

October 23, 2014

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

DearMs. Simmons,

Following is a data summary for the first two weeks of operation of the Georgia-Pacific (GP) hydrogen sulfide (H_2S) and meteorological monitoring program at the GP Crossett mill. The initial report provides a brief discussion of the background and measurement results. Subsequent reports will only contain data plots and a QC summary.

Background

The GP Crossett mill is working in cooperation with the State of Arkansas Department of Environmental Quality (ADEQ) and the U.S. Environmental Protection Agency (EPA) to conduct fenceline monitoring for H_2S adjacent to the mill's wastewater treatment plant in an attempt to address community concerns with odors.

TRC is currently operating H_2S and meteorological monitoring stations in the vicinity of the Crossett mill. TRC submitted a Quality Assurance Project Plan (QAPP) to Georgia-Pacific on September 12, 2014 (Revised October 2, 2014). Georgia-Pacific submitted the QAPP to EPA Region VI for review and comment on October 09, 2014. TRC is operating these stations in accordance with that Plan. Monitoring for H_2S at the Crossett mill began October 1, 2014. This report provides a summary of measurement data for the period of October 1, 2014 through October 14, 2014.

Summary of Results

Included in this report are three plots presenting H_2S 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 biweekly 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.

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.

There were no periods of data loss during this two week period, other than those resulting from automated daily 1-point QC and weekly calibration checks. Results for all automated daily 1-point QC checks fall within the acceptable range, indicating the H_2S 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,

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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: Ryan Benefield, ADEQ Director via email:benefield@adeq.state.ar.us Kara Allen, Environmental Engineer, USEPA Region 6 via email <u>Allen.Kara@epa.gov</u>





6312 NW 18th Drive Suite 100 Gainesville, FL 32653

352.378.0332 PHONE 352.378.0354 FAX

www.TRCsolutions.com











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Oct 22, 2014 H₂S Air Monitoring

	H ₂ S Assessment											
GP - Crossett, AR		Pollutant type: H ₂ S					CV _{ub} (%)			Bias (%)		
Date	Meas Val (Y)	Audit Val (X)	d (Egn. 1)	25th Percentile	d ²	d	d ²					
10/1/14 13:00	64.1	70	-8.4	0.750	71.041	8.429	71.041					
10/2/14 13:00	69.5	70	-0.7	75th Percentile	0.510	0.714	0.510	n	Sd	S _{d2}	Σd	"AB" (Eqn 4)
10/3/2014 13:00	70.5	70	0.7	1.857	0.510	0.714	0.510	14	2.715	18.406	27.286	1.949
10/4/2014 13:00	70.5	70	0.7		0.510	0.714	0.510	n-1	Σd	∑d ²	$\Sigma \mathbf{d} ^2$	"AS" (Eqn 5)
10/5/2014 13:00	71.3	70	1.9		3.449	1.857	3.449	13	9.000	101.612	101.612	1.930
10/6/2014 13:00	71.2	70	1.7		2.939	1.714	2.939					
10/7/2014 13:00	71.3	70	1.9		3.449	1.857	3.449				Bias (%) (Eqn 3)	Both Signs Positive
10/8/2014 13:00	70.6	70	0.9		0.735	0.857	0.735				2.86	TRUE
10/9/2014 13:00	71.5	70	2.1		4.592	2.143	4.592		CV (%) (Eqn 2)		Signed Bias (%)	Both Signs Negative
10/10/2014 13:00	71.3	70	1.9		3.449	1.857	3.449		3.69		+2.86	FALSE
10/11/2014 13:00	71.1	70	1.6		2.469	1.571	2.469					
10/12/2014 13:00	71.0	70	1.4		2.041	1.429	2.041		Upper Probabili	ity Limit	Lower Probabilit	y Limit
10/13/2014 13:00	71.3	70	1.9		3.449	1.857	3.449		5.96		-4.68	
10/14/2014 13:00	71.1	70	1.6		2.469	1.571	2.469					
	Percent Differences											
				15.0								
				10.0								
				10.0								
				5.0 -								
				0.0		• •		_		<u>→</u>		
				-5.0								
				10.0								
				10.0								
				15.0								
				1		1						







Meteorological Summary



