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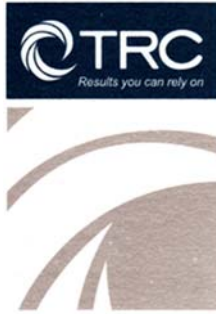
6312 NW 18th Drive
Suite 100
Gainesville, FL 32653

352.378.0332 PHONE
352.378.0354 FAX

www.TRCsolutions.com

May 11, 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 April 18, 2018 through May 1, 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.

The scheduled automated three-point calibration check on April 26th was interrupted due to programming updates. 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.

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

Date	Zero Check Response (ppb)
4/19/2018	-0.6
4/27/2018	-0.6

Data Capture

There were no significant occurrences of H_2S data loss this monitoring period, other than those resulting from automated daily 1-point QC and weekly calibration checks.   There were a few short-term H_2S data losses on account of programming/communication updates, none were longer than ten minutes, and the total unscheduled loss for this monitoring period was less than 30 minutes.

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 10 minutes of precipitation data on April 24th.

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.go
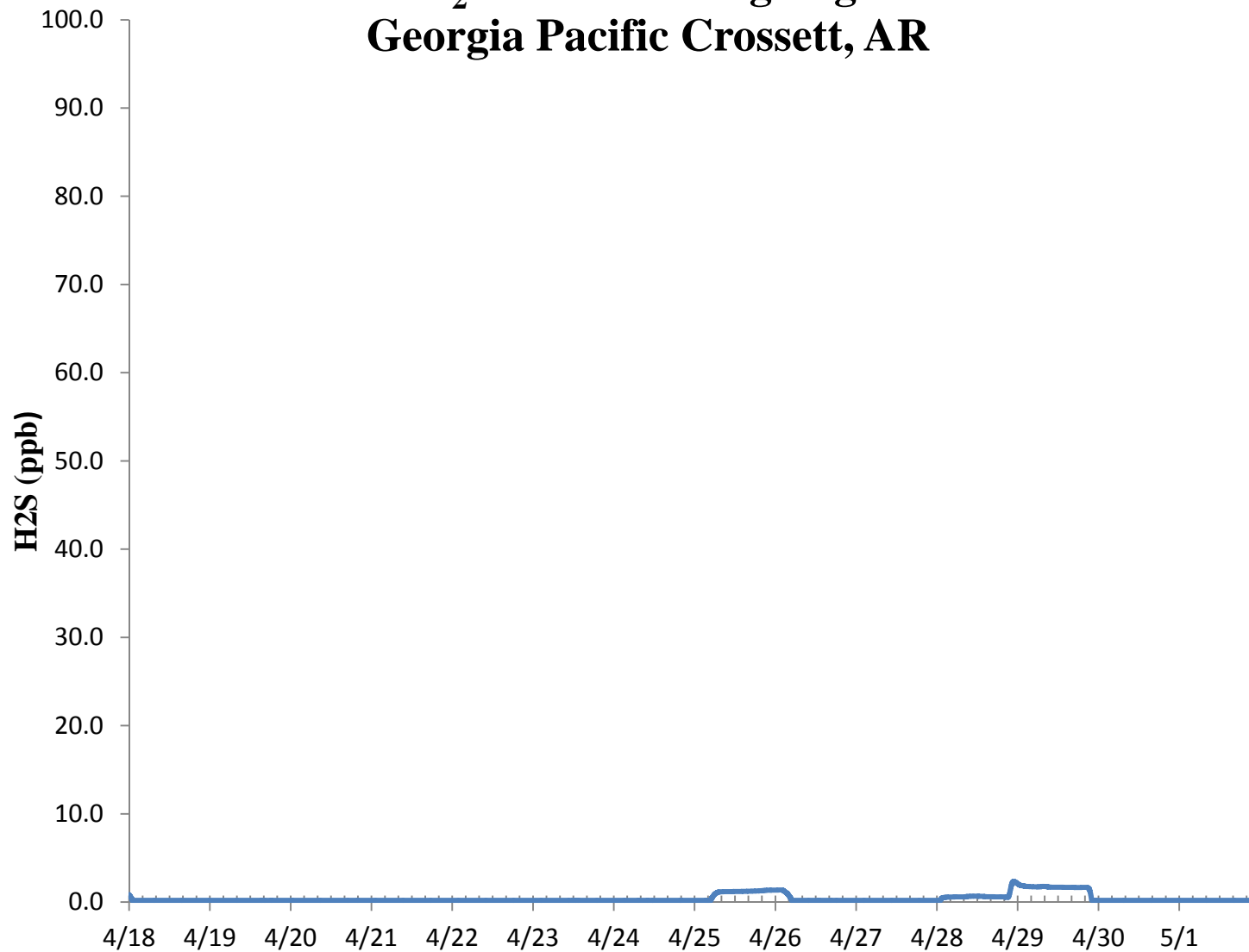
H₂S 30 Min Rolling Avg
Georgia Pacific Crossett, AR
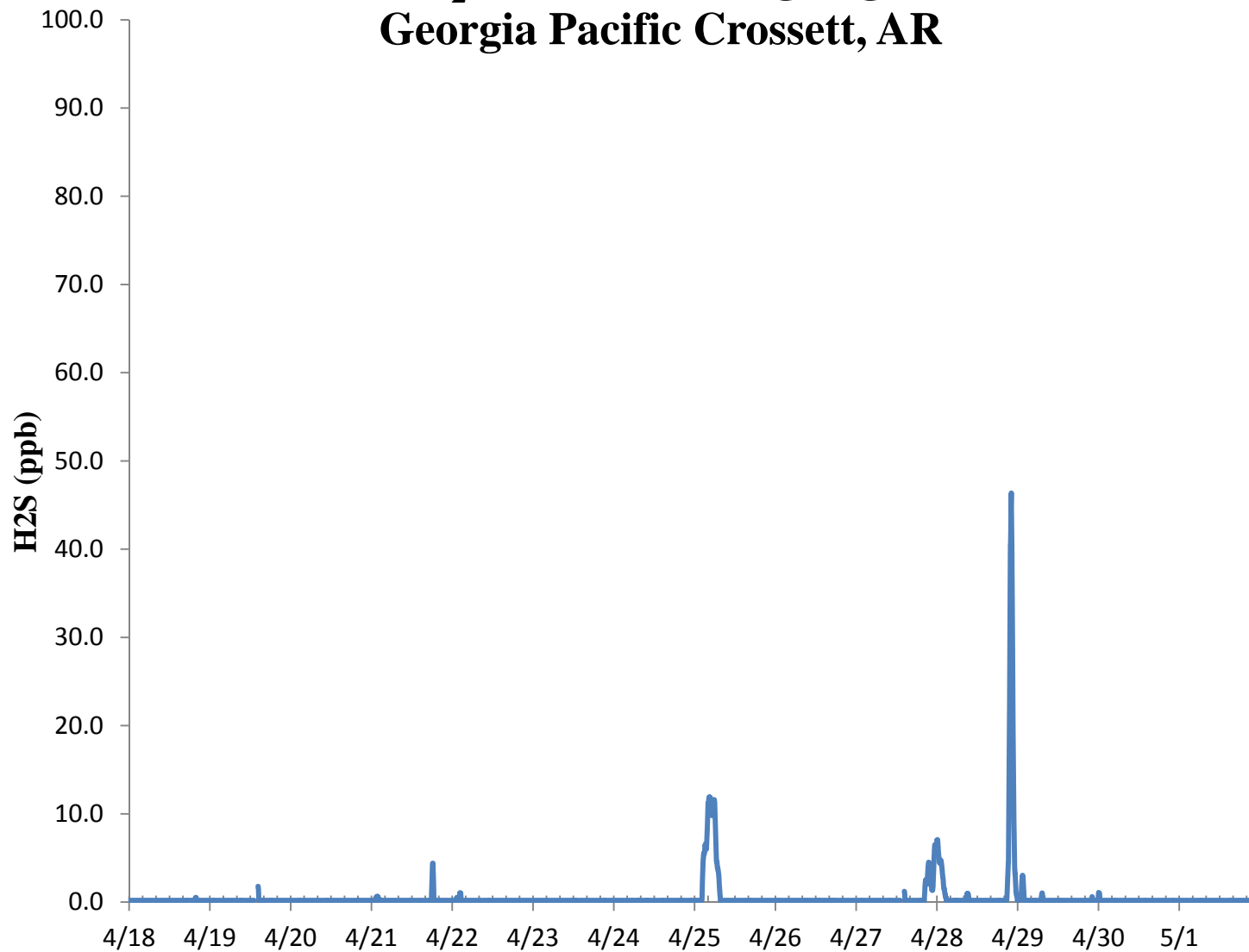
H$_2$S 8 Hr Rolling Avg
Georgia Pacific Crossett, AR
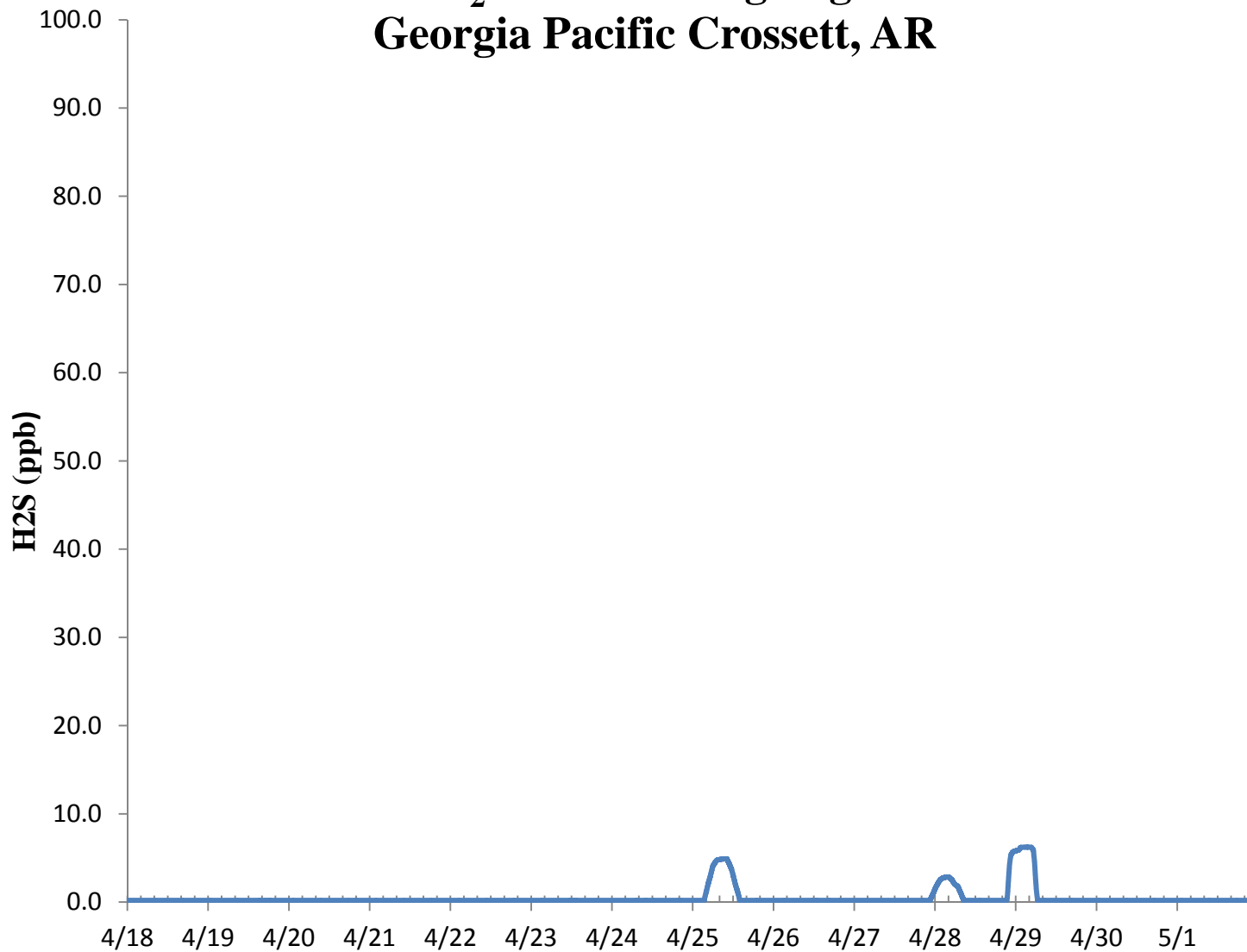
H$_2$S 24 Hr Rolling Avg
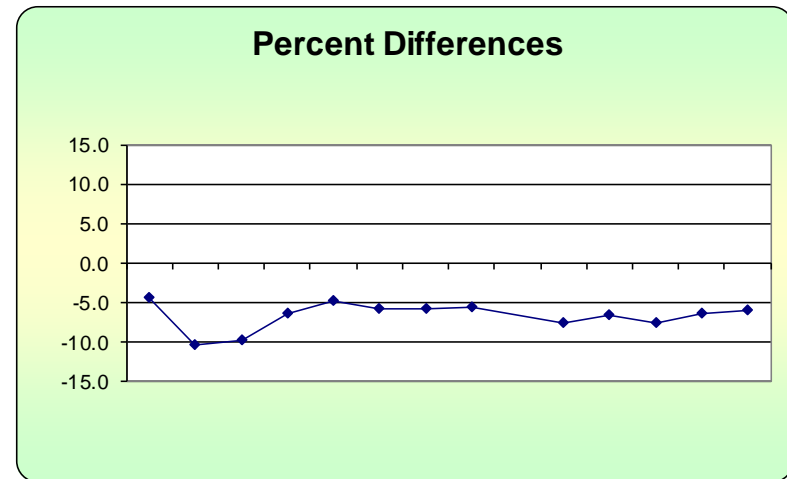## Georgia Pacific Crossett, AR

H₂S Assessment

Date	Meas Val (Y)	Input Val (X)	d (Eqn. 1)	25th Percentile	d^2	|d|	$\|d\|^2$
4/18/2018 13:00	66.9	70.0	-4.4	-7.571	19.612	4.429	19.612
4/19/2018 13:00	62.7	70.0	-10.4	**75th Percentile**	108.755	10.429	108.755
4/20/2018 13:00	63.1	70.0	-9.9	-5.714	97.163	9.857	97.163
4/21/2018 13:00	65.5	70.0	-6.4		41.327	6.429	41.327
4/22/2018 13:00	66.6	70.0	-4.9		23.592	4.857	23.592
4/23/2018 13:00	65.9	70.0	-5.9		34.306	5.857	34.306
4/24/2018 13:00	66.0	70.0	-5.7		32.653	5.714	32.653
4/25/2018 13:00	66.1	70.0	-5.6		31.041	5.571	31.041
4/27/2018 13:00	64.7	70.0	-7.6		57.327	7.571	57.327
4/28/2018 13:00	65.4	70.0	-6.6		43.184	6.571	43.184
4/29/2018 13:00	64.7	70.0	-7.6		57.327	7.571	57.327
4/30/2018 13:00	65.6	70.0	-6.3		39.510	6.286	39.510
5/1/2018 13:00	65.8	70.0	-6.0		36.000	6.000	36.000

GP - Crossett, AR — **Compound of Interest: H₂S** — **CV_ub (%)** — **Bias (%)**

n	S_d	S_{d2}	$\Sigma\|d\|$	**"AB" (Eqn 4)**
13	1.771	26.892	87.143	6.703
n-1	**Σd**	**Σd^2**	**$\Sigma\|d\|^2$**	**"AS" (Eqn 5)**
12	-87.143	621.796	621.796	1.771

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

CV (%) (Eqn 2)	**Signed Bias (%)**	Both Signs Negative
2.44	-7.58	TRUE

Upper Probability Limit	**Lower Probability Limit**
-3.23	-10.18

Percent Differences

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Meteorological Summary