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November 25, 2015

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,

Following is the biweekly data summary for the Georgia-Pacific (GP) hydrogen sulfide (H_2S) and meteorological monitoring program, at the GP Crossett mill, covering the calendar period of November 4^{th} through November 17^{th} .

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 was a single occurence of data loss during this two week period, as well as those resulting from automated daily 1-point QC and weekly calibration checks. On November 6th, approximately seven and a half hours of H₂S data was lost due to a LAN communication error between the analyzer and logger PC. TRC is working Teledyne-API to find a resolution to this issue in order to prevent future data loss. Results from the automated calibration check on this day were not recorded. Results for all available automated daily 1-point QC checks fall within the acceptable range, indicating the H₂S 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,



Jonathan Bowser

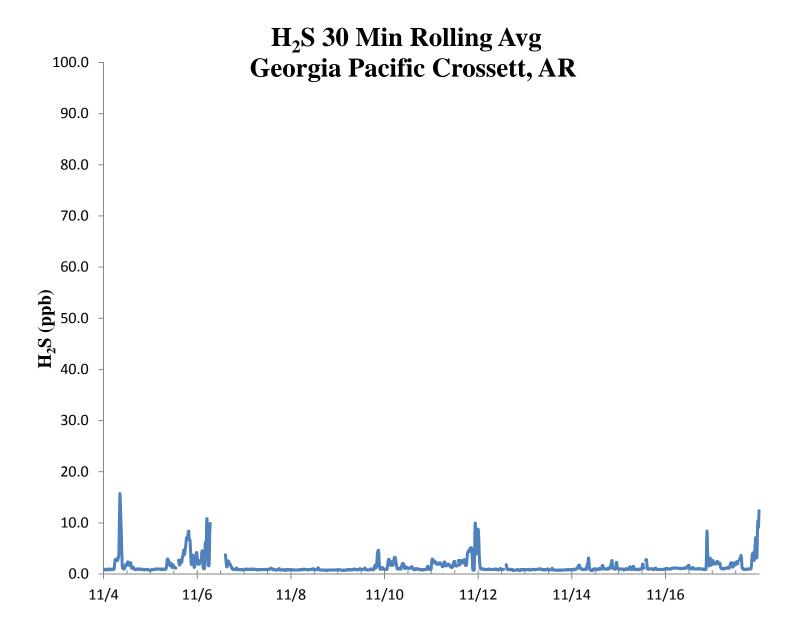
Manager, Air Quality and Meteorological Monitoring

Air Measurements – Gainesville Office 6312 NW 18th Drive, Suite 100 Gainesville, Florida 32653 (352) 260-1162

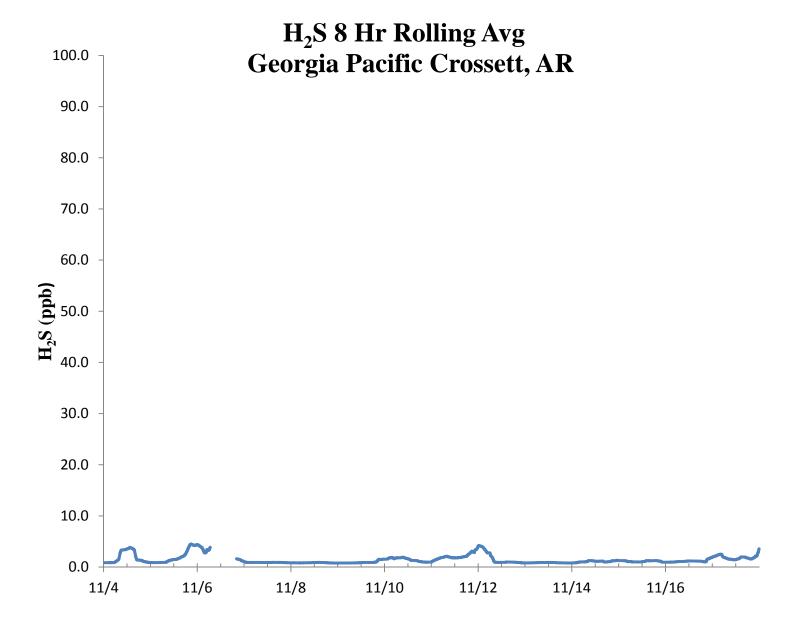
Email: jbowser@trcsolutions.com

CC: Becky Keough, ADEQ Director via email: keogh@adeq.state.ar.us Kara Allen, Environmental Engineer, USEPA Region 6 via email <u>Allen.Kara@epa.gov</u>

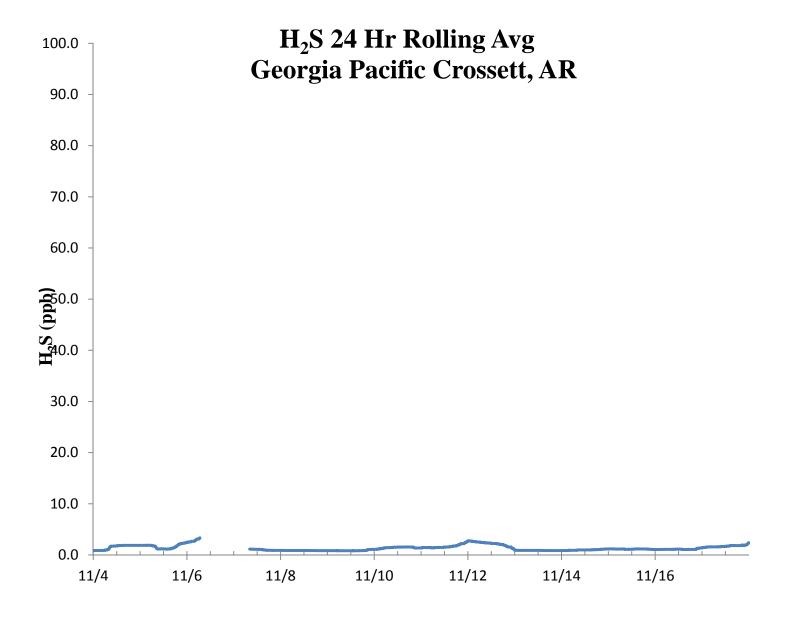














| | | | | H_2S | Asse | ssment | t | | | | |
|-------------------|---|--|--|---|---|---|--|----------------------|--|-----------------------|---|
| GP - Crossett, AR | | Constituent type: H ₂ S | | | | | | CV _{ub} (%) | | Bias (%) | |
| Meas Val (Y) | Audit Val (X) | | | d² | d | d ² | | | | | |
| 67.8 | 70.0 | -3.1 | -3.536 | 9.878 | 3.143 | 9.878 | | | | | |
| 68.0 | 70.0 | -2.9 | 75th Percentile | 8.163 | 2.857 | 8.163 | n | S _d | S _{d2} | Σ d | "AB" (Eqn 4) |
| 67.6 | 70.0 | -3.4 | -2.964 | 11.755 | 3.429 | 11.755 | 12 | 1.719 | | | 3.25 |
| 67.8 | 70.0 | -3.1 | | 9.878 | 3.143 | 9.878 | n-1 | ∑d | $\sum d^2$ | $\sum \mathbf{d} ^2$ | "AS" (Eqn 5) |
| 67.9 | 70.0 | -3.0 | | 9.000 | 3.000 | 9.000 | 11 | -34.143 | 129.653 | 129.653 | 0.51 |
| 67.9 | 70.0 | -3.0 | | 9.000 | 3.000 | 9.000 | | | | | |
| 68.0 | 70.0 | -2.9 | | 8.163 | 2.857 | 8.163 | | | | Bias (%) (Eqn 3) | Both Signs Positive |
| 71.7 | 70.0 | 2.4 | | 5.898 | 2.429 | 5.898 | | | | 3.52 | FALSE |
| 67.2 | 70.0 | -4.0 | | 16.000 | 4.000 | 16.000 | | CV (%) (Eqn 2) | | Signed Bias (%) | Both Signs Negativ |
| 67.1 | 70.0 | -4.1 | | 17.163 | 4.143 | 17.163 | | 2.41 | | -3.52 | TRUE |
| 67.3 | 70.0 | -3.9 | | 14.878 | 3.857 | 14.878 | | | | | |
| 67.8 | 70.0 | -3.1 | | 9.878 | 3.143 | 9.878 | | Upper Probabili | ity Limit | Lower Probabilit | y Limit |
| | | | | | | | | 0.52 | | -6.21 | |
| | | | | | | 10.0 | | Percer | nt Diffe | rences | |
| | Meas Val (Y) 67.8 68.0 67.6 67.8 67.9 67.9 68.0 71.7 67.2 67.1 67.3 | Meas Val (Y) Audit Val (X) 67.8 70.0 68.0 70.0 67.6 70.0 67.8 70.0 67.9 70.0 67.9 70.0 68.0 70.0 71.7 70.0 67.2 70.0 67.1 70.0 67.3 70.0 | Meas Val (Y) Audit Val (X) d (Eqn. 1) 67.8 70.0 -3.1 68.0 70.0 -2.9 67.6 70.0 -3.4 67.8 70.0 -3.0 67.9 70.0 -3.0 68.0 70.0 -2.9 71.7 70.0 2.4 67.2 70.0 -4.0 67.1 70.0 -4.1 67.3 70.0 -3.9 | Meas Val (Y) Audit Val (X) d (Eqn. 1) 25th Percentile 67.8 70.0 -3.1 -3.536 68.0 70.0 -2.9 75th Percentile 67.6 70.0 -3.4 -2.964 67.8 70.0 -3.0 -3.0 67.9 70.0 -3.0 -3.0 68.0 70.0 -2.9 -7.2 71.7 70.0 2.4 -4.0 67.1 70.0 -4.1 67.3 70.0 -3.9 | P- Crossett, AR Constituent type: H ₂ S Meas Val (Y) Audit Val (X) d (Eqn. 1) 25th Percentile d ² 67.8 70.0 -3.1 -3.536 9.878 68.0 70.0 -2.9 75th Percentile 8.163 67.6 70.0 -3.4 -2.964 11.755 67.8 70.0 -3.1 9.878 67.9 70.0 -3.0 9.000 67.9 70.0 -3.0 9.000 68.0 70.0 -2.9 8.163 71.7 70.0 2.4 5.898 67.2 70.0 -4.0 16.000 67.1 70.0 -4.1 17.163 67.3 70.0 -3.9 14.878 | P- Crossett, AR Constituent type: H ₂ S d | Neas Val (Y) Audit Val (X) d (Eqn. 1) 25th Percentile d d d d d | Meas Val (Y) | P - Crossett, AR Constituent type: H ₂ S CV _{ub} (%) | P - Crossett, AR | Neas Val (Y) Audit Val (X) d (Eqn. 1) 25th Percentile d² d d ² |



