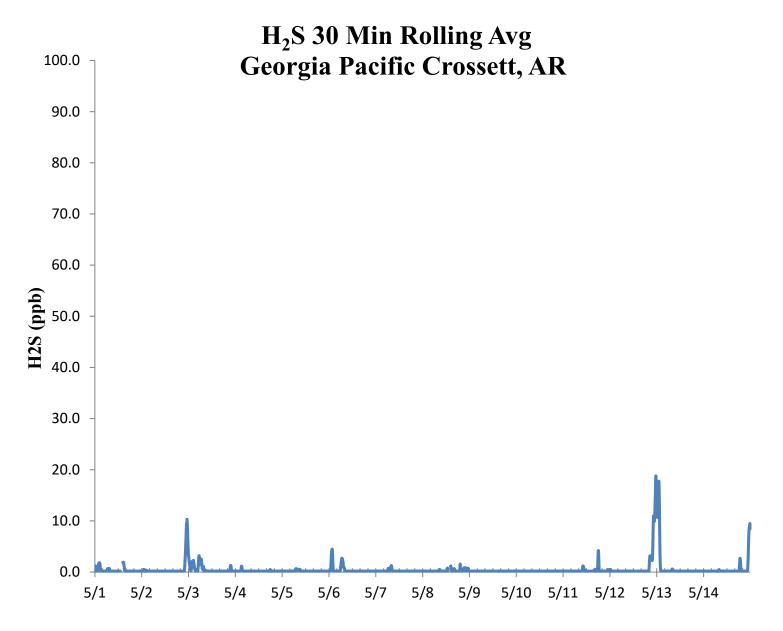
Manager, Air Quality and Meteorological Monitoring

Air Measurements – Alachua Office 13351 Progress Blvd. Ste A Alachua, FL 32615 (352) 260-1162

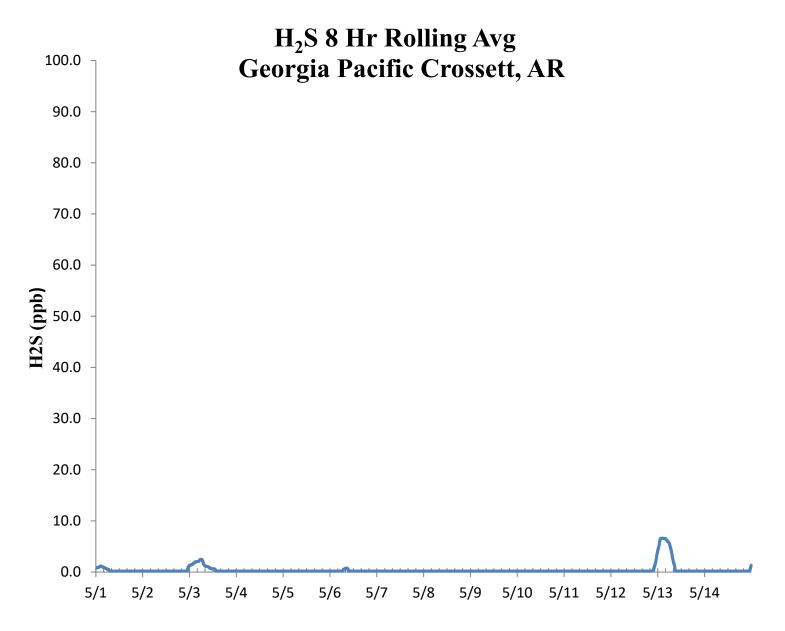
Email: jbowser@trccompanies.com

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

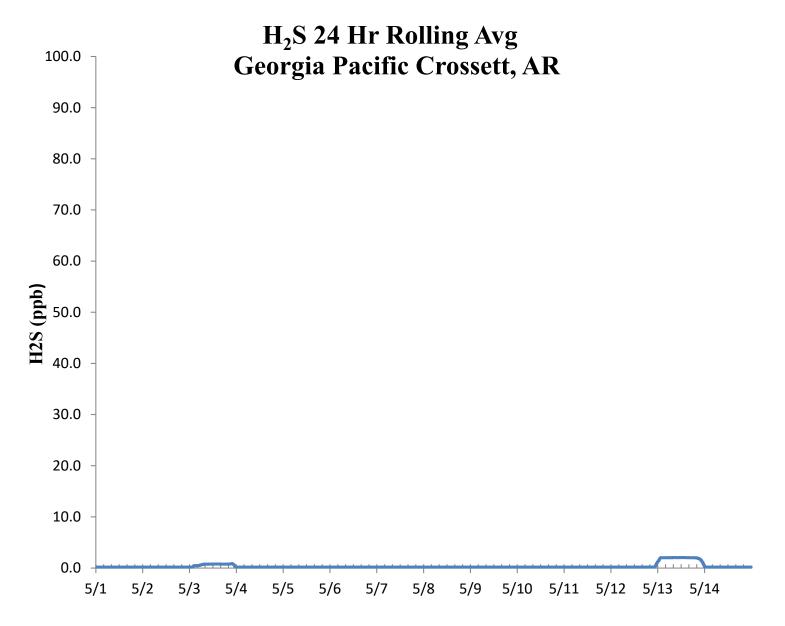














H₂S Assessment

GP - Crossett, AR			Compound of Interest: H ₂ S				CV _{ub} (%)	Bias (%)			
Date	Meas Val (Y)	Input Val (X)	d (Eqn. 1)	25th Percentile	d²	d	d ²				
5/1/2019 13:00	72.9	70.0	4.1	5.143	17.163	4.143	17.163				
5/2/2019 13:00	73.8	70.0	5.4	75th Percentile	29.469	5.429	29.469 n	S _d	S _{d2}	$\Sigma d $	"AB" (Eqn 4)
5/3/2019 13:00	74.0	70.0	5.7	6.143	32.653	5.714	32.653 1	4 0.766	8.617	79.714	5.694
5/4/2019 13:00	74.5	70.0	6.4		41.327	6.429	41.327 n -	1 Σ d	Σd^2	$\sum \mathbf{d} ^2$	"AS" (Eqn 5)
5/5/2019 13:00	73.6	70.0	5.1		26.449	5.143	26.449 1	3 79.714	461.510	461.510	0.766
5/6/2019 13:00	73.6	70.0	5.1		26.449	5.143	26.449				
5/7/2019 13:00	74.1	70.0	5.9		34.306	5.857	34.306			Bias (%) (Eqn 3)	Both Signs Positive
5/8/2019 13:00	74.9	70.0	7.0		49.000	7.000	49.000			6.06	TRUE
5/9/2019 13:00	74.3	70.0	6.1		37.735	6.143	37.735	CV (%) (Eqn 2)		Signed Bias (%)	Both Signs Negative
5/10/2019 13:00	74.3	70.0	6.1		37.735	6.143	37.735	1.04		+6.06	FALSE
5/11/2019 13:00	74.6	70.0	6.6		43.184	6.571	43.184				
5/12/2019 13:00	74.2	70.0	6.0		36.000	6.000	36.000	Upper Probabili	ty Limit	Lower Probability	/ Limit
5/13/2019 13:00	73.4	70.0	4.9		23.592	4.857	23.592	7.2		4.19	
5/14/2019 13:00	73.6	70.0	5.1		26.449	5.143	26.449				

