6312 NW 18th Drive
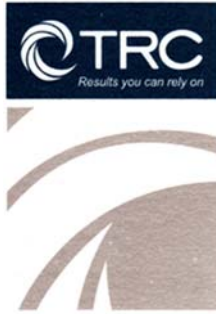**Suite 100**
Gainesville, FL 32653

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352.378.0354 FAX

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September 13, 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 (H_2S) and meteorological monitoring program covering the calendar period of August 22, 2018 through September 4, 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.

Due to substantial maintenance and repairs, automated calibration checks were not performed on August 30th. 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 is presented below.

Date	Zero Check Response (ppb)
8/22/2018	0.1
8/29/2018	0.0

Data Capture

There were multiple occurrences of H_2S data loss this monitoring period, in addition to those resulting from automated daily 1-point QC and weekly calibration checks.   An extensive power outage beginning on August 20th was responsible for data loss on August 22nd. Power was restored around 08:00 am on the 22nd, and a manual calibration check was performed, resulting in H_2S data loss through 10:00 am. Approximately one hour of H_2S data was lost on August 25th, on account of communication interruptions. On August 29th and 30th TRC personnel were on site to perform maintenance and repairs on the H_2S analyzer, responsible for approximately 24 hours of H_2S data loss.

Fourteen-day time series plots for all recorded meteorological (met) parameters are presented in the final charts. TRC personnel rewired the met station and installed a new modem on August 30th, resulting in approximately four hours of data loss for all met parameters.

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
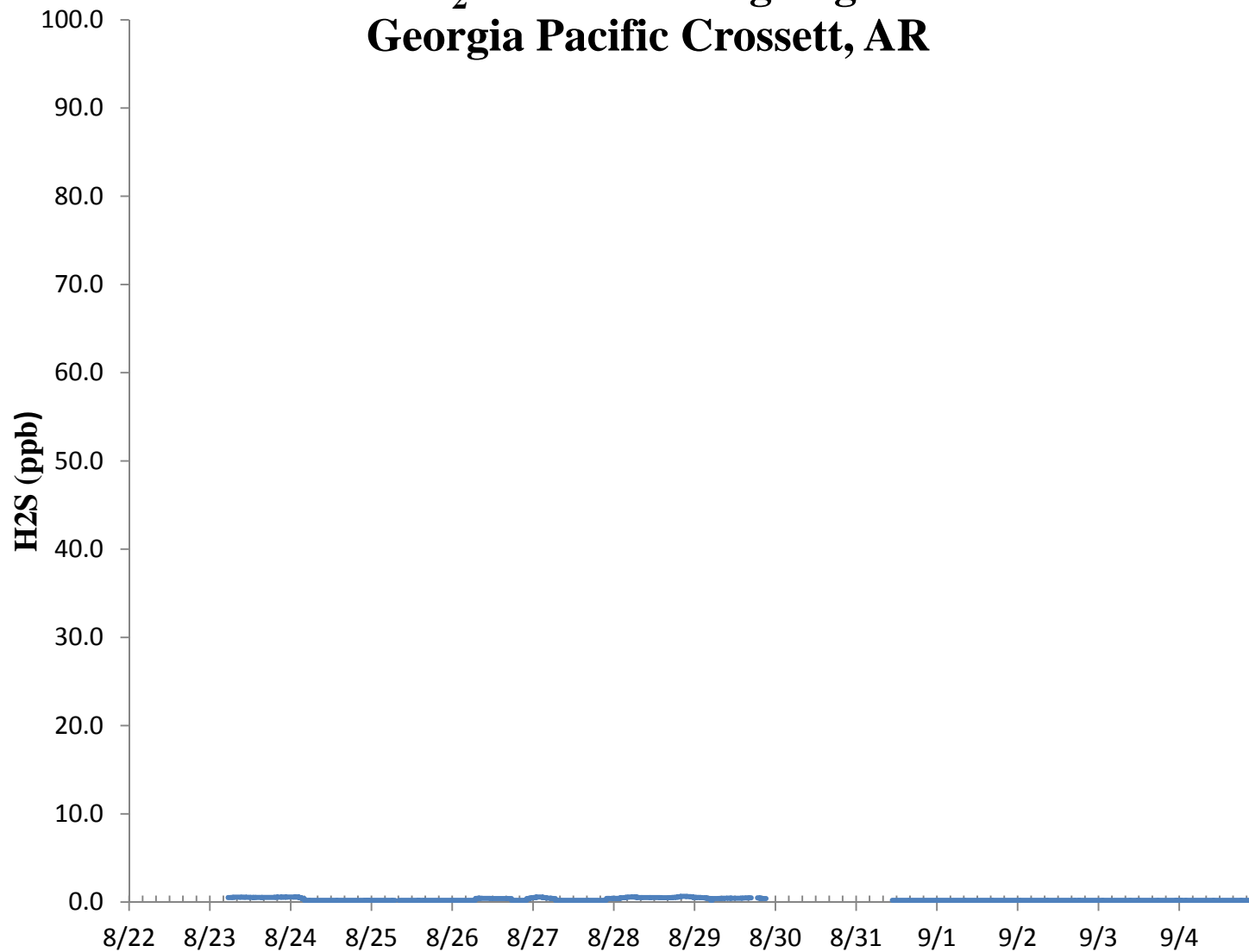   Kara Allen, Environmental Engineer, USEPA Region 6 via email Allen.Kara@epa.gov

TRC

H$_2$S 30 Min Rolling Avg
Georgia Pacific Crossett, AR

TRC
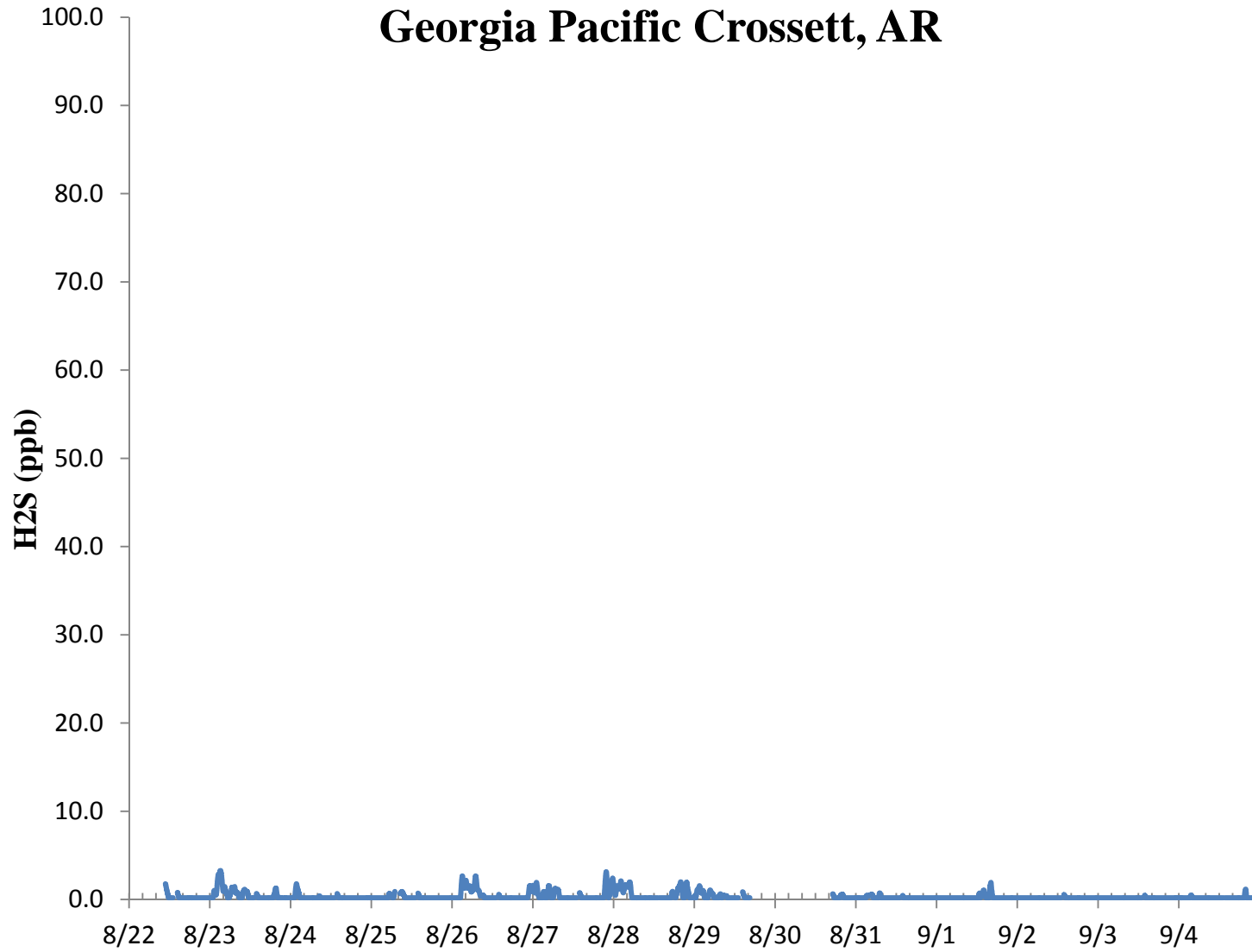
H$_2$S 8 Hr Rolling Avg
Georgia Pacific Crossett, AR
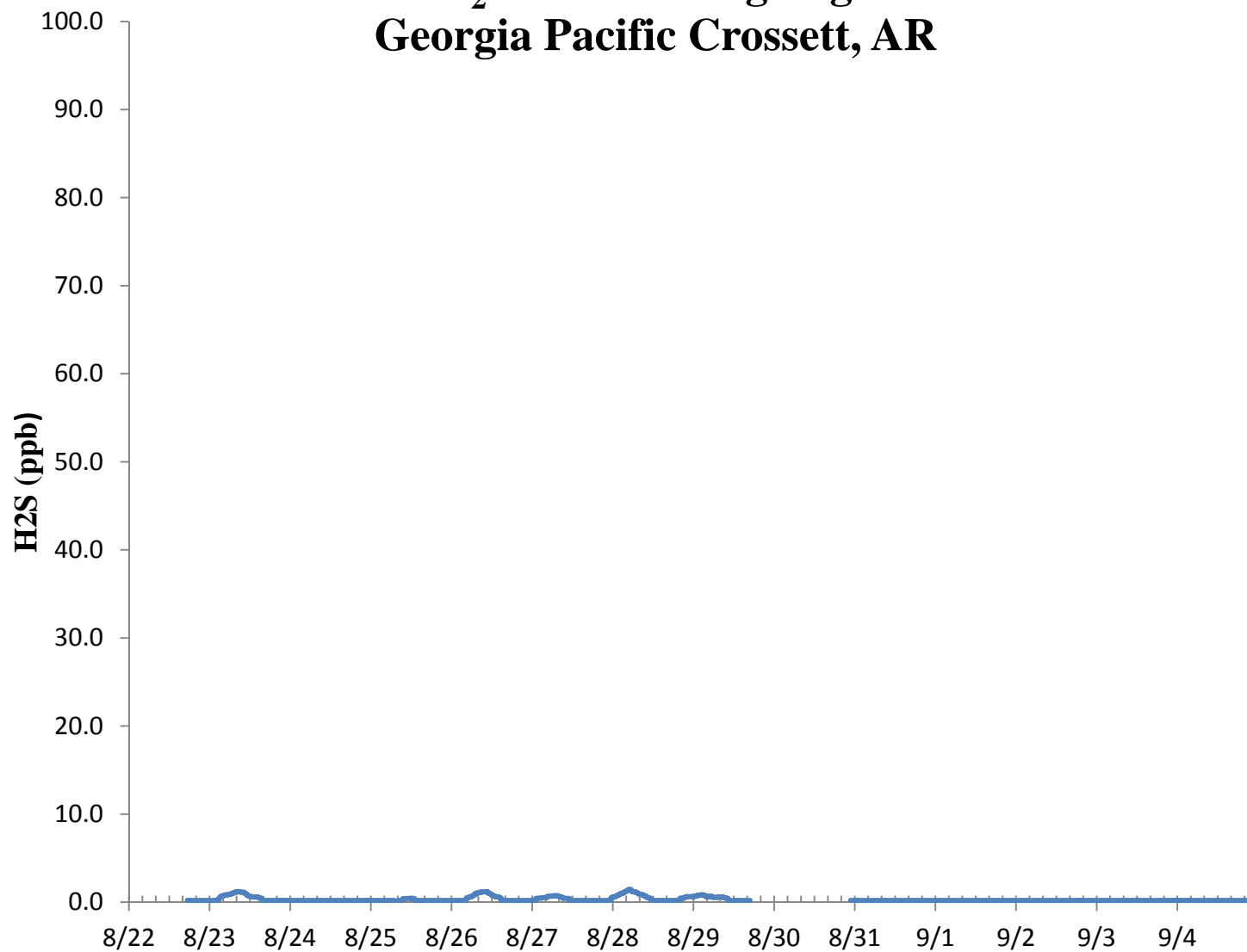
H$_2$S 24 Hr Rolling Avg
Georgia Pacific Crossett, AR

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	

Date	Meas Val (Y)	Input Val (X)	d (Eqn. 1)	25th Percentile	d^2	|d|	|d|^2
8/22/2018 13:00	71.1	70.0	1.6	-0.429	2.469	1.571	2.469
8/23/2018 13:00	70.7	70.0	1.0	**75th Percentile**	1.000	1.000	1.000
8/24/2018 13:00	70.7	70.0	1.0	0.786	1.000	1.000	1.000
8/25/2018 13:00	69.9	70.0	-0.1		0.020	0.143	0.020
8/26/2018 13:00	69.9	70.0	-0.1		0.020	0.143	0.020
8/27/2018 13:00	69.7	70.0	-0.4		0.184	0.429	0.184
8/28/2018 13:00	68.9	70.0	-1.6		2.469	1.571	2.469
8/29/2018 13:00	69.0	70.0	-1.4		2.041	1.429	2.041
8/31/2018 13:00	69.9	70.0	-0.1		0.020	0.143	0.020
9/1/2018 13:00	70.5	70.0	0.7		0.510	0.714	0.510
9/2/2018 13:00	69.7	70.0	-0.4		0.184	0.429	0.184
9/3/2018 13:00	69.7	70.0	-0.4		0.184	0.429	0.184

n	S$_d$	S$_{d2}$	Σ|d|	"AB" (Eqn 4)
12	0.958	0.964	9.000	0.750
n-1	Σd	Σd^2	Σ|d|^2	"AS" (Eqn 5)
11	-0.429	10.102	10.102	0.552

Bias (%) (Eqn 3)	Both Signs Positive
1.04	FALSE

CV (%) (Eqn 2)	Signed Bias (%)	Both Signs Negative
1.34	+/-1.04	FALSE

Upper Probability Limit	Lower Probability Limit
1.84	-1.91

Percent Differences

TRC
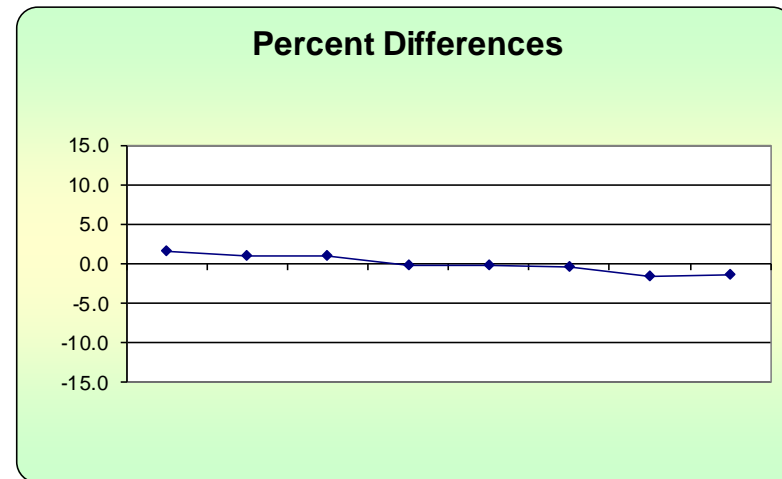
Meteorological Summary