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September 14, 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,

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 August 9, 2017 through August 22, 2017.

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 H_2S 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.

Programming errors interrupted the scheduled automated calibration checks on August 10th and 17th, however both days were bracketed by passing QC checks. Results for available automated daily 1-point QC checks were within the accuracy objective, 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, so as to limit the effect of the analyzer's zero drift. However, during this reporting period there were programming errors that interrupted the scheduled automated weekly checks. Instead, a single manual zero check was performed during this report period; within the acceptable range of \pm 1.5 ppb,



as defined in the QAPP. The result for this zero check is presented below.

Date	Zero Check Response (ppb)					
8/22/2017	0.3					

Data Capture

There were multiple occurrences of data loss during this monitoring period, in addition to those resulting from automated daily 1-point QC and weekly calibration checks. The site PC failed in the early morning hours of August 9th. The PC was reset and data was recovered from the instrument beginning at 7:56 AM, resulting in approximately 8 hours of data loss. On August 11th the site experienced a server error resulting in approximately two hours of data loss in the afternoon. On August 22nd TRC personnel were on site to perform maintenance followed by a multipoint calibration verification, and approximately four hours of data were lost.

Fourteen-day time series plots for all recorded meteorological (met) parameters are presented in the final table. The server error on August 11th intermittently affected the met monitoring station and data was lost for all parameters for approximately one and a half hours.

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

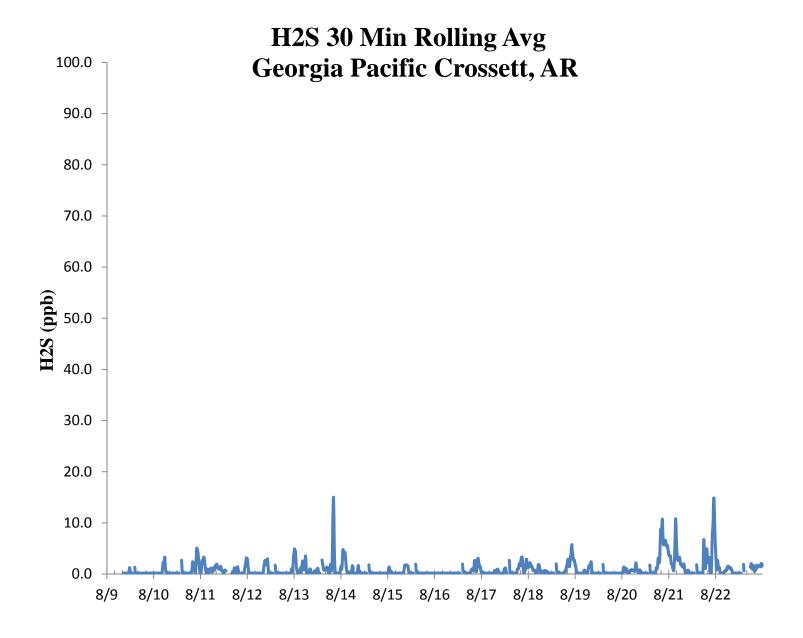
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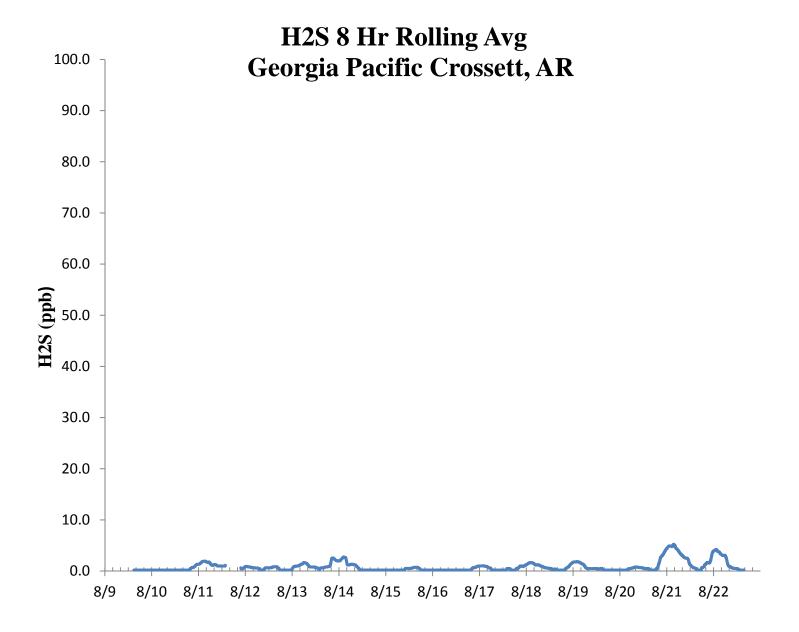
Email: jbowser@trcsolutions.com

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

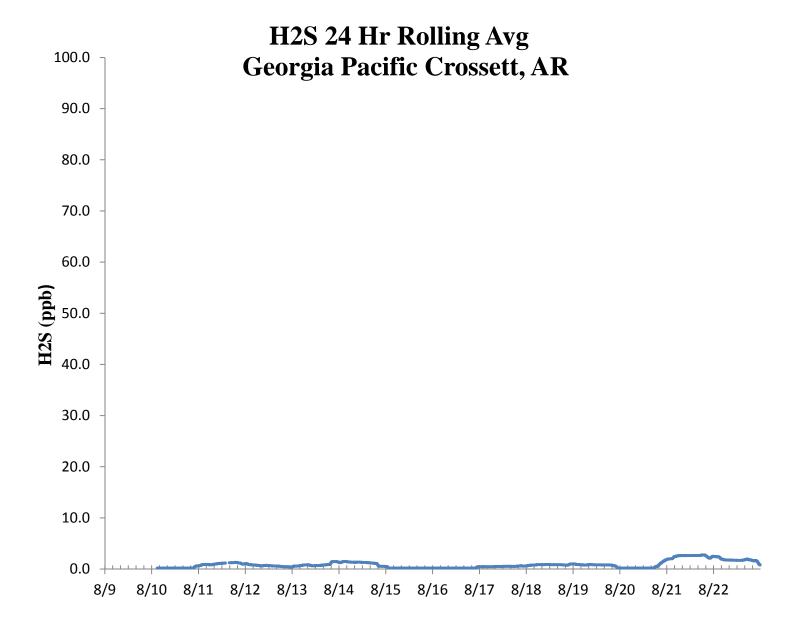














					H_2S	Asse	ssment	t				
GP - Crossett, AR			Compound of Interest: H ₂ S					CV _{ub} (%)		Bias (%)		
Date	Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	25th Percentile	d²	d	d ²					
8/9/2017 13:00	70.4	70.0	0.6	0.000	0.327	0.571	0.327					
8/11/2017 13:00	70.5	70.0	0.7	75th Percentile	0.510	0.714	0.510	n	S _d	S _{d2}	∑ d	"AB" (Eqn 4)
8/12/2017 13:00	69.9	70.0	-0.1	0.714	0.020	0.143	0.020	12	0.352	0.268		0.369
8/13/2017 13:00	70.5	70.0	0.7		0.510	0.714	0.510	n-1	∑d	$\sum d^2$	$\sum \mathbf{d} ^2$	"AS" (Eqn 5)
8/14/2017 13:00	70.2	70.0	0.3		0.082	0.286	0.082	11	4.143	2.796	2.796	0.325
8/15/2017 13:00	70.6	70.0	0.9		0.735	0.857	0.735					
8/16/2017 13:00	70.2	70.0	0.3		0.082	0.286	0.082				Bias (%) (Eqn 3)	Both Signs Positive
8/18/2017 13:00	70.5	70.0	0.7		0.510	0.714	0.510				0.54	TRUE
8/19/2017 13:00	70.1	70.0	0.1		0.020	0.143	0.020		CV (%) (Eqn 2)		Signed Bias (%)	Both Signs Negative
8/20/2017 13:00	70.0	70.0	0.0		0.000	0.000	0.000		0.49		+0.54	FALSE
8/21/2017 13:00	70.0	70.0	0.0		0.000	0.000	0.000					
8/22/2017 13:00	70.0	70.0	0.0		0.000	0.000	0.000		Upper Probabil	ity Limit	Lower Probabilit	y Limit
									1.04		-0.35	
								Percent Differences				
							15.0 -					
							10.0					
							5.0					
							0.0	•		-	, , , , ,	• • • • • • • • • • • • • • • • • • •
							-5.0					
							-10.0					
							-15.0 ¹					



