

March 14, 2018



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March 14, 2018

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 February 7, 2018 through February 20, 2018.

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.

Additionally, weekly automated zero adjustments were implemented starting February 1, 2017. During this reporting period two automated zero checks were performed; within the acceptable range



of ± 1.5 ppb, as defined in the QAPP. The result for these zero checks are presented below.

Date	Zero Check Response (ppb)
2/8/2018	0.4
2/15/2018	0.8

Data Capture

There was a single occurrence of H₂S data loss this monitoring period, in addition to those resulting from automated daily 1-point QC and weekly calibration checks. The logging program experienced a failure late in the evening of February 15th; responsible for approximately seven hours of lost H₂S data. The TRC logger was reset the morning of February 16th. The TRC logger program has since been updated in an attempt to minimize future 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 precipitation data. Routine cleaning and maintenance was responsible for the loss of 20 minutes of precipitation data on February 15th.

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

Sincerely,



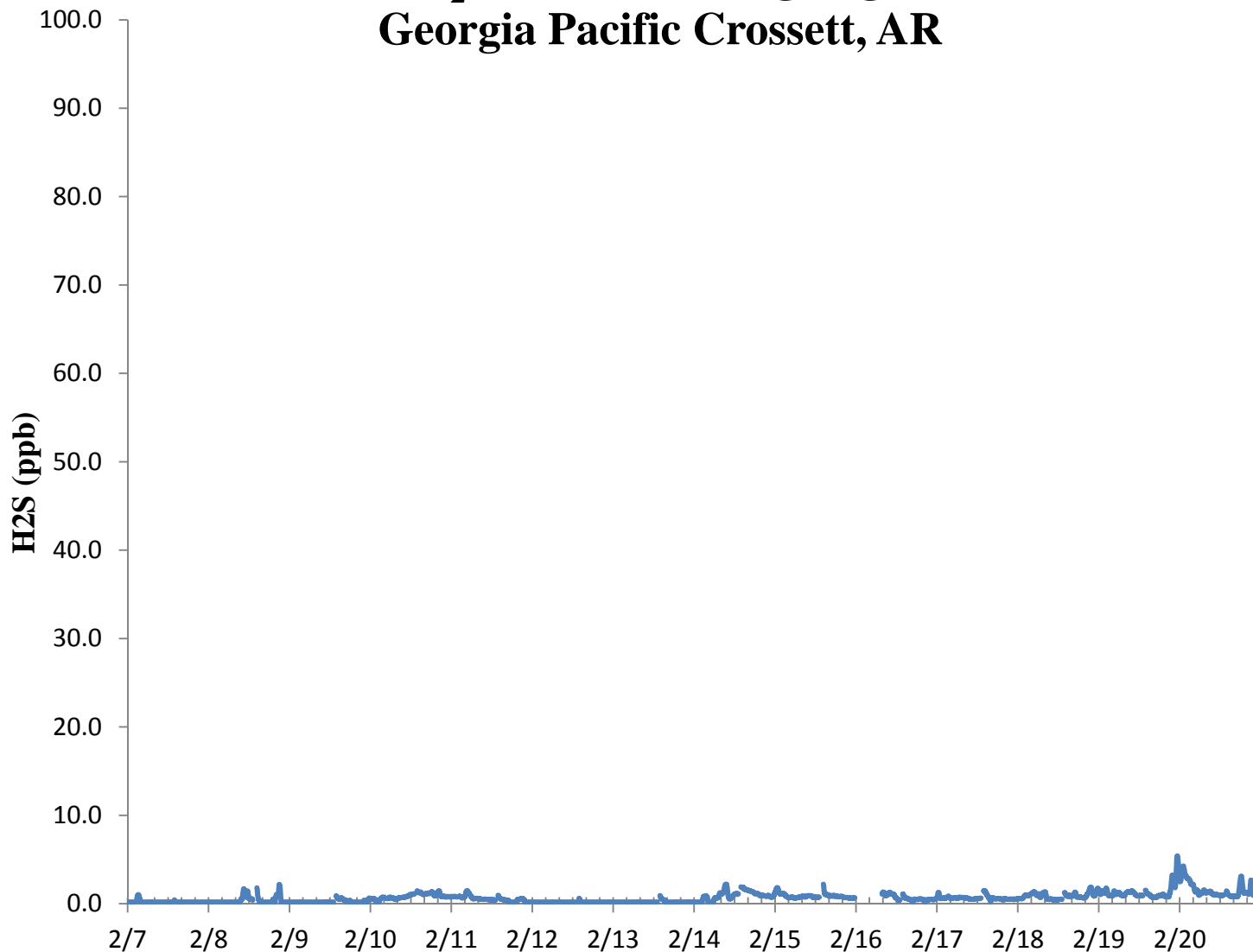
Jonathan Bowser
 Manager, Air Quality and Meteorological Monitoring

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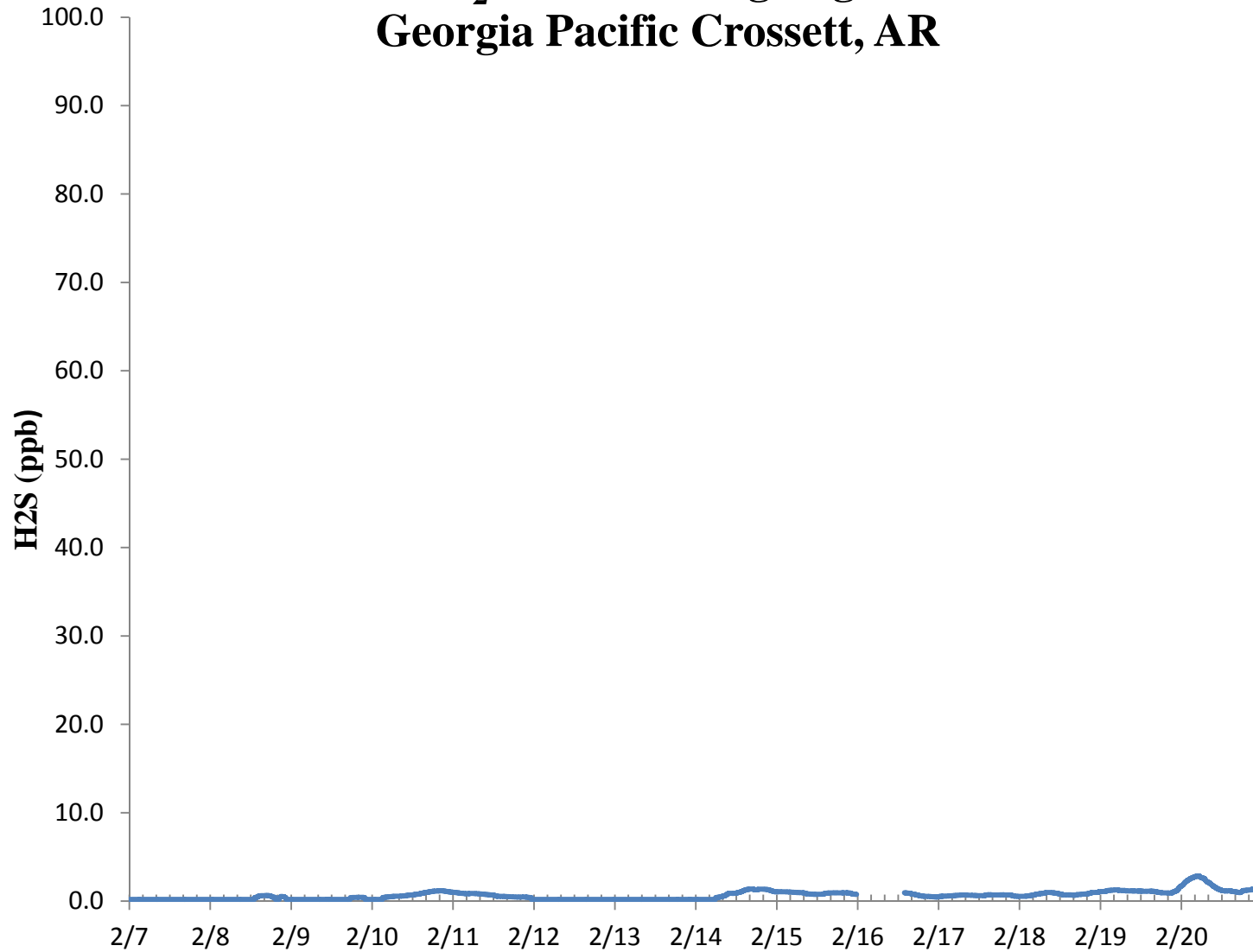
CC: Becky Keough, ADEQ Director via email: keogh@adeq.state.ar.us
 Kara Allen, Environmental Engineer, USEPA Region 6 via email Allen.Kara@epa.gov



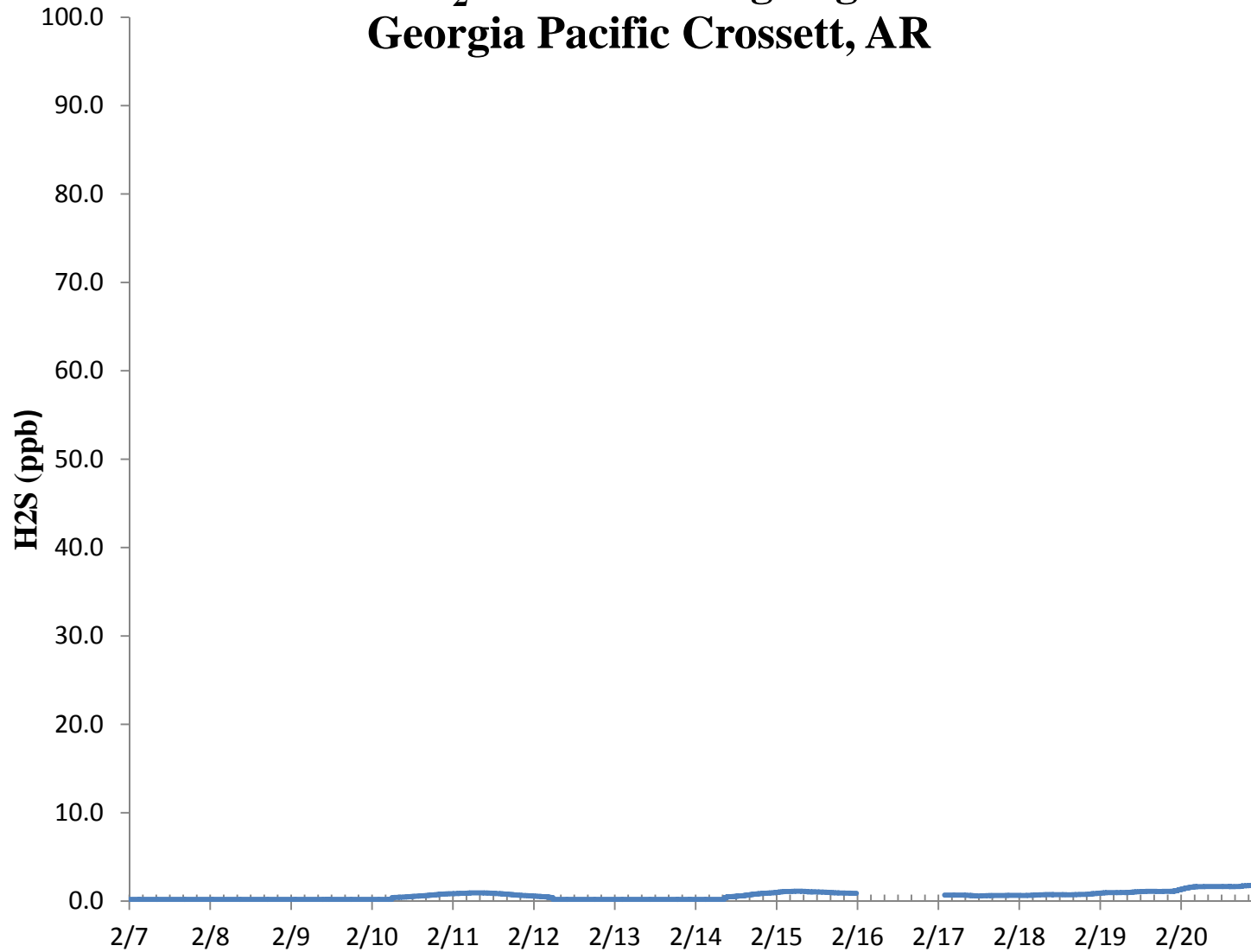
H₂S 30 Min Rolling Avg Georgia Pacific Crossett, AR



H₂S 8 Hr Rolling Avg Georgia Pacific Crossett, AR



H₂S 24 Hr Rolling Avg Georgia Pacific Crossett, AR



H₂S Assessment

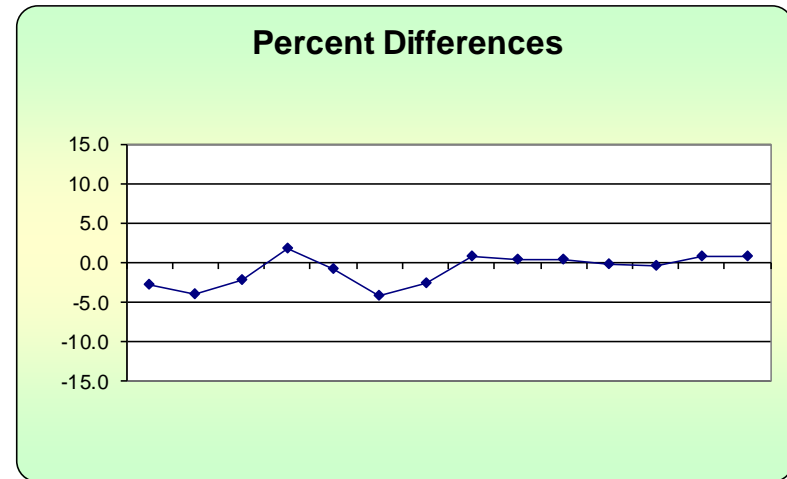
GP - Crossett, AR			Compound of Interest: H ₂ S			CV _{ub} (%)	Bias (%)
Date	Meas Val (Y)	Input Val (X)	d (Eqn. 1)	25th Percentile	d ²	d	d ²
2/7/2018 13:00	68.1	70.0	-2.7	-2.464	7.367	2.714	7.367
2/8/2018 13:00	67.2	70.0	-4.0	75th Percentile	16.000	4.000	16.000
2/9/2018 13:00	68.5	70.0	-2.1	0.607	4.592	2.143	4.592
2/10/2018 13:00	71.2	70.0	1.7		2.939	1.714	2.939
2/11/2018 13:00	69.5	70.0	-0.7		0.510	0.714	0.510
2/12/2018 13:00	67.0	70.0	-4.3		18.367	4.286	18.367
2/13/2018 13:00	68.2	70.0	-2.6		6.612	2.571	6.612
2/14/2018 13:00	70.6	70.0	0.9		0.735	0.857	0.735
2/15/2018 13:00	70.2	70.0	0.3		0.082	0.286	0.082
2/16/2018 13:00	70.2	70.0	0.3		0.082	0.286	0.082
2/17/2018 13:00	69.9	70.0	-0.1		0.020	0.143	0.020
2/18/2018 13:00	69.7	70.0	-0.4		0.184	0.429	0.184
2/19/2018 13:00	70.5	70.0	0.7		0.510	0.714	0.510
2/20/2018 13:00	70.5	70.0	0.7		0.510	0.714	0.510

n	S _d	S _{d2}	Σ d	"AB" (Eqn 4)
14	1.911	6.063	21.571	1.541
n-1	Σd	Σd ²	Σ d ²	"AS" (Eqn 5)
13	-12.429	58.510	58.510	1.394

Bias (%) (Eqn 3)	Both Signs Positive
2.2	FALSE
Signed Bias (%)	Both Signs Negative
+/-2.2	FALSE

CV (%) (Eqn 2)	
2.6	

Upper Probability Limit	Lower Probability Limit
2.86	-4.63



Meteorological Summary

