

May 12, 2015



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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 - Monthly Air Monitoring Report for Hydrogen Sulfide

Dear Ms. Simmons,

Following is a data summary for the monthly operational period of the Georgia-Pacific (GP) hydrogen sulfide (H₂S) and meteorological monitoring program at the GP Crossett mill, covering the calendar period of April 1st through 30th, 2015.

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 monthly period. The QAPP establishes goals for precision and bias 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.

Thirty-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.

There were multiple occurrences of data loss during this monthly period, in addition to those resulting from automated daily 1-point QC and weekly calibration checks. A total of approximately eight and a half hours of H₂S data were lost during the month of April, as follows:

- April 3rd: 17:58 – 21:51
- April 5th: 08:51 – 09:16
- April 22nd: 10:22 – 12:35
- April 25th: 01:37 – 09:37

Multiple power failures occurred at the site on April 3rd, 5th, and 25th. Data stored internally in the H₂S analyzer were downloaded and entered into the database, where available. Routine maintenance of the T101 H₂S analyzer was performed on April 22nd. The SO₂ scrubber was



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replaced and pre and post maintenance calibration checks were performed.

As a result of the power failures, automated daily 1-point QC checks were not performed on April 3rd, 4th and 24th through 26th. Results for all available automated daily 1-point QC checks fall within the acceptable range, indicating the H₂S monitor was operating in accordance with the QAPP.

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

Sincerely,

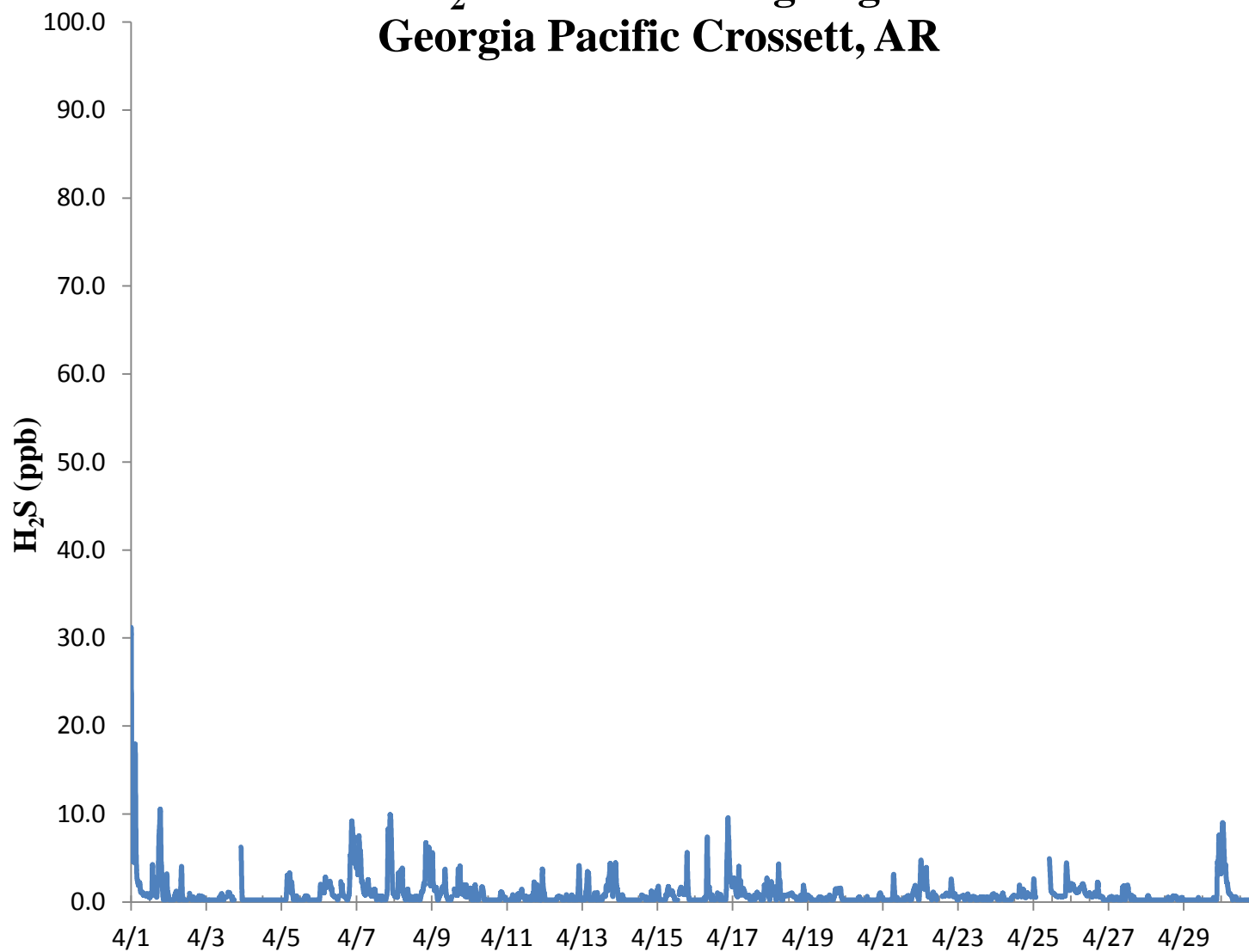


Jonathan Bowser
Manager, Air Quality and Meteorological Monitoring

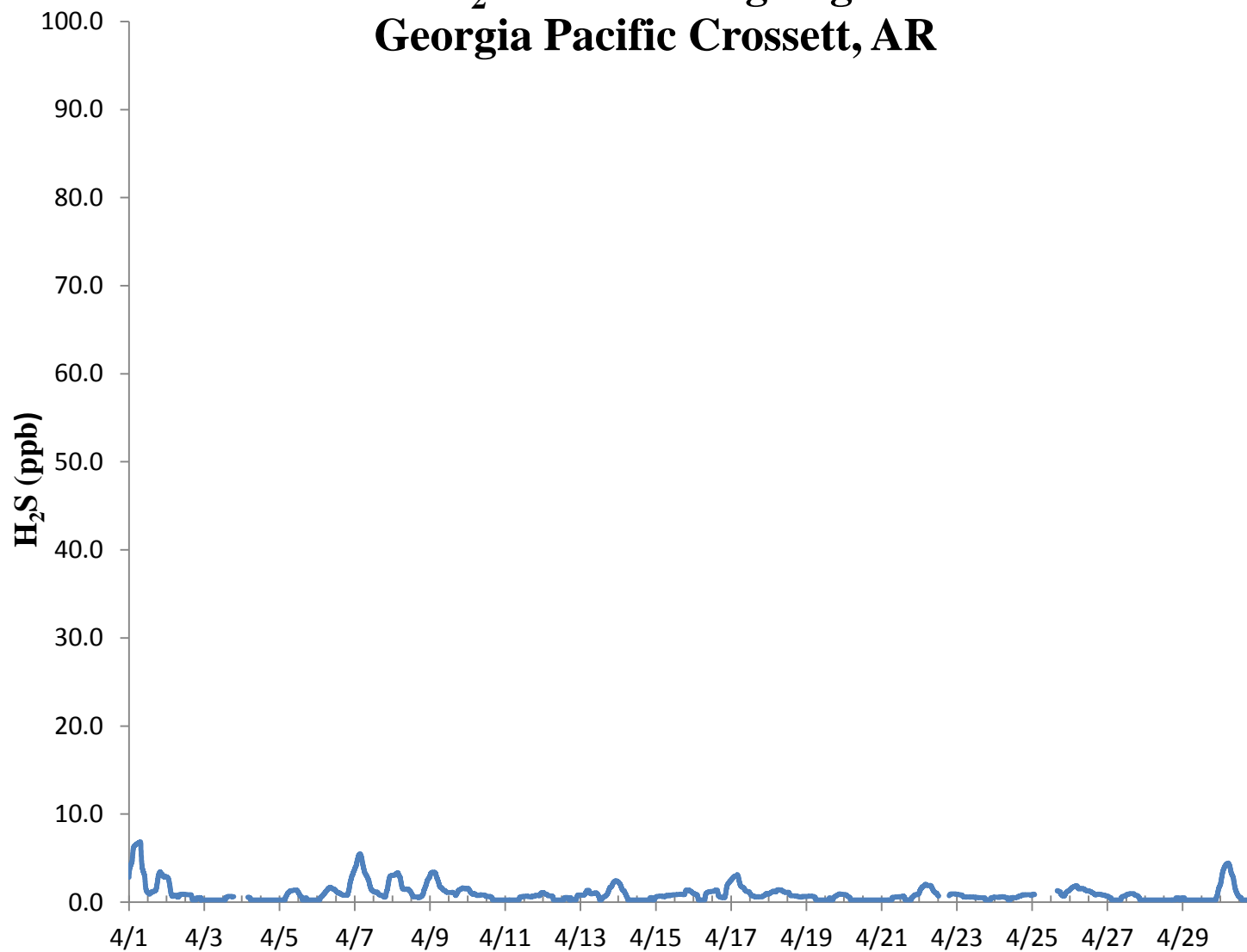
Air Measurements – Gainesville Office
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Email: jbowser@trcsolutions.com

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

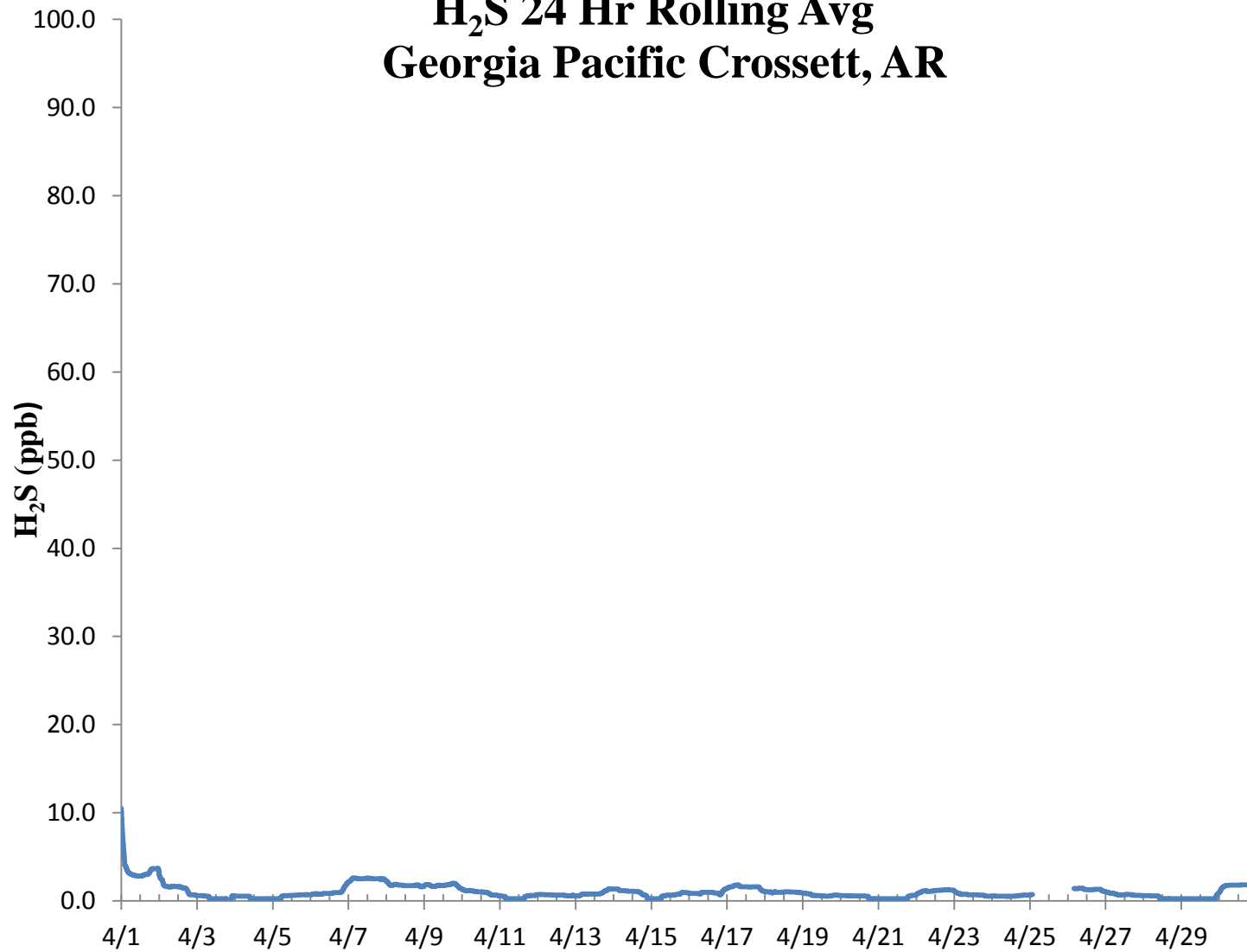
**H₂S 30 Min Rolling Avg
Georgia Pacific Crossett, AR**



**H₂S 8 Hr Rolling Avg
Georgia Pacific Crossett, AR**



**H₂S 24 Hr Rolling Avg
Georgia Pacific Crossett, AR**



H₂S Assessment

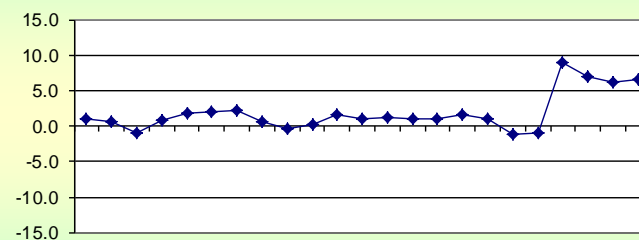
GP - Crossett, AR			Pollutant type: H ₂ S					CV _{ub} (%)	Bias (%)	
Date	Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	25th Percentile	d ²	d	d ²			
4/1/2015 13:00	70.7	70.0	1.0	0.571	1.000	1.000	1.000			
4/2/2015 13:00	70.4	70.0	0.6	75th Percentile	0.327	0.571	0.327			
4/5/2015 13:00	69.4	70.0	-0.9	2.143	0.735	0.857	0.735			
4/6/2015 13:00	70.6	70.0	0.9		0.735	0.857	0.735			
4/7/2015 13:00	71.3	70.0	1.9		3.449	1.857	3.449			
4/8/2015 13:00	71.4	70.0	2.0		4.000	2.000	4.000			
4/9/2015 13:00	71.5	70.0	2.1		4.592	2.143	4.592			
4/10/2015 13:00	70.4	70.0	0.6		0.327	0.571	0.327			
4/11/2015 13:00	69.8	70.0	-0.3		0.082	0.286	0.082			
4/12/2015 13:00	70.2	70.0	0.3		0.082	0.286	0.082			
4/13/2015 13:00	71.2	70.0	1.7		2.939	1.714	2.939			
4/14/2015 13:00	70.7	70.0	1.0		1.000	1.000	1.000			
4/15/2015 13:00	70.9	70.0	1.3		1.653	1.286	1.653			
4/16/2015 13:00	70.7	70.0	1.0		1.000	1.000	1.000			
4/17/2015 13:00	70.7	70.0	1.0		1.000	1.000	1.000			
4/18/2015 13:00	71.1	70.0	1.6		2.469	1.571	2.469			
4/19/2015 13:00	70.8	70.0	1.1		1.306	1.143	1.306			
4/20/2015 13:00	69.2	70.0	-1.1		1.306	1.143	1.306			
4/21/2015 13:00	69.3	70.0	-1.0		1.000	1.000	1.000			
4/22/2015 13:00	76.3	70.0	9.0		81.000	9.000	81.000			
4/23/2015 13:00	74.9	70.0	7.0		49.000	7.000	49.000			
4/27/2015 13:00	74.3	70.0	6.1		37.735	6.143	37.735			
4/28/2015 13:00	74.6	70.0	6.6		43.184	6.571	43.184			
4/29/2015 13:00	74.7	70.0	6.7		45.082	6.714	45.082			
4/30/2015 13:00	74.8	70.0	6.9		47.020	6.857	47.020			

n	S _d	S _{d2}	Σ d	"AB" (Eqn 4)
25	2.902	22.510	63.571	2.543
n-1	Σd	Σd ²	Σ d ²	"AS" (Eqn 5)
24	57.000	332.020	332.020	2.664

Bias (%) (Eqn 3)	Both Signs Positive
3.45	TRUE
Signed Bias (%)	Both Signs Negative
+3.45	FALSE

Upper Probability Limit	Lower Probability Limit
7.97	-3.41

Percent Differences



Meteorological Summary

