

July 15, 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 June 12, 2019 through June 25, 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)				
6/12/2019	-0.5				
6/19/2019	-0.2				

Data Capture

There were two brief occurrences of H₂S data loss this monitoring period, other than those resulting from automated daily 1-point QC and weekly calibration checks. Communications were interrupted,



resulting in brief losses of data on June 13th for approximately 35 minutes, on June 17th for less than 10 minutes, on June 18th for approximately 15 minutes, on June 19th for less than five minutes.

Fourteen-day time series plots for all recorded meteorological (met) parameters are presented in the final charts. Communications at the met site were interrupted, resulting in brief losses of all met parameters on June 13th for 25 minutes, and June 18th for ten minutes.

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

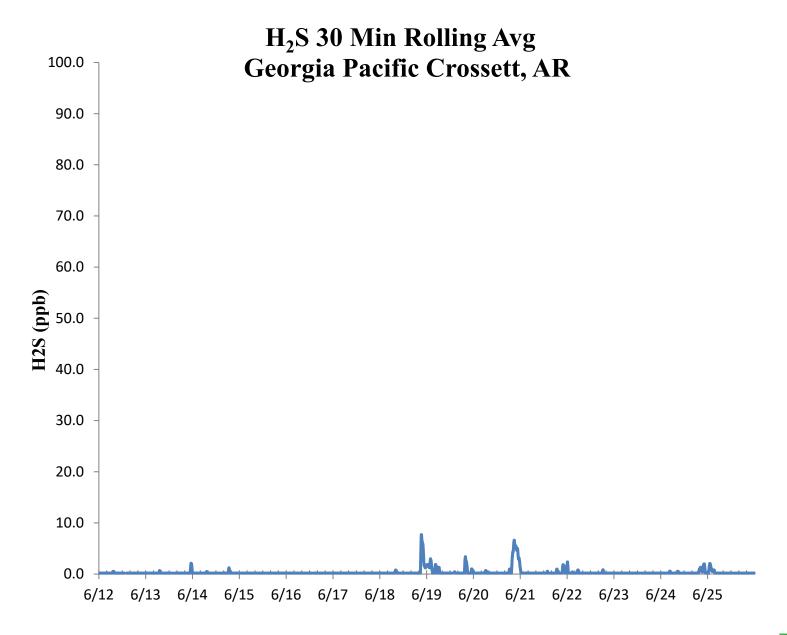
Air Measurements – Alachua Office 13351 Progress Blvd. Ste A Alachua, FL 32615

(352) 260-1162

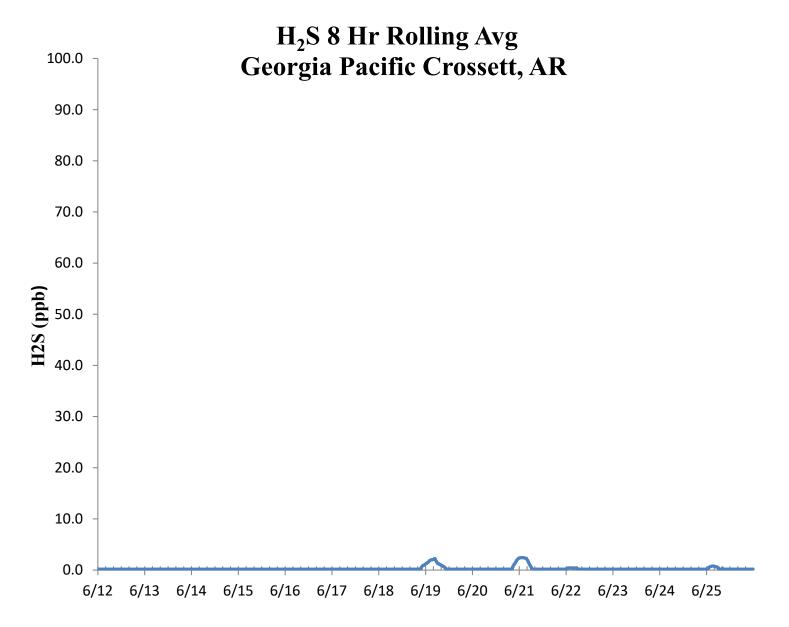
Email: jbowser@trccompanies.com

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

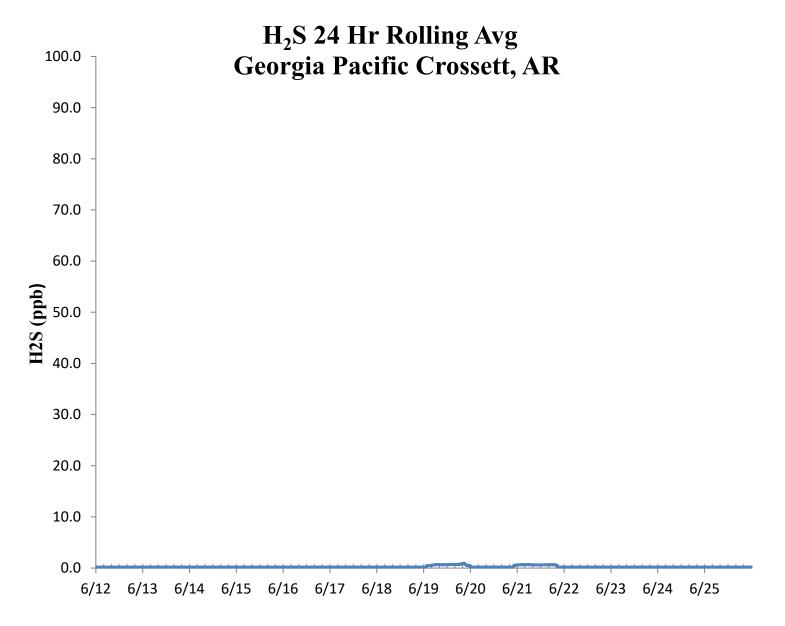














H₂S Assessment

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				_
6/12/2019 13:00	73.2	70.0	4.6	5.929	20.898	4.571	20.898				
6/13/2019 13:00	73.1	70.0	4.4	75th Percentile	19.612	4.429	19.612 n	S _d	S _{d2}	Σ d	"AB" (Eqn 4)
6/14/2019 13:00	73.1	70.0	4.4	6.857	19.612	4.429	19.612 1	4 1.007	11.521	87.143	6.224
6/15/2019 13:00	74.3	70.0	6.1		37.735	6.143	37.735 n -	1 ∑d	Σd^2	$\sum \mathbf{d} ^2$	"AS" (Eqn 5)
6/16/2019 13:00	74.1	70.0	5.9		34.306	5.857	34.306 1	3 87.143	555.592	555.592	1.007
6/17/2019 13:00	74.7	70.0	6.7		45.082	6.714	45.082				
6/18/2019 13:00	74.8	70.0	6.9		47.020	6.857	47.020			Bias (%) (Eqn 3)	Both Signs Positive
6/19/2019 13:00	74.9	70.0	7.0		49.000	7.000	49.000			6.7	TRUE
6/20/2019 13:00	74.8	70.0	6.9		47.020	6.857	47.020	CV (%) (Eqn 2)		Signed Bias (%)	Both Signs Negative
6/21/2019 13:00	75.0	70.0	7.1		51.020	7.143	51.020	1.37		+6.7	FALSE
6/22/2019 13:00	74.8	70.0	6.9		47.020	6.857	47.020				
6/23/2019 13:00	74.9	70.0	7.0		49.000	7.000	49.000	Upper Probabili	ty Limit	Lower Probability	y Limit
6/24/2019 13:00	74.7	70.0	6.7		45.082	6.714	45.082	8.2	-	4.25	
6/25/2019 13:00	74.6	70.0	6.6		43.184	6.571	43.184				

