



Georgia-Pacific Consumer Operations LLC  
Consumer Products

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March 1, 2021

Bryan Leamons, P.E.  
Senior Operations Manager  
Office of Water Quality  
Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, AR 72118-5317

RE: NPDES Permit No. **AR0001210, AFIN 02-00013**  
Georgia-Pacific Consumer Operations LLC: Crossett Paper Operations  
pH Adjustment Trial Interim Status Report

Dear Mr. Leamons:

Georgia-Pacific Consumer Operations LLC (GP) is providing a pH Adjustment Trial (Trial) interim status report consistent with the requirements in ADEQ's trial approval letter dated October 25, 2019. As anticipated, the adjustment of the effluent pH has been necessary due to significant process changes at the paper mill which affected the wastewater characteristics.

GP continued to comply with the terms and conditions of NPDES Permit No. AR0001210 throughout the Trial.<sup>1</sup> In an email dated November 5, 2019, GP notified the OWQ within 24 hours of the expected start of the Trial that GP elected to inject carbon dioxide (CO<sub>2</sub>) upstream of Outfall 001 and SMS 002 when needed. GP also provided the safety data sheet (SDS) for CO<sub>2</sub> to ADEQ prior to initiating the Trial. The length of the Trial has not exceeded 12 months as indicated in our letter dated December 2, 2020. A trial extension through May 31, 2021 was approved in ADEQ's letter dated January 12, 2021.

Although the Trial has not ended, GP is submitting this interim status report ahead of the upcoming NPDES Construction Permit Only application for a permanent CO<sub>2</sub> supply system upstream of Outfall 001. This submittal includes CO<sub>2</sub> usage information, the results of the Trial and next steps. As required by ADEQ's October 25, 2019 letter, the monitoring frequency for pH increased to a minimum of five times per week after the Trial commenced. The Outfall 001 and SMS 002 pH data is available in Appendix 1.

Footnote 1: GP reported a violation of Part I, Section A of our NPDES permit due to a TSS daily maximum exceedance at SMS 002 on 8/31/2020 due to Hurricane Laura related weather conditions unrelated to the pH Adjustment Trial. This Trial has allowed GP to continue to comply with permit provisions.

TABLE 1: CO<sub>2</sub> Usage Information

| Month        | No. of CO <sub>2</sub> Injection Days | Average Time of Day When CO <sub>2</sub> Operated |
|--------------|---------------------------------------|---|
| May 2020     | 7                                     | 1:40 PM   |
| June 2020    | 14                                    | 12:16 PM  |
| January 2021 | 10                                    | 12:37 PM  |

TABLE 2: pH Adjustment Trial Results

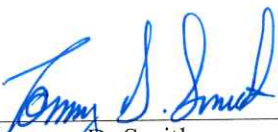
|  | Data |
|--|------|
| Percent CO <sub>2</sub> System In Control (i.e. pH < 9)            | 96%  |
| Percent of Time CO <sub>2</sub> Injection Utilized in 2020         | 6%   |
| Percent of Time CO <sub>2</sub> Injection Utilized in January 2021 | 32%  |

Based on a Trial data review, the CO<sub>2</sub> system controlled the effluent pH 96% of the time when the system was operating. GP plans to make the pH adjustment permanent by submitting a construction application for installing a CO<sub>2</sub> injection system at Outfall 001 and making the CO<sub>2</sub> supply system at SMS 002 permanent.

If you have any questions regarding this response, please contact Rachel Johnson, Environmental Engineer, at (870) 415-6352 or by email at [Rachel.Johnson2@gapac.com](mailto:Rachel.Johnson2@gapac.com).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

  
\_\_\_\_\_  
Tommy D. Smith  
Vice President of Manufacturing

  
\_\_\_\_\_  
DATE

Appendix 1 CO2 Trial pH Data

| Outfall<br>001 | SMS 002 | Outfall<br>001 | SMS 002 | Outfall<br>001 | SMS<br>002 | Outfall<br>001 | SMS<br>002 | Outfall<br>001 | SMS<br>002 |
|----------------|---------|----------------|---------|----------------|------------|----------------|------------|----------------|------------|
| Date           | pH      | Date           | pH      | Date           | pH         | Date           | pH         | Date           | pH         |
| 5/1/2020       | Flooded | 6/1/2020       | 7.1     | 7/1/2020       | 6.8        | 8/1/2020       |            |                |            |
| 5/2/2020       |         | 6/2/2020       | 7.2     | 7/2/2020       | 6.8        | 8/2/2020       | 7.7        | 7.7            |            |
| 5/3/2020       | 7.0     | 6/3/2020       | 7.2     | 7/3/2020       |            | 8/3/2020       | 7.3        | 7.8            |            |
| 5/4/2020       | 6.9     | 6/4/2020       | 7.2     | 7/4/2020       |            | 8/4/2020       | 7.3        | 7.8            |            |
| 5/5/2020       | 6.9     | 6/5/2020       |         | 7/5/2020       | 6.9        | 8/5/2020       | 7.3        | 7.9            |            |
| 5/6/2020       | 6.9     | 6/6/2020       |         | 7/6/2020       | 6.9        | 8/6/2020       | 7.4        | 7.3            |            |
| 5/7/2020       | 6.9     | 6/7/2020       | 7.9     | 7/7/2020       | 6.9        | 8/7/2020       |            |                |            |
| 5/8/2020       |         | 6/8/2020       | 7.7     | 7/8/2020       | 7.0        | 8/8/2020       |            |                |            |
| 5/9/2020       |         | 6/9/2020       | 7.6     | 7/9/2020       | 6.9        | 8/9/2020       | 7.7        | 7.7            |            |
| 5/10/2020      | 6.7     | 6/10/2020      | 7.6     | 7/10/2020      |            | 8/10/2020      | 7.7        | 7.8            |            |
| 5/11/2020      | 6.8     | 6/11/2020      | 7.5     | 7/11/2020      |            | 8/11/2020      | 7.7        | 7.7            |            |
| 5/12/2020      | 6.9     | 6/12/2020      |         | 7/12/2020      | 6.9        | 8/12/2020      | 8.0        | 7.5            |            |
| 5/13/2020      | 7.0     | 6/13/2020      |         | 7/13/2020      | 6.8        | 8/13/2020      | 7.7        | 7.4            |            |
| 5/14/2020      | 7.0     | 6/14/2020      | 7.3     | 7/14/2020      | 6.9        | 8/14/2020      |            |                |            |
| 5/15/2020      |         | 6/15/2020      | 7.2     | 7/15/2020      | 7.2        | 8/15/2020      |            |                |            |
| 5/16/2020      |         | 6/16/2020      | 7.0     | 7/16/2020      | 7.4        | 8/16/2020      | 7.5        | 7.9            |            |
| 5/17/2020      | 7.0     | 6/17/2020      | 7.0     | 7/17/2020      |            | 8/17/2020      | 7.6        | 7.2            |            |
| 5/18/2020      | 6.9     | 6/18/2020      | 8.2     | 7/18/2020      |            | 8/18/2020      | 7.6        | 7.9            |            |
| 5/19/2020      | 6.9     | 6/19/2020      |         | 7/19/2020      | 7.4        | 8/19/2020      | 7.5        | 7.5            |            |
| 5/20/2020      | 7.2     | 6/20/2020      |         | 7/20/2020      | 7.5        | 8/20/2020      | 7.5        | 7.5            |            |
| 5/21/2020      | 7.4     | 6/21/2020      | 7.5     | 7/21/2020      | 7.5        | 8/21/2020      |            |                |            |
| 5/22/2020      |         | 6/22/2020      | 7.6     | 7/22/2020      | 7.4        | 8/22/2020      |            |                |            |
| 5/23/2020      |         | 6/23/2020      | 7.6     | 7/23/2020      | 7.6        | 8/23/2020      | 7.7        | 7.3            |            |
| 5/24/2020      | 7.2     | 6/24/2020      | 7.6     | 7/24/2020      |            | 8/24/2020      | 7.7        | 7.2            |            |
| 5/25/2020      | 7.4     | 6/25/2020      | 7.1     | 7/25/2020      |            | 8/25/2020      | 7.7        | 7.7            |            |
| 5/26/2020      | 7.6     | 6/26/2020      |         | 7/26/2020      | 7.4        | 8/26/2020      | 7.7        | 7.5            |            |
| 5/27/2020      | 7.7     | 6/27/2020      |         | 7/27/2020      | 7.5        | 8/27/2020      | 7.5        | 7.7            |            |
| 5/28/2020      | 7.5     | 6/28/2020      | 6.8     | 7/28/2020      | 7.6        | 8/28/2020      |            |                |            |
| 5/29/2020      |         | 6/29/2020      | 7.1     | 7/29/2020      | 7.4        | 8/29/2020      |            |                |            |
| 5/30/2020      |         | 6/30/2020      | 6.7     | 7/30/2020      | 7.4        | 8/30/2020      | 7.6        | 6.7            |            |
| 5/31/2020      | 6.6     |                |         | 7/31/2020      |            | 8/31/2020      | 7.7        | 6.7            |            |



Appendix 1 CO2 Trial pH Data

| Outfall 001 |     |            | Outfall 001 |     |            | Outfall 001 |     |            | Outfall 001 |     |            |
|-------------|-----|------------|-------------|-----|------------|-------------|-----|------------|-------------|-----|------------|
| Date        | pH  | SMS 002 pH | Date        | pH  | SMS 002 pH | Date        | pH  | SMS 002 pH | Date        | pH  | SMS 002 pH |
| 9/1/2020    | 7.6 | 6.8        | 10/1/2020   | 7.4 |            | 11/1/2020   | 7.6 | 7.6        | 12/1/2020   | 7.4 | 7.5        |
| 9/2/2020    | 7.5 | 6.7        | 10/2/2020   |     |            | 11/2/2020   | 8.7 | 8.0        | 12/2/2020   | 7.4 | 7.4        |
| 9/3/2020    | 7.7 |            | 10/3/2020   |     |            | 11/3/2020   | 7.9 | 8.3        | 12/3/2020   | 7.3 | 7.3        |
| 9/4/2020    |     |            | 10/4/2020   | 7.4 |            | 11/4/2020   | 7.6 | 7.8        | 12/4/2020   |     |            |
| 9/5/2020    |     |            | 10/5/2020   | 7.4 |            | 11/5/2020   | 7.6 | 7.8        | 12/5/2020   |     |            |
| 9/6/2020    | 7.6 |            | 10/6/2020   | 7.1 |            | 11/6/2020   |     |            | 12/6/2020   | 7.4 | 7.3        |
| 9/7/2020    | 7.5 |            | 10/7/2020   | 7.3 |            | 11/7/2020   |     |            | 12/7/2020   | 7.4 | 7.3        |
| 9/8/2020    | 7.5 |            | 10/8/2020   | 7.4 |            | 11/8/2020   | 7.7 | 7.8        | 12/8/2020   | 7.4 | 7.3        |
| 9/9/2020    | 7.5 |            | 10/9/2020   |     |            | 11/9/2020   | 7.5 | 7.7        | 12/9/2020   | 7.4 | 7.4        |
| 9/10/2020   | 7.4 |            | 10/10/2020  |     |            | 11/10/2020  | 7.3 | 7.1        | 12/10/2020  | 7.3 | 7.3        |
| 9/11/2020   |     |            | 10/11/2020  | 7.2 |            | 11/11/2020  | 7.2 | 7.2        | 12/11/2020  |     |            |
| 9/12/2020   |     |            | 10/12/2020  | 7.1 |            | 11/12/2020  | 7.2 | 7.2        | 12/12/2020  |     |            |
| 9/13/2020   | 7.4 |            | 10/13/2020  | 7.0 |            | 11/13/2020  |     |            | 12/13/2020  | 8.2 | 7.2        |
| 9/14/2020   | 7.5 |            | 10/14/2020  | 7.0 |            | 11/14/2020  |     |            | 12/14/2020  | 7.4 | 6.9        |
| 9/15/2020   | 7.5 |            | 10/15/2020  | 7.1 |            | 11/15/2020  | 7.3 | 7.5        | 12/15/2020  | 7.4 | 7.0        |
| 9/16/2020   | 7.5 |            | 10/16/2020  |     |            | 11/16/2020  | 7.3 | 7.2        | 12/16/2020  | 7.5 | 7.1        |
| 9/17/2020   | 7.5 |            | 10/17/2020  |     |            | 11/17/2020  | 7.3 | 7.6        | 12/17/2020  | 7.2 | 7.0        |
| 9/18/2020   |     |            | 10/18/2020  | 7.1 |            | 11/18/2020  | 7.3 | 7.5        | 12/18/2020  |     |            |
| 9/19/2020   |     |            | 10/19/2020  | 7.1 |            | 11/19/2020  | 7.2 | 7.6        | 12/19/2020  |     |            |
| 9/20/2020   | 7.5 |            | 10/20/2020  | 7.2 |            | 11/20/2020  |     |            | 12/20/2020  | 7.1 | 6.9        |
| 9/21/2020   | 7.5 |            | 10/21/2020  | 7.1 |            | 11/21/2020  |     |            | 12/21/2020  | 7.1 | 6.5        |
| 9/22/2020   | 7.5 |            | 10/22/2020  | 7.1 |            | 11/22/2020  | 6.7 | 7.6        | 12/22/2020  | 7.1 | 6.9        |
| 9/23/2020   | 7.5 |            | 10/23/2020  |     |            | 11/23/2020  | 7.3 | 7.1        | 12/23/2020  | 7.1 |            |
| 9/24/2020   | 7.5 |            | 10/24/2020  |     |            | 11/24/2020  | 7.3 | 7.6        | 12/24/2020  | 7.1 |            |
| 9/25/2020   |     |            | 10/25/2020  | 7.1 |            | 11/25/2020  | 7.3 | 7.7        | 12/25/2020  |     |            |
| 9/26/2020   |     |            | 10/26/2020  | 7.2 |            | 11/26/2020  | 7.3 | 7.5        | 12/26/2020  |     |            |
| 9/27/2020   | 7.4 |            | 10/27/2020  | 7.1 |            | 11/27/2020  |     |            | 12/27/2020  | 7.1 |            |
| 9/28/2020   | 7.4 |            | 10/28/2020  | 7.1 |            | 11/28/2020  |     |            | 12/28/2020  | 7.1 |            |
| 9/29/2020   | 7.4 |            | 10/29/2020  | 8.3 |            | 11/29/2020  | 7.4 | 7.3        | 12/29/2020  | 7.1 |            |
| 9/30/2020   | 7.4 |            | 10/30/2020  |     |            | 11/30/2020  | 7.4 | 7.3        | 12/30/2020  | 7.2 |            |
|             |     |            | 10/31/2020  |     |            |             |     |            | 12/31/2020  | 7.2 |            |

Appendix 1 CO2 Trial pH Data

| Date      | Outfall<br>001<br>pH | SMS 002<br>pH | Date      | Outfall<br>001<br>pH | SMS 002<br>pH |
|-----------|----------------------|---------------|-----------|----------------------|---------------|
| 1/1/2021  |                      | Flooded       | 2/1/2021  | 7.5                  | Flooded       |
| 1/2/2021  |                      |               | 2/2/2021  | 7.6                  |               |
| 1/3/2021  | 7.1                  |               | 2/3/2021  | 7.5                  |               |
| 1/4/2021  | 7.1                  |               | 2/4/2021  | 7.4                  |               |
| 1/5/2021  | 7.0                  |               | 2/5/2021  |                      |               |
| 1/6/2021  | 7.1                  |               | 2/6/2021  |                      |               |
| 1/7/2021  | 7.1                  |               | 2/7/2021  | 7.4                  |               |
| 1/8/2021  |                      |               | 2/8/2021  | 7.4                  |               |
| 1/9/2021  |                      |               | 2/9/2021  | 7.3                  |               |
| 1/10/2021 | 7.5                  |               | 2/10/2021 | 7.4                  |               |
| 1/11/2021 | 7.5                  |               | 2/11/2021 | 7.3                  |               |
| 1/12/2021 | 7.9                  |               | 2/12/2021 |                      |               |
| 1/13/2021 | 7.6                  |               | 2/13/2021 |                      |               |
| 1/14/2021 | 7.8                  |               | 2/14/2021 | 7.6                  |               |
| 1/15/2021 |                      |               | 2/15/2021 | 7.5                  |               |
| 1/16/2021 |                      |               | 2/16/2021 | 7.2                  |               |
| 1/17/2021 | 7.8                  |               | 2/17/2021 | 7.7                  |               |
| 1/18/2021 | 7.8                  |               | 2/18/2021 | 7.4                  |               |
| 1/19/2021 | 7.7                  |               | 2/19/2021 |                      |               |
| 1/20/2021 | 7.4                  |               | 2/20/2021 |                      |               |
| 1/21/2021 | 7.4                  |               | 2/21/2021 | 7.4                  |               |
| 1/22/2021 |                      |               | 2/22/2021 | 7.4                  |               |
| 1/23/2021 |                      |               | 2/23/2021 | 7.3                  |               |
| 1/24/2021 | 7.5                  |               | 2/24/2021 |                      |               |
| 1/25/2021 | 7.3                  |               | 2/25/2021 |                      |               |
| 1/26/2021 | 7.4                  |               | 2/26/2021 |                      |               |
| 1/27/2021 | 7.4                  |               | 2/27/2021 |                      |               |
| 1/28/2021 | 7.6                  |               | 2/28/2021 |                      |               |
| 1/29/2021 |                      |               |           |                      |               |
| 1/30/2021 |                      |               |           |                      |               |
| 1/31/2021 | 7.5                  |               |           |                      |               |