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August 26, 2016

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<sub>2</sub>S) and meteorological monitoring program, at the GP Crossett mill, covering the calendar period of July 13<sup>th</sup> through July 26<sup>th</sup>.

## 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  $\pm 10\%$ , respectively. Precision and bias are calculated in accordance with 40 CFR Part 58 Appendix A, Section 4.1.

There were no occurrences 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 available 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.

Fourteen-day time series plots for all recorded meteorological (met) parameters are presented in the final table. All met parameters have 99% data capture for this report period. There was a power outage at the met site on July 26<sup>th</sup> which is responsible for the brief period of missing met data.

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

Sincerely,



Jonathan Bowser

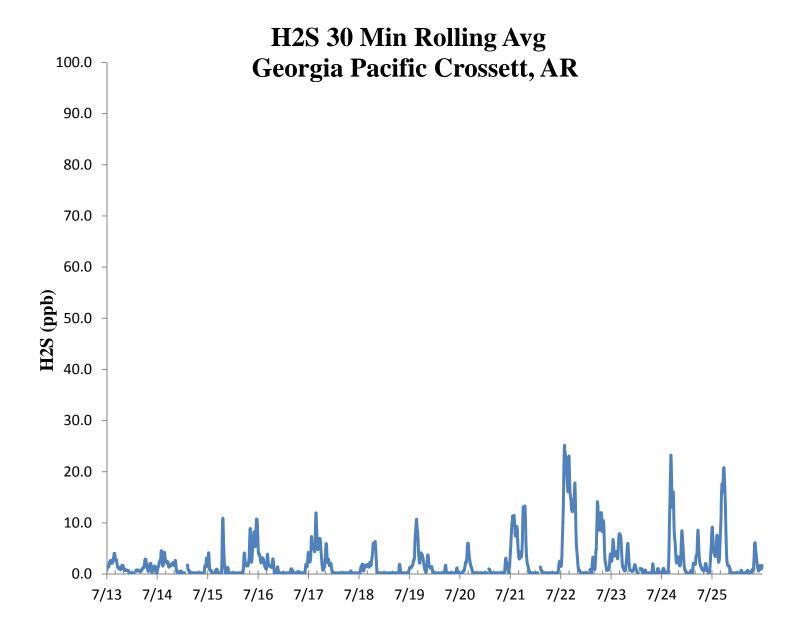
Manager, Air Quality and Meteorological Monitoring

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

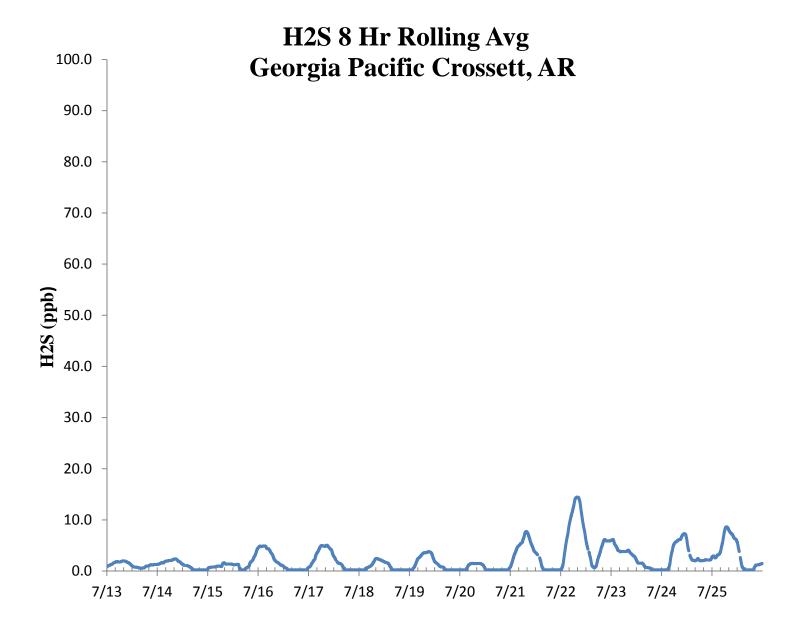
Email: jbowser@trcsolutions.com

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

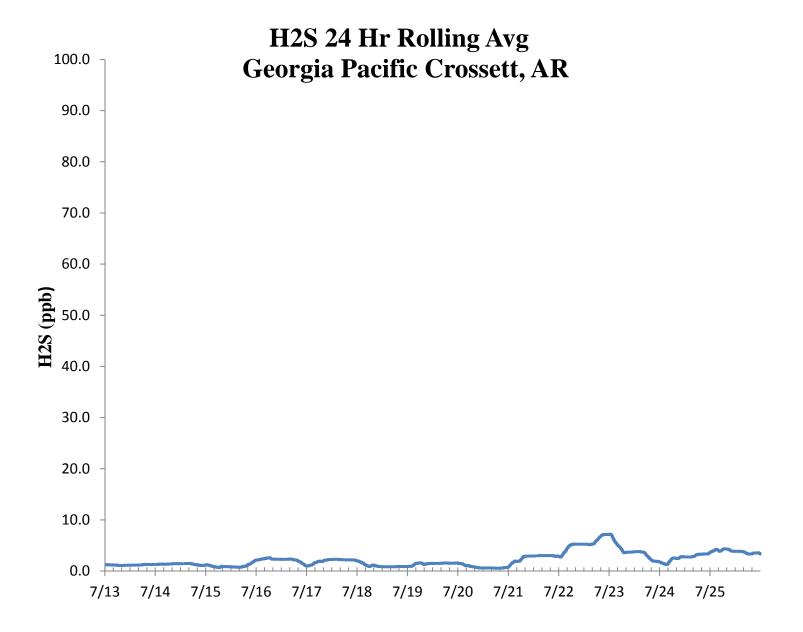














|                   |   |  |   | $H_2S$  | Asses  | ssment  | ;   |   |   |                       |                     |
|-------------------|---|--|---|---|--|---|---|---|---|-----------------------|---------------------|
| GP - Crossett, AR |   |  | Constituent type: H <sub>2</sub> S  |   |  | CV <sub>ub</sub> (%)                                    |   | CV <sub>ub</sub> (%)  |   | Bias (%)              |                     |
| Meas Val (Y)      | Audit Val (X)   | d (Eqn. 1)   | 25th Percentile   | d <sup>2</sup>  | d  | d  <sup>2</sup>   |   |   |   |                       |                     |
| 71.2              | 70.0  | 1.7  | 2.286   | 2.939   | 1.714  | 2.939   |   |   |   |                       |                     |
| 71.9              | 70.0  | 2.7  | 75th Percentile   | 7.367   | 2.714  | 7.367   | n   | S <sub>d</sub>  | S <sub>d2</sub>   | ∑ d                   | "AB" (Eqn 4)        |
| 71.2              | 70.0  | 1.7  | 3.357   | 2.939   | 1.714  | 2.939   | 14  | 0.767   | 4.108   | 37.857                | 2.704               |
| 71.0              | 70.0  | 1.4  |   | 2.041   | 1.429  | 2.041   | n-1   | ∑d  | $\sum d^2$  | $\sum  \mathbf{d} ^2$ | "AS" (Eqn 5)        |
| 71.6              | 70.0  | 2.3  |   | 5.224   | 2.286  | 5.224   | 13  | 37.857  | 110.020   | 110.020               | 0.767               |
| 71.6              | 70.0  | 2.3  |   | 5.224   | 2.286  | 5.224   |   |   |   |                       |                     |
| 71.7              | 70.0  | 2.4  |   | 5.898   | 2.429  | 5.898   |   |   |   | Bias (%) (Eqn 3)      | Both Signs Positive |
| 72.0              | 70.0  | 2.9  |   | 8.163   | 2.857  | 8.163   |   |   |   | 3.07                  | TRUE                |
| 72.2              | 70.0  | 3.1  |   | 9.878   | 3.143  | 9.878   |   | CV (%) (Eqn 2)  |   | Signed Bias (%)       | Both Signs Negative |
| 72.4              | 70.0  | 3.4  |   | 11.755  | 3.429  | 11.755  |   | 1.04  |   | +3.07                 | FALSE               |
| 72.6              | 70.0  | 3.7  |   | 13.796  | 3.714  | 13.796  |   |   |   |                       |                     |
| 72.7              | 70.0  | 3.9  |   | 14.878  | 3.857  | 14.878  |   | Upper Probabil  | ity Limit   | Lower Probabilit      | y Limit             |
| 72.4              | 70.0  | 3.4  |   | 11.755  | 3.429  | 11.755  |   | 4.21  |   | 1.2                   |                     |
| 72.0              | 70.0  | 2.9  |   | 8.163   | 2.857  | 8.163   |   |   |   |                       |                     |
|                   |   |  |   |   |  | 15.0 T<br>10.0 T<br>5.0 T<br>0.0 T<br>-5.0 T<br>-10.0 T | • 1   | Perce   | ent Diff  | erences               |                     |
|                   | Meas Val (Y) 71.2 71.9 71.2 71.0 71.6 71.6 71.7 72.0 72.2 72.4 72.6 72.7 72.4 | Meas Val (Y)         Audit Val (X)           71.2         70.0           71.9         70.0           71.0         70.0           71.6         70.0           71.7         70.0           72.0         70.0           72.2         70.0           72.4         70.0           72.7         70.0           72.7         70.0           72.4         70.0           72.7         70.0           72.4         70.0 | Meas Val (Y)         Audit Val (X)         d (Eqn. 1)           71.2         70.0         1.7           71.9         70.0         2.7           71.2         70.0         1.7           71.0         70.0         1.4           71.6         70.0         2.3           71.7         70.0         2.4           72.0         70.0         2.9           72.2         70.0         3.1           72.4         70.0         3.7           72.7         70.0         3.9           72.4         70.0         3.4           72.7         70.0         3.4           72.4         70.0         3.9           72.4         70.0         3.4 | Meas Val (Y)         Audit Val (X)         d (Eqn. 1)         25th Percentile           71.2         70.0         1.7         75th Percentile           71.2         70.0         1.7         3.357           71.0         70.0         1.4         3.357           71.6         70.0         2.3         3.357           71.7         70.0         2.3         3.357           71.7         70.0         2.4         3.2           72.0         70.0         2.9         3.1           72.4         70.0         3.4         3.4           72.6         70.0         3.9         3.9           72.7         70.0         3.4           72.4         70.0         3.4 | P-Crossett, AR   Constituent type: H <sub>2</sub> S   d <sup>2</sup> | Constituent type: H <sub>2</sub> S     d                | Neas Val (Y)   Audit Val (X)   d (Eqn. 1)   25th Percentile   d   d     d     d     2939   1.714   2.939   71.9   70.0   1.7   2.286   2.939   1.714   2.939   71.0   70.0   1.7   3.357   2.939   1.714   2.939   71.0   70.0   1.4   2.041   1.429   2.041   71.6   70.0   2.3   5.224   2.286   5.224   71.6   70.0   2.3   5.224   2.286   5.224   71.7   70.0   2.4   5.898   2.429   5.898   72.0   70.0   2.9   8.163   2.857   8.163   72.2   70.0   3.1   9.878   3.143   9.878   72.4   70.0   3.4   11.755   3.429   11.755   72.6   70.0   3.9   14.878   3.857   14.878   72.4   70.0   3.4   11.755   3.429   11.755   72.0   70.0   2.9   8.163   2.857   8.163   72.2   70.0   3.1   72.4   70.0   3.4   11.755   3.429   11.755   72.0   70.0   2.9   8.163   2.857   8.163   72.4   70.0   3.4   70.0 | Meas Val (Y)   Audit Val (X)   d (Eqn. 1)   25th Percentile   d²    d     d ² | Neas Val (Y)   Audit Val (X)   d (Eqn. 1)   25th Percentile   d²    d     d ² | Constituent type: H2S | Crossett, AR        |



