July 10, 2018

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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_2S) and meteorological monitoring program covering the calendar period of June 13, 2018 through June 26, 2018.

Summary of Results

Included in this report are three plots presenting H_2S 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_2S regarding precision and bias expressed as a coefficient of variation (CV) <10% and ± 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, ± 10%, indicating the H_2S monitor was operating in accordance with MQOs as stated in the QAPP.

During this reporting period two automated zero checks were performed. The result for these zero checks are presented below.

TRC

Date	Zero Check Response (ppb)
6/15/2018	0.6
6/22/2018	1.4

Data Capture

There was a single occurrence of H_2S data loss this monitoring period, in addition to those resulting from automated daily 1-point QC and weekly calibration checks. The morning of June 22nd a severe thunderstorm caused a brief power outage resulting in approximately an hour and a half of H_2S data loss.

Fourteen-day time series plots for all recorded meteorological (met) parameters are presented in the final table. All met parameters have 100% data capture for this report period, with the exception of solar radiation. Solar radiation data is not available for the entire monitoring period on account of weather damage. TRC replaced the solar radiation sensor during a routine site visit on June 27, 2018.

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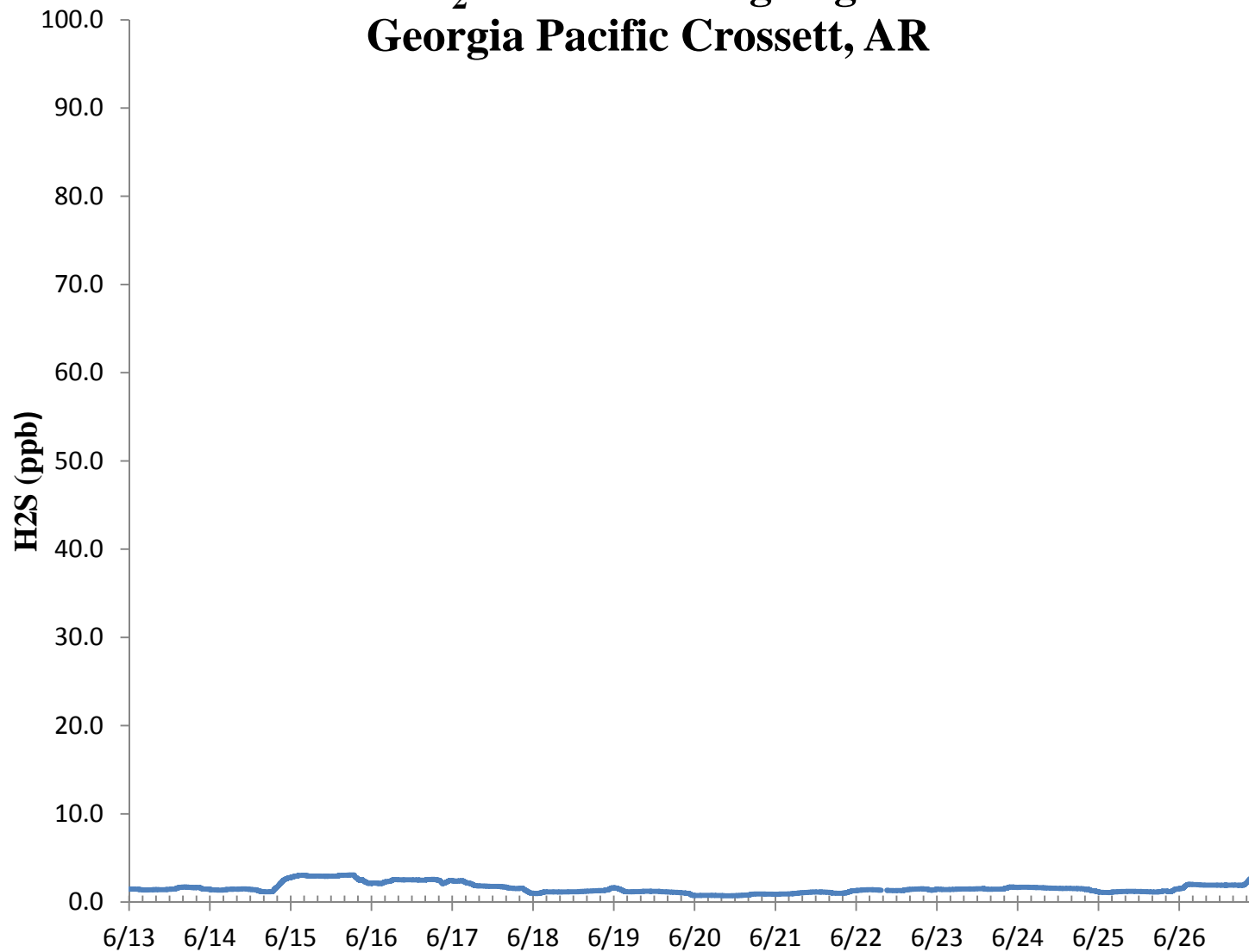Kara Allen, Environmental Engineer, USEPA Region 6 via email Allen.Kara@epa.gov

H₂S 30 Min Rolling Avg
Georgia Pacific Crossett, AR
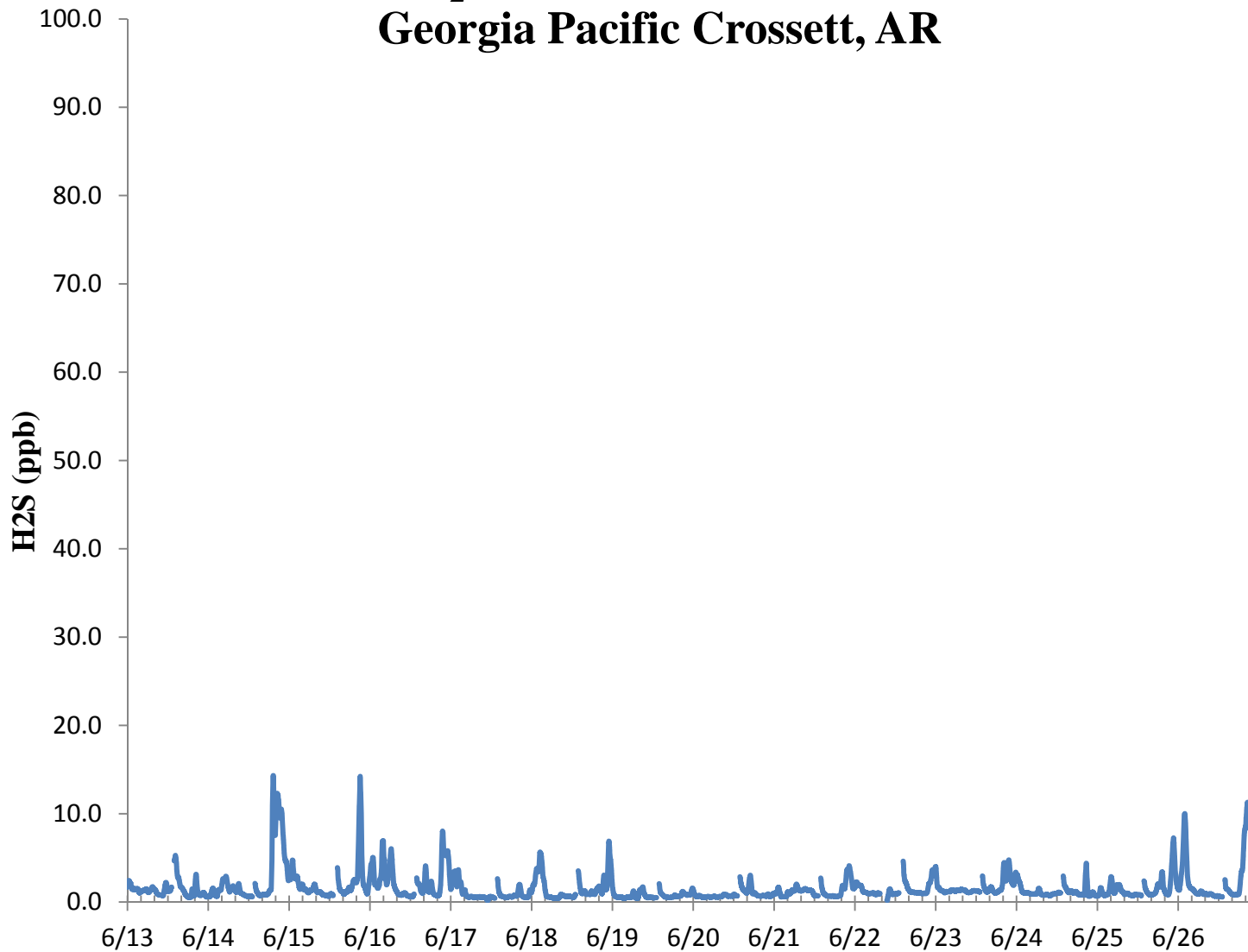
H₂S 8 Hr Rolling Avg
Georgia Pacific Crossett, AR

July 10, 2018
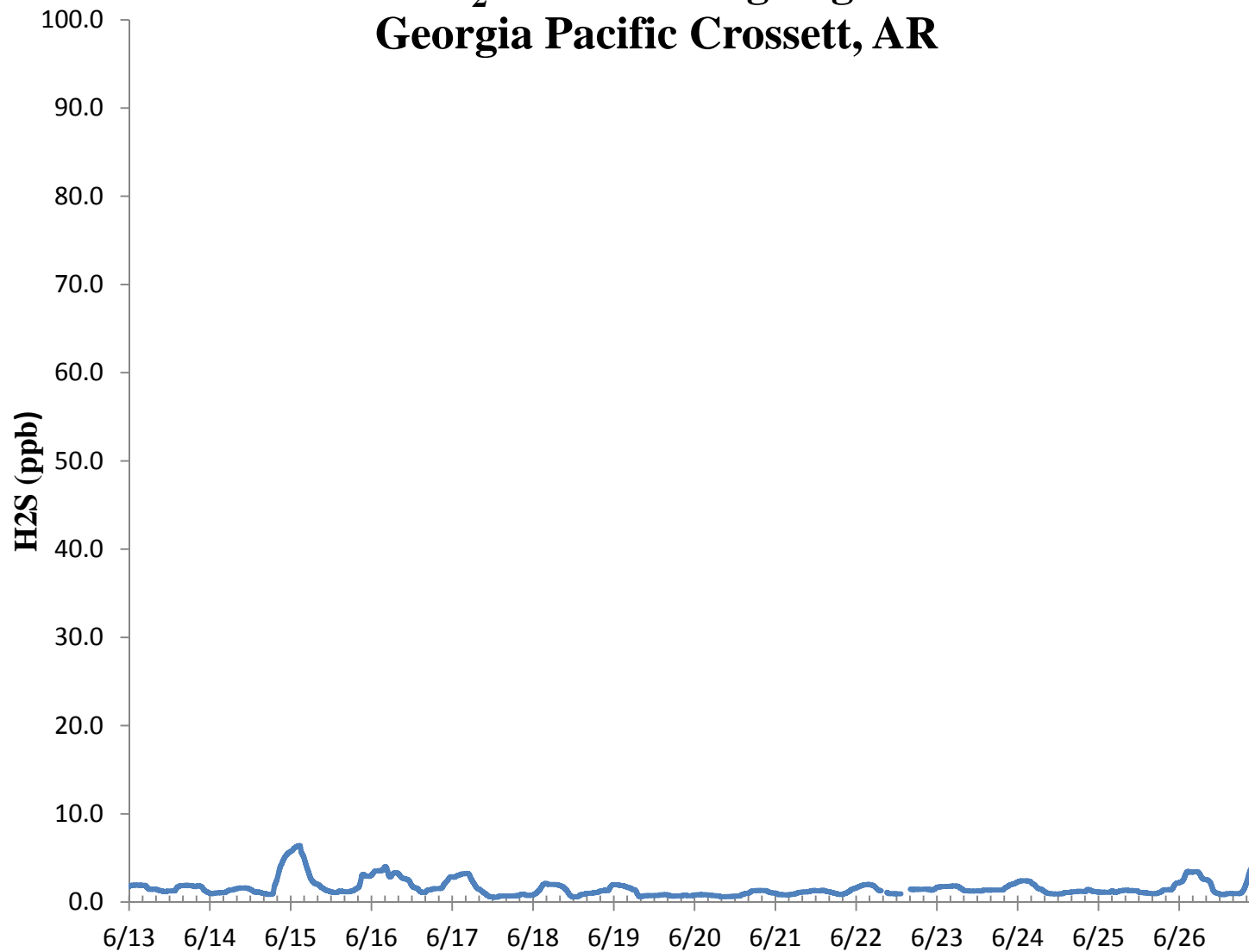
H$_2$S 24 Hr Rolling Avg
Georgia Pacific Crossett, AR

TRC

H$_2$S 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					
6/13/2018 13:00	68.6	70.0	-2.0	-2.321	4.000	2.000	4.000					
6/14/2018 13:00	67.9	70.0	-3.0	**75th Percentile**	9.000	3.000	9.000	n	S$_d$	S$_{d2}$	∑|d|	**"AB" (Eqn 4)**
6/15/2018 13:00	68.7	70.0	-1.9	0.714	3.449	1.857	3.449	14	1.779	2.547	24.714	1.765
6/16/2018 13:00	69.2	70.0	-1.1		1.306	1.143	1.306	n-1	∑d	∑d^2	∑|d|^2	**"AS" (Eqn 5)**
6/17/2018 13:00	68.3	70.0	-2.4		5.898	2.429	5.898	13	-11.286	50.224	50.224	0.712
6/18/2018 13:00	68.3	70.0	-2.4		5.898	2.429	5.898					
6/19/2018 13:00	68.2	70.0	-2.6		6.612	2.571	6.612				**Bias (%) (Eqn 3)**	Both Signs Positive
6/20/2018 13:00	69.4	70.0	-0.9		0.735	0.857	0.735				2.1	FALSE
6/21/2018 13:00	69.2	70.0	-1.1		1.306	1.143	1.306	**CV (%) (Eqn 2)**		**Signed Bias (%)**		Both Signs Negative
6/22/2018 13:00	69.6	70.0	-0.6		0.327	0.571	0.327	2.42		+/-2.1		FALSE
6/23/2018 13:00	71.4	70.0	2.0		4.000	2.000	4.000					
6/24/2018 13:00	71.3	70.0	1.9		3.449	1.857	3.449	**Upper Probability Limit**		**Lower Probability Limit**		
6/25/2018 13:00	70.8	70.0	1.1		1.306	1.143	1.306	2.68		-4.29		
6/26/2018 13:00	71.2	70.0	1.7		2.939	1.714	2.939					

Percent Differences

TRC
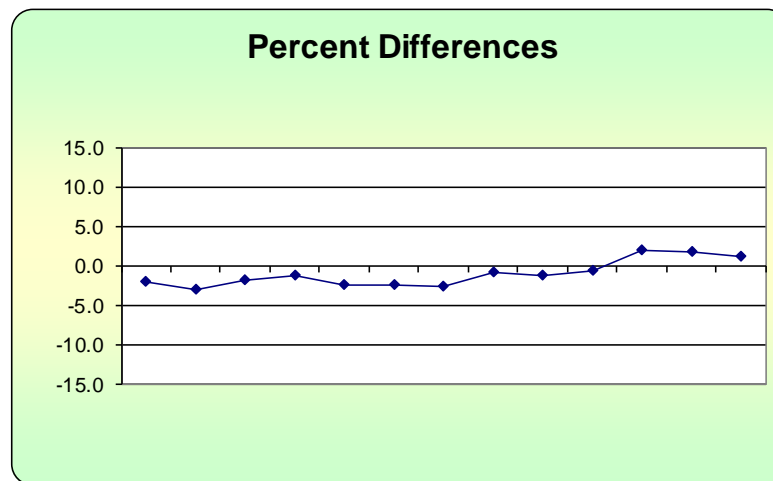
Meteorological Summary