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December 16, 2014

Ms. Lori Simmons  
Arkansas Department of Health  
4815 West Markham Street  
Little Rock, Arkansas 72205  
Via email [Lori.Simmons@arkansas.gov](mailto:Lori.Simmons@arkansas.gov)

**Re: Georgia-Pacific, Crossett mill - Biweekly Air Monitoring Report for Hydrogen Sulfide**

Dear Ms. Simmons,

Following is a data summary for the fifth two-week operational period of the Georgia-Pacific (GP) hydrogen sulfide (H<sub>2</sub>S) and meteorological monitoring program at the GP Crossett mill.

Summary of Results

Included in this report are three plots presenting H<sub>2</sub>S 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 ± 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 was one occurrence of data loss during this two week period, in addition to those resulting from automated daily 1-point QC and weekly calibration checks. On December 6<sup>th</sup> through 7<sup>th</sup>, an error with the H<sub>2</sub>S monitor caused the instrument's internal logger to stop recording data. This is the second time such an error has occurred resulting in loss of data. The manufacturer of the H<sub>2</sub>S monitor was contacted and suggested a corrupt file in the instrument's firmware may be the cause. During the most recent site visit (December 16<sup>th</sup>), TRC replaced the disk on module (DOM) that stores the instrument's configuration and reloaded the firmware. Following replacement of the DOM, a complete calibration was performed.

Results for all automated daily 1-point QC checks fall within the acceptable range, indicating the H<sub>2</sub>S monitor was operating in accordance with the QAPP.



Dec 16, 2014

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

Sincerely,



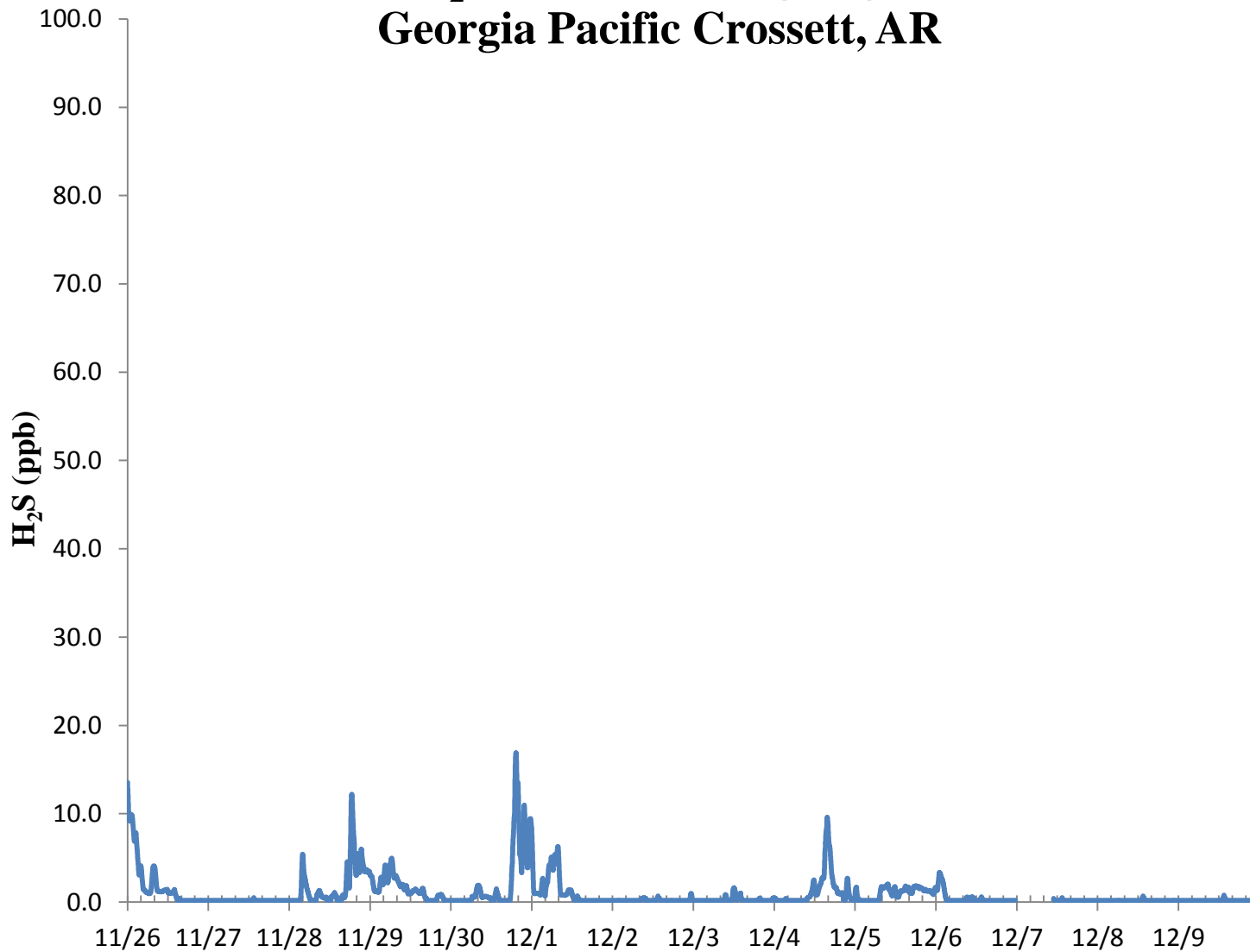
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Jonathan Bowser  
Manager, Air Quality and Meteorological Monitoring

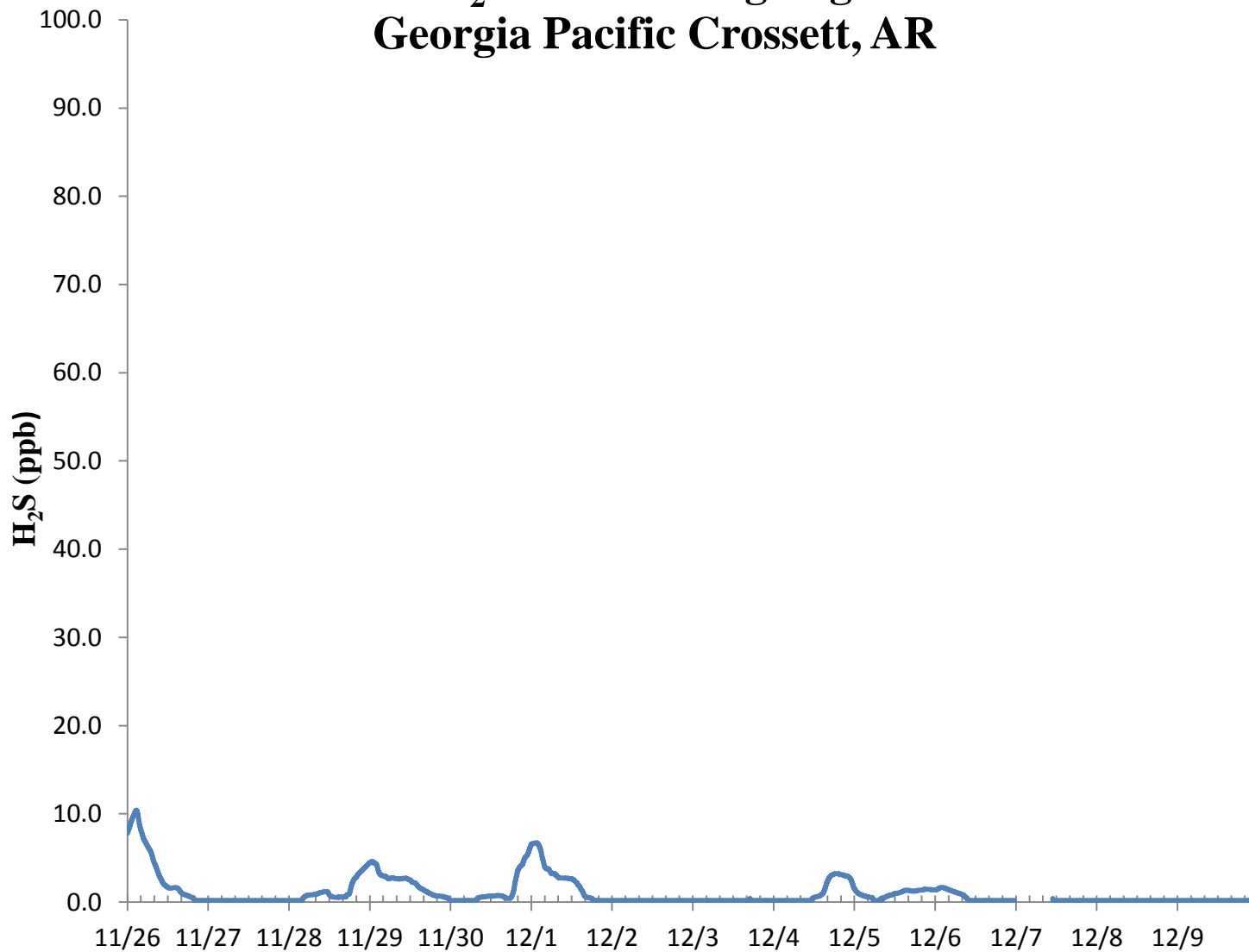
Air Measurements – Gainesville Office  
6312 NW 18th Drive, Suite 100  
Gainesville, Florida 32653  
(352) 260-1162  
Email: [jbowser@trcsolutions.com](mailto:jbowser@trcsolutions.com)

CC: Ryan Benefield, ADEQ Director via email: [benefield@adeq.state.ar.us](mailto:benefield@adeq.state.ar.us)  
Kara Allen, Environmental Engineer, USEPA Region 6 via email [Allen.Kara@epa.gov](mailto:Allen.Kara@epa.gov)

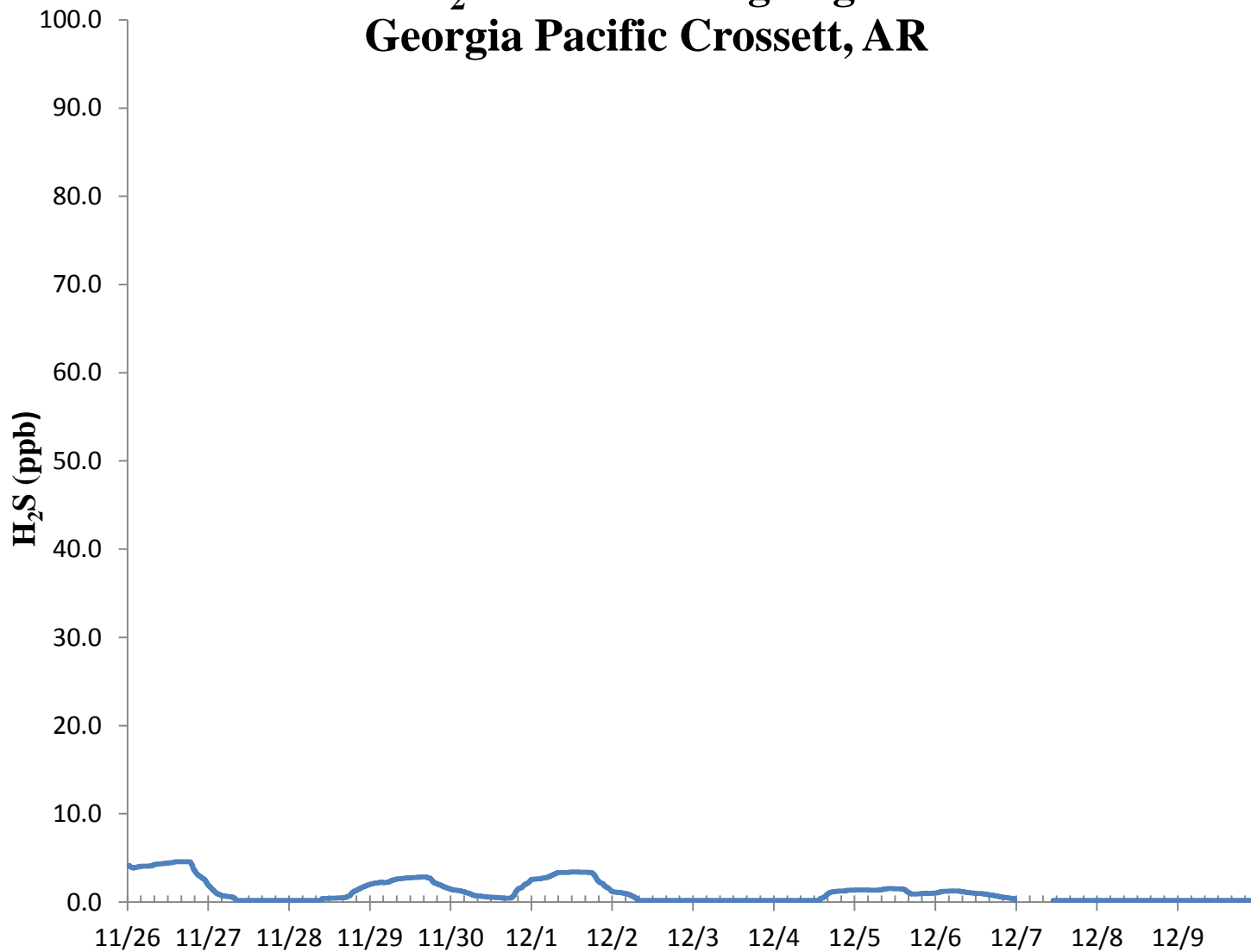
### H<sub>2</sub>S 30 Min Rolling Avg Georgia Pacific Crossett, AR



### H<sub>2</sub>S 8 Hr Rolling Avg Georgia Pacific Crossett, AR

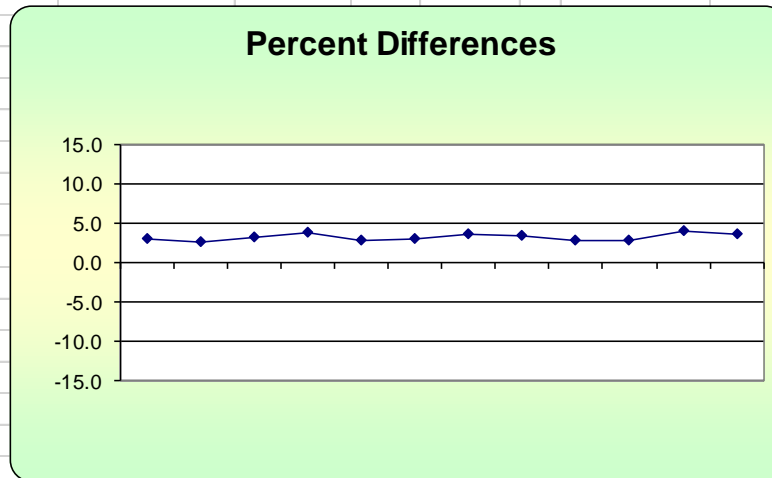


## H<sub>2</sub>S 24 Hr Rolling Avg Georgia Pacific Crossett, AR



### H<sub>2</sub>S Assessment

GP - Crossett, AR			Pollutant type: H <sub>2</sub> S					CV <sub>ub</sub> (%)	Bias (%)										
Date	Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	25th Percentile	d <sup>2</sup>	d	d  <sup>2</sup>												
11/26/2014 13:00	72.1	70.0	3.0	2.714	9.000	3.000	9.000												
11/27/2014 13:00	71.8	70.0	2.6	75th Percentile	6.612	2.571	6.612	<table border="1"> <tr> <td>n</td> <td>S<sub>d</sub></td> <td>S<sub>d2</sub></td> <td>Σ d </td> <td>"AB" (Eqn 4)</td> </tr> <tr> <td>12</td> <td>0.480</td> <td>3.144</td> <td>38.143</td> <td>3.179</td> </tr> </table>	n	S <sub>d</sub>	S <sub>d2</sub>	Σ d	"AB" (Eqn 4)	12	0.480	3.144	38.143	3.179	
n	S <sub>d</sub>	S <sub>d2</sub>	Σ d	"AB" (Eqn 4)															
12	0.480	3.144	38.143	3.179															
11/28/2014 13:00	72.2	70.0	3.1	3.571	9.878	3.143	9.878	<table border="1"> <tr> <td>n-1</td> <td>Σd</td> <td>Σd<sup>2</sup></td> <td>Σ d <sup>2</sup></td> <td>"AS" (Eqn 5)</td> </tr> <tr> <td>11</td> <td>38.143</td> <td>123.776</td> <td>123.776</td> <td>0.480</td> </tr> </table>	n-1	Σd	Σd <sup>2</sup>	Σ d  <sup>2</sup>	"AS" (Eqn 5)	11	38.143	123.776	123.776	0.480	
n-1	Σd	Σd <sup>2</sup>	Σ d  <sup>2</sup>	"AS" (Eqn 5)															
11	38.143	123.776	123.776	0.480															
11/29/2014 13:00	72.7	70.0	3.9		14.878	3.857	14.878												
12/1/2014 13:00	71.9	70.0	2.7		7.367	2.714	7.367												
12/2/2014 13:00	72.1	70.0	3.0		9.000	3.000	9.000												
12/4/2014 13:00	72.5	70.0	3.6		12.755	3.571	12.755		<table border="1"> <tr> <td>Bias (%) (Eqn 3)</td> <td>Both Signs Positive</td> </tr> <tr> <td>3.43</td> <td>TRUE</td> </tr> </table>	Bias (%) (Eqn 3)	Both Signs Positive	3.43	TRUE						
Bias (%) (Eqn 3)	Both Signs Positive																		
3.43	TRUE																		
12/5/2014 13:00	72.3	70.0	3.3		10.796	3.286	10.796												
12/6/2014 13:00	71.9	70.0	2.7		7.367	2.714	7.367	<table border="1"> <tr> <td>CV (%) (Eqn 2)</td> <td></td> </tr> <tr> <td>0.67</td> <td></td> </tr> </table>	CV (%) (Eqn 2)		0.67		<table border="1"> <tr> <td>Signed Bias (%)</td> <td>Both Signs Negative</td> </tr> <tr> <td>+3.43</td> <td>FALSE</td> </tr> </table>	Signed Bias (%)	Both Signs Negative	+3.43	FALSE		
CV (%) (Eqn 2)																			
0.67																			
Signed Bias (%)	Both Signs Negative																		
+3.43	FALSE																		
12/7/2014 13:00	71.9	70.0	2.7		7.367	2.714	7.367												
12/8/2014 13:00	72.8	70.0	4.0		16.000	4.000	16.000												
12/9/2014 13:00	72.5	70.0	3.6		12.755	3.571	12.755	<table border="1"> <tr> <td>Upper Probability Limit</td> <td>Lower Probability Limit</td> </tr> <tr> <td>4.12</td> <td>2.24</td> </tr> </table>	Upper Probability Limit	Lower Probability Limit	4.12	2.24							
Upper Probability Limit	Lower Probability Limit																		
4.12	2.24																		



Meteorological Summary

