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July 24, 2017

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,

Following is the biweekly data summary for the Georgia-Pacific (GP) hydrogen sulfide (H₂S) and meteorological monitoring program, at the GP Crossett mill, covering the calendar period of June 28, 2017 through July 11, 2017.

Summary of Results

Included in this report are three plots presenting H₂S concentrations calculated with varied rolling average periods (30-minute, 8-hour, and 24-hour).

Also included in this report is a summary of results from the daily 1-point QC checks performed during this biweekly period. The QAPP establishes goals for precision and bias 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.

Additionally, weekly automated zero adjustments have been put in place beginning February 1, 2017, so as to limit the effect of the analyzer's zero drift. During this reporting period there were a total of 9 zero checks performed; all within the acceptable range of ± 1.5 ppb, as defined in the QAPP. Results for these zero checks are presented below.

Date	Zero Check	Date	Zero Check
6/30/2017	0.1	7/6/2017	0.4
7/2/2017	0.2	7/7/2017	0.5
7/3/2017	0.3	7/8/2017	0.4
7/4/2017	0.3	7/9/2017	0.5
7/5/2017	0.2		

There were multiple occurrences of data loss during this monitoring period, in addition to those



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resulting from automated daily 1-point QC and weekly calibration checks. TRC performed extensive troubleshooting and maintenance on the H₂S calibration system June 28th – 30th, resulting in approximately 12 hours of data loss over those three days. The above mentioned maintenance was also responsible for interrupting the scheduled automated calibration check on July 29th. Issues with the calibration system persisted and remote troubleshooting was performed on July 1st, overriding the automated calibration period on that day. TRC continued to perform manual multipoint checks (zero, ~70 ppb, and ~400 ppb) on July 2nd through July 9th; responsible for approximately an hour and a half of data loss each day. Missing automated calibration checks were bracketed with checks that fell within the acceptable range, indicating the H₂S monitor was operating in accordance with the QAPP. These results were used in calculating the CV as shown in the table that follows. On July 10th TRC personnel updated the automated calibration program, and since then all automated calibration checks have been within acceptance criteria.

Fourteen-day time series plots for all recorded meteorological (met) parameters are presented in the final table. Data for all meteorological parameters is missing for approximately two hours on July 28th, due to replacement of the logger PC.

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

Sincerely,

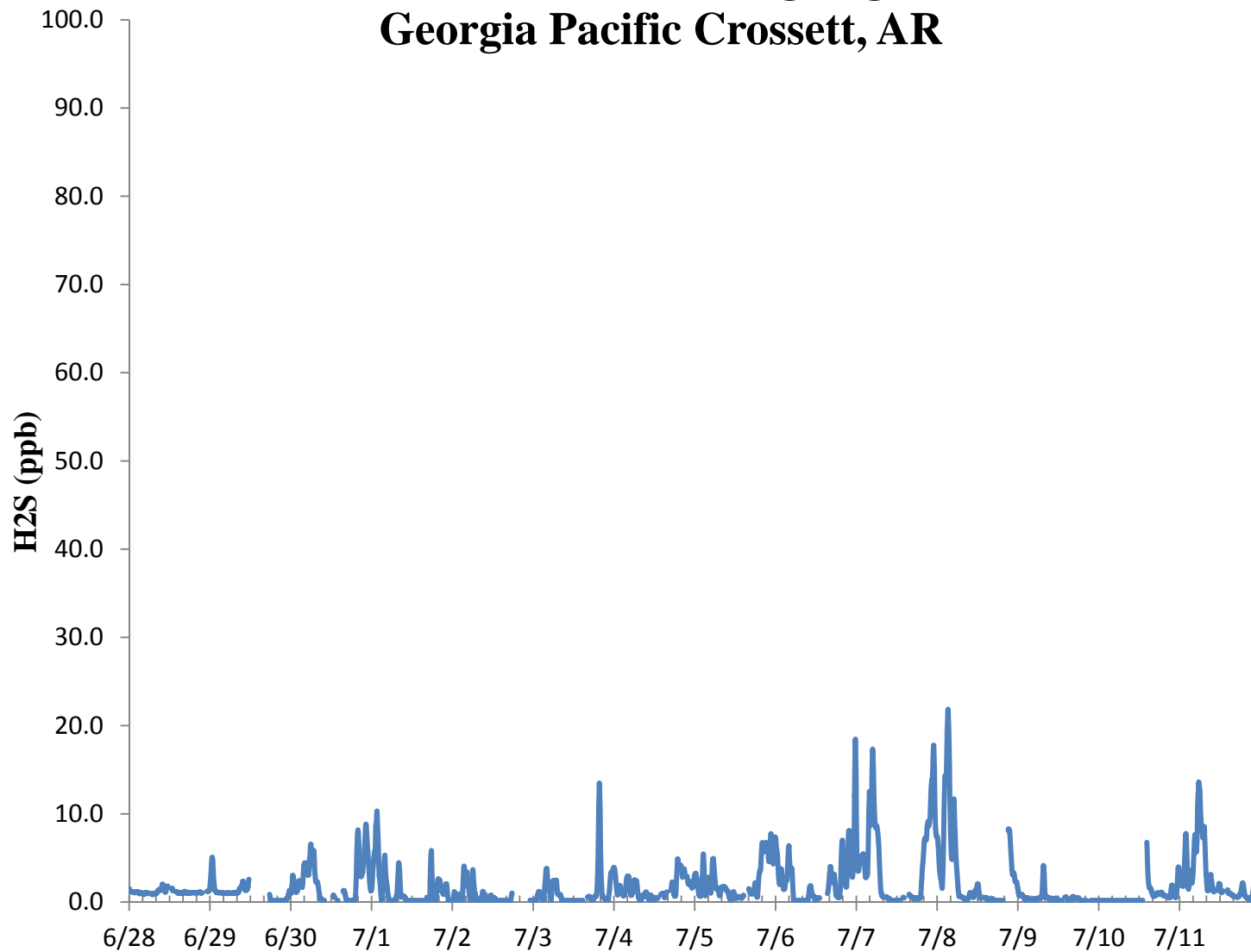


Jonathan Bowser
Manager, Air Quality and Meteorological Monitoring

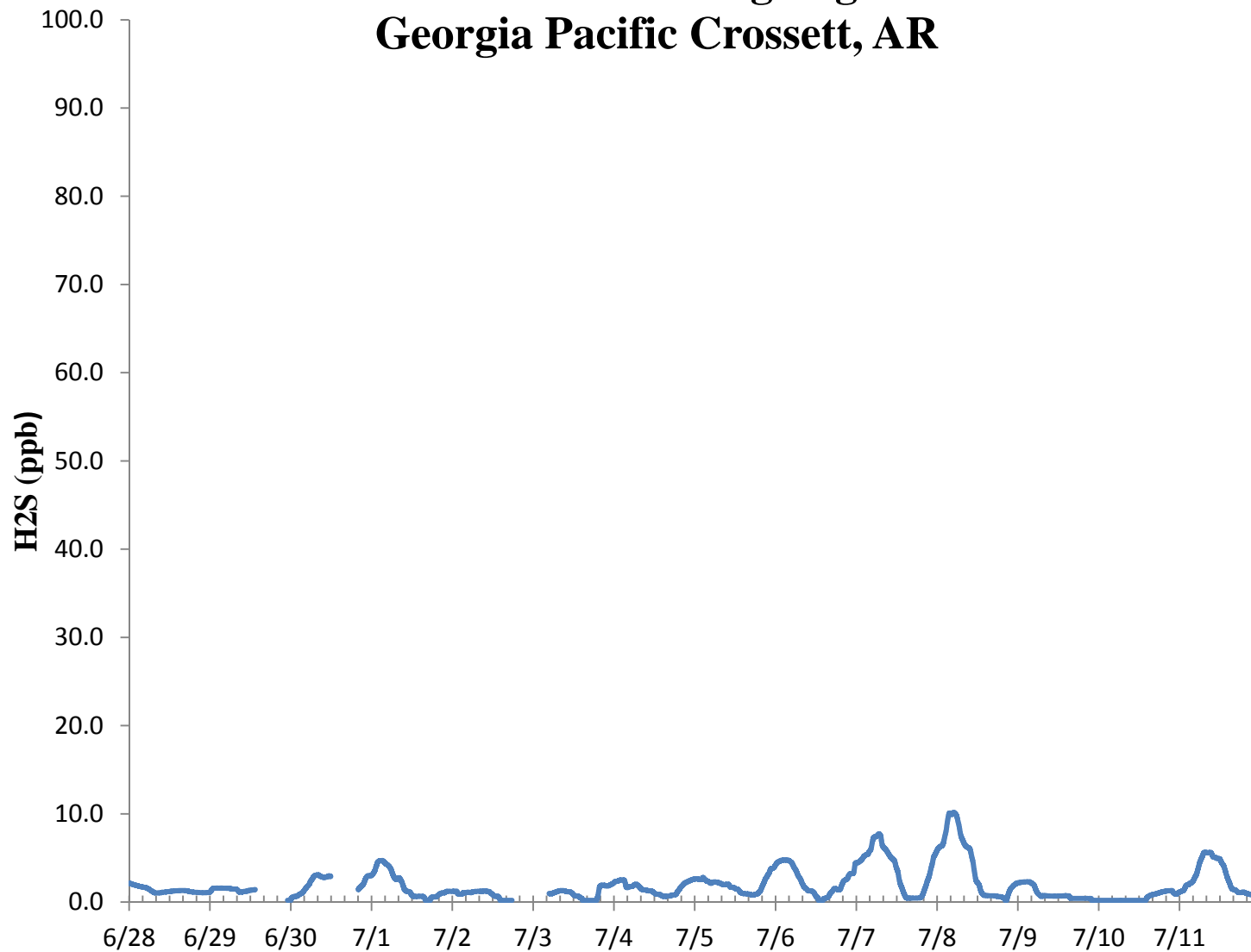
Air Measurements – Gainesville Office
6312 NW 18th Drive, Suite 100
Gainesville, Florida 32653
(352) 260-1162
Email: jbowser@trcsolutions.com

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

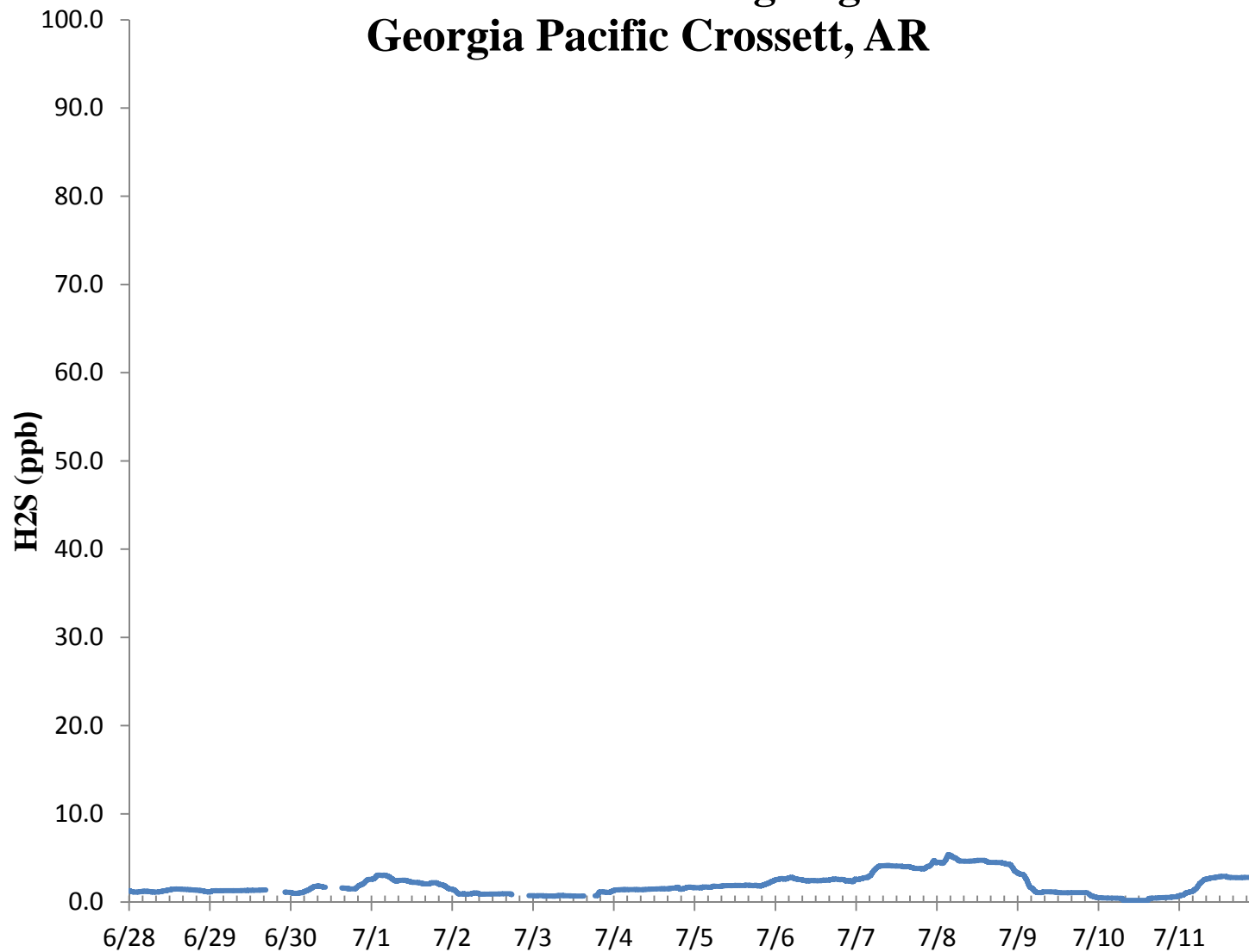
H2S 30 Min Rolling Avg Georgia Pacific Crossett, AR



H2S 8 Hr Rolling Avg Georgia Pacific Crossett, AR



H2S 24 Hr Rolling Avg Georgia Pacific Crossett, AR



H₂S Assessment

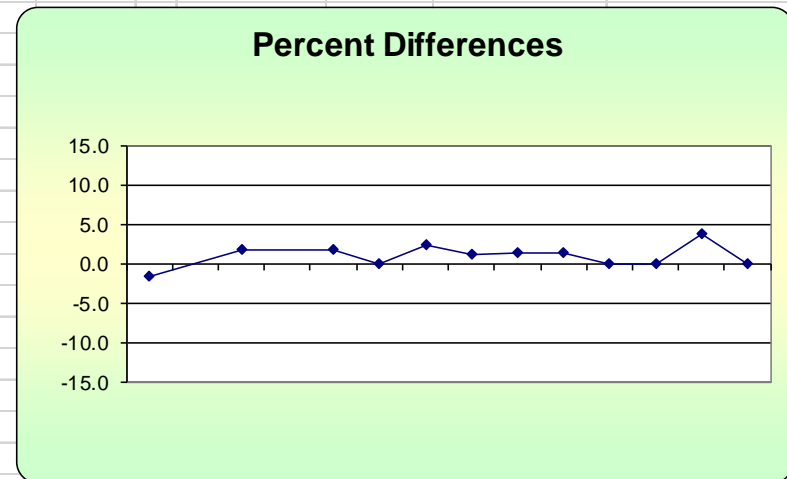
GP - Crossett, AR			Compound of Interest: H ₂ S				CV _{ub} (%)	Bias (%)
Date	Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	25th Percentile	d ²	d	d ²	
6/28/2017 13:00	68.9	70.0	-1.6	0.000	2.469	1.571	2.469	
6/30/2017 13:00	71.2	70.0	1.7	75th Percentile	2.939	1.714	2.939	
7/2/2017 13:00	71.3	70.0	1.9	1.750	3.449	1.857	3.449	
7/3/2017 13:00	71.0	71.0	0.0		0.000	0.000	0.000	
7/4/2017 13:00	71.7	70.0	2.4		5.898	2.429	5.898	
7/5/2017 13:00	71.8	71.0	1.1		1.270	1.127	1.270	
7/6/2017 13:00	72.0	71.0	1.4		1.984	1.408	1.984	
7/7/2017 13:00	72.0	71.0	1.4		1.984	1.408	1.984	
7/8/2017 13:00	72.0	72.0	0.0		0.000	0.000	0.000	
7/9/2017 13:00	72.0	72.0	0.0		0.000	0.000	0.000	
7/10/2017 13:00	72.6	70.0	3.7		13.796	3.714	13.796	
7/11/2017 13:00	70.0	70.0	0.0		0.000	0.000	0.000	

n	S _d	S _{d2}	Σ d	"AB" (Eqn 4)
12	1.402	3.886	15.229	1.269
n-1	Σd	Σd ²	Σ d ²	"AS" (Eqn 5)
11	12.087	33.788	33.788	1.147

Bias (%) (Eqn 3)	Both Signs Positive
1.86	TRUE
Signed Bias (%)	Both Signs Negative
+1.86	FALSE

CV (%) (Eqn 2)	1.97
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Upper Probability Limit	Lower Probability Limit
3.75	-1.74



Meteorological Summary

