

June 12, 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 15, 2019 through May 28, 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.

The automated calibration check scheduled for May 16th was not performed due to a PC failure. Results for available automated daily 1-point QC checks were within the accuracy objective, $\pm 10\%$, and the missing daily check was bracketed by passing checks, 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)
5/15/2019	-0.3
5/22/2019	-0.6


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. All met parameters have 100% data capture for this report period, with the exception of precipitation. Precipitation data has been invalidated from April 4th, due to a malfunction with the tipping bucket. TRC cleaned the tipping bucket and precipitation data has been reporting valid data as of 13:45 on May 20, 2019.

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

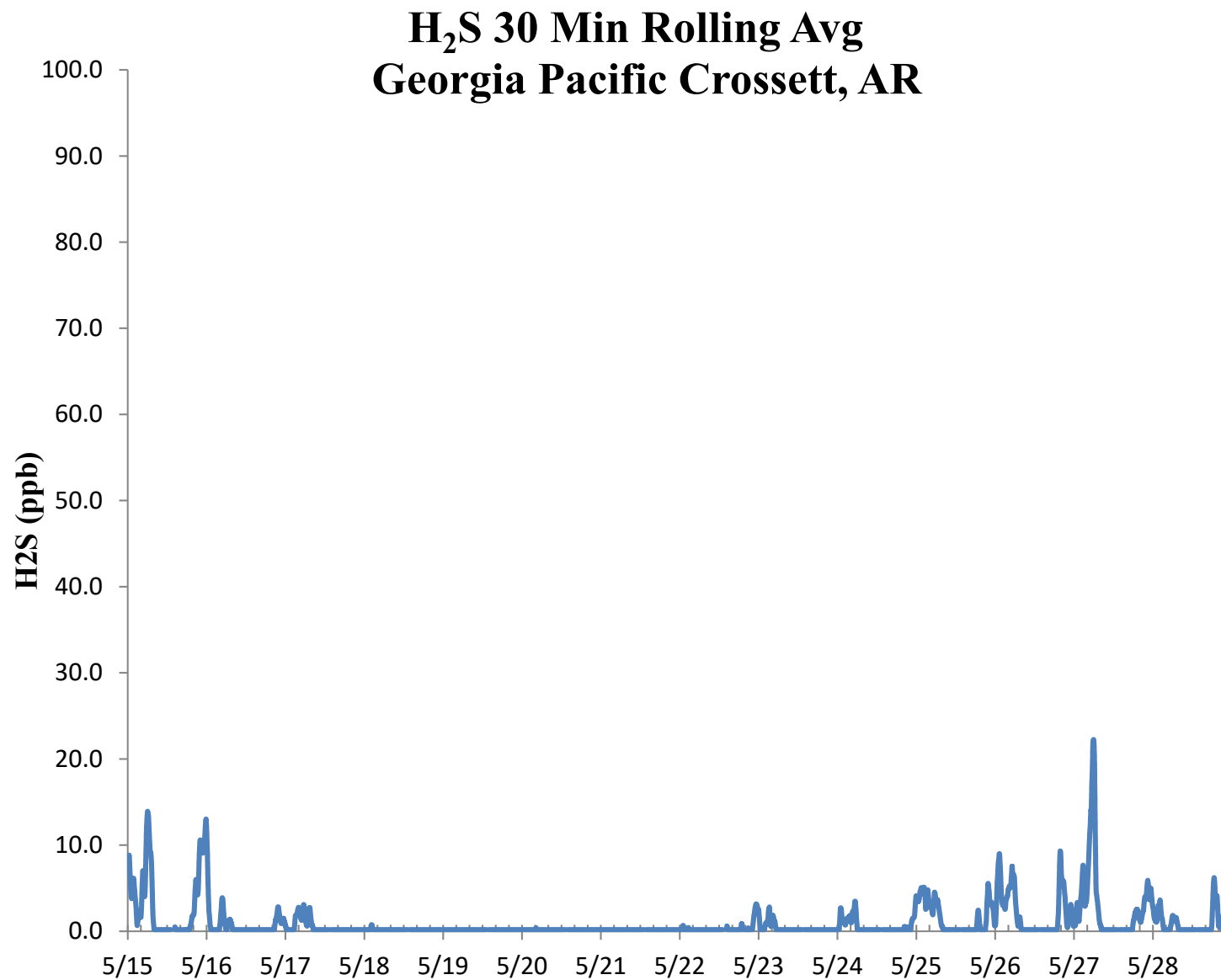
Sincerely,



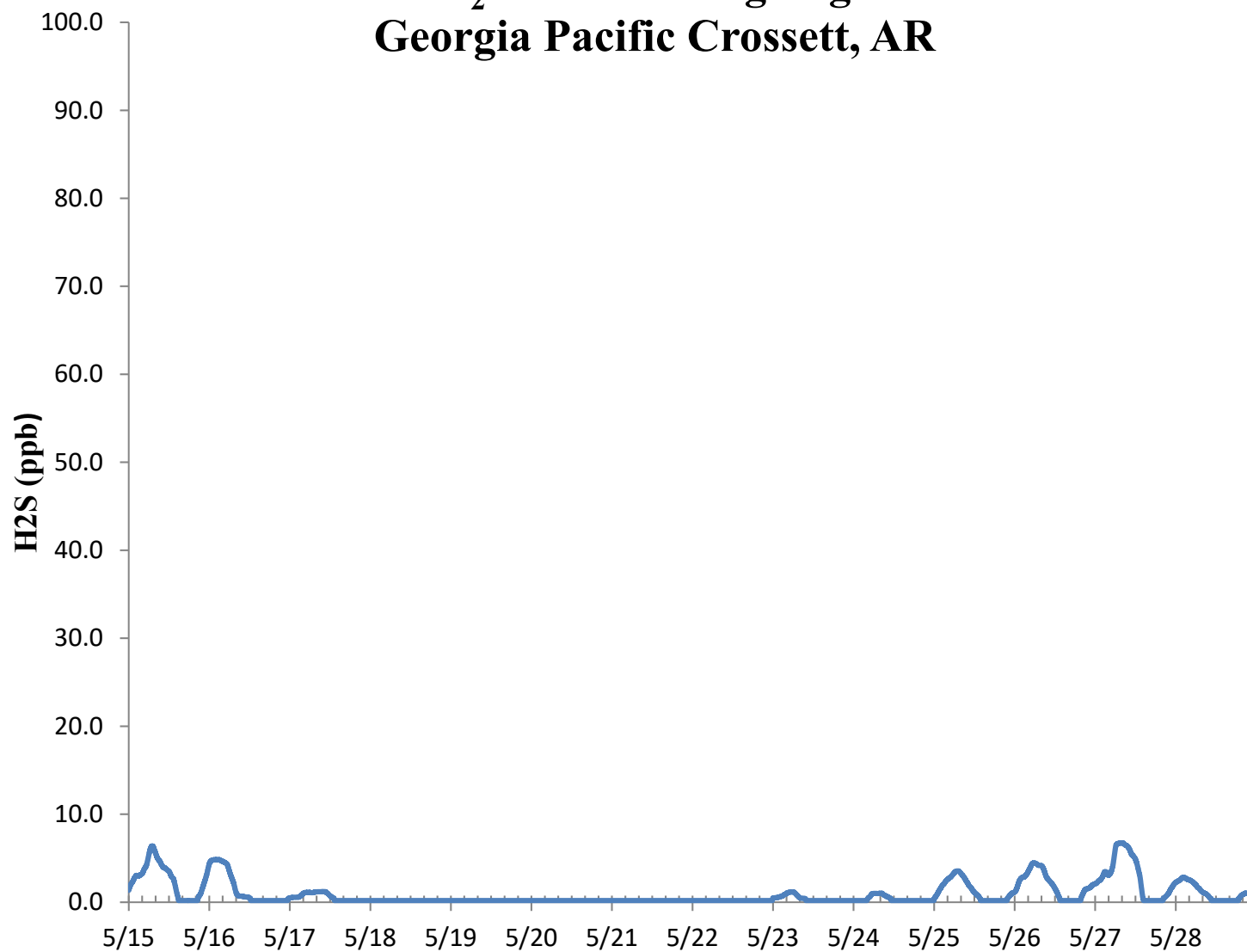
Jonathan Bowser
Manager, Air Quality and Meteorological Monitoring

Air Measurements – Alachua Office
13351 Progress Blvd. Ste A
Alachua, FL 32615
(352) 260-1162
Email: jbowser@trccompanies.com

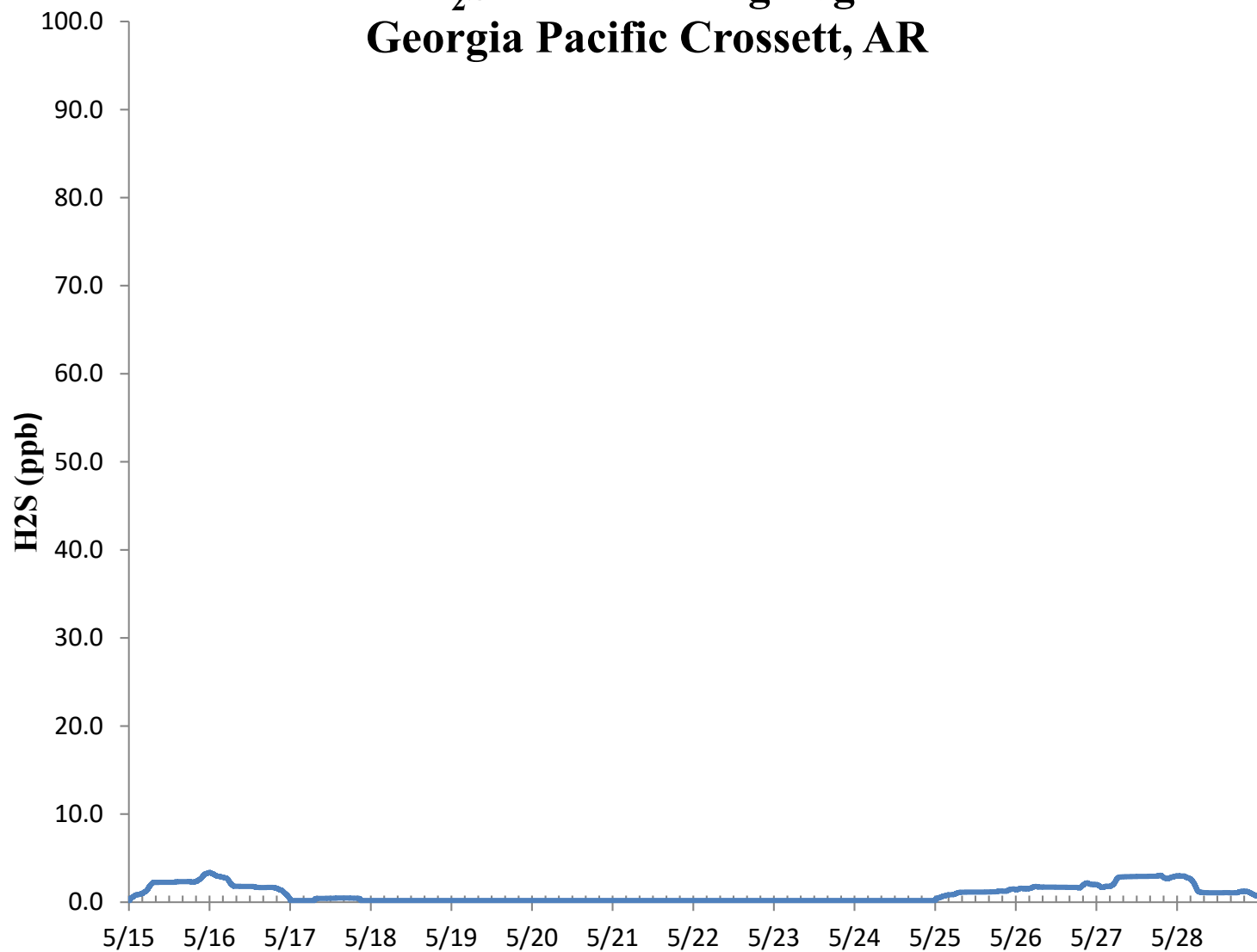
CC: Becky Keough, ADEQ Director via email: keogh@adeq.state.ar.us
Kara Allen, Environmental Engineer, USEPA Region 6 via email Allen.Kara@epa.gov



H₂S 8 Hr Rolling Avg Georgia Pacific Crossett, AR



H₂S 24 Hr Rolling Avg Georgia Pacific Crossett, AR



H₂S Assessment

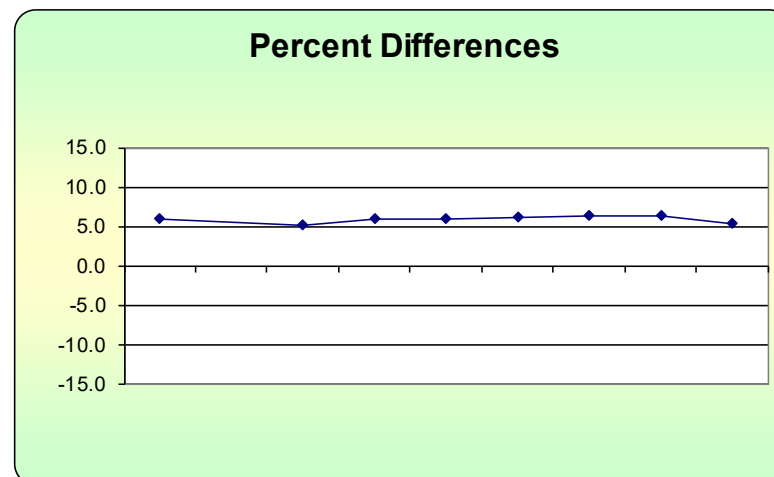
GP - Crossett, AR			Compound of Interest: H ₂ S			CV _{ub} (%)		Bias (%)	
Date	Meas Val (Y)	Input Val (X)	d (Eqn. 1)	25th Percentile	d ²	d	d ²		
5/15/2019 13:00	74.1	70.0	5.9	5.429	34.306	5.857	34.306		
5/17/2019 13:00	73.6	70.0	5.1	75th Percentile	26.449	5.143	26.449		
5/18/2019 13:00	74.1	70.0	5.9	6.143	34.306	5.857	34.306		
5/19/2019 13:00	74.2	70.0	6.0		36.000	6.000	36.000		
5/20/2019 13:00	74.3	70.0	6.1		37.735	6.143	37.735		
5/21/2019 13:00	74.5	70.0	6.4		41.327	6.429	41.327		
5/22/2019 13:00	74.5	70.0	6.4		41.327	6.429	41.327		
5/23/2019 13:00	73.8	70.0	5.4		29.469	5.429	29.469		
5/24/2019 13:00	73.6	70.0	5.1		26.449	5.143	26.449		
5/25/2019 13:00	73.8	70.0	5.4		29.469	5.429	29.469		
5/26/2019 13:00	73.5	70.0	5.0		25.000	5.000	25.000		
5/27/2019 13:00	74.1	70.0	5.9		34.306	5.857	34.306		
5/28/2019 13:00	74.5	70.0	6.4		41.327	6.429	41.327		

n	S _d	S _{d2}	Σ d	"AB" (Eqn 4)
13	0.510	5.872	75.143	5.780
n-1	Σd	Σd ²	Σ d ²	"AS" (Eqn 5)
12	75.143	437.469	437.469	0.510

Bias (%) (Eqn 3)	Both Signs Positive
6.03	TRUE
Signed Bias (%)	Both Signs Negative
+6.03	FALSE

CV (%) (Eqn 2)	0.7
----------------	-----

Upper Probability Limit	Lower Probability Limit
6.78	4.78



Meteorological Summary

