REGION 4
ATLANTA, GA 30303

SENT VIA ELECTRONIC MAIL

Paula Wentzell
Environmental Manager
Clearwater Paper Augusta
4278 Mike Padgett Highway
Augusta, Georgia 30906
Paula.wentzell@clearwaterpaper.com

Dear Paula Wentzell:

On June 25-27, 2024, the U.S. Environmental Protection Agency Region 4 Air Enforcement Branch conducted a partial compliance inspection at Clearwater Paper, located in Augusta, Georgia. Enclosed is a copy of the final report generated by the U.S. Environmental Protection Agency's Region 4, South Air Enforcement Section.

Should you have questions regarding this inspection report, contact me at (404) 562-8837, or by email at Slade.Daniel@epa.gov.

Sincerely,

DANIEL SLADE

Digitally signed by DANIEL SLADE
Date: 2024.08.19 11:50:13 -04'00'

Daniel Slade
Environmental Engineer
South Air Enforcement Section

CC: Sean Taylor, GA EPD
Lauren Wheeler, GA EPD
Adrienne Tabor, GA EPD
Whitney DeMoor, GA EPD
Gerson Martinez, GA EPD

United States Environmental Protection Agency (EPA) Region 4
Air Enforcement Branch
Draft Inspection Report

I. GENERAL INFORMATION

Facility Name: Clearwater Paper

Location (Address): 4278 Mike Padgett Highway Augusta, Georgia 30906

Inspection Dates: June 25-27, 2024

Type of Inspection (Full or Partial Compliance Evaluation):
Partial Compliance Evaluation

PROGRAMMATIC ID: GA0000001324500006

PERMIT NUMBER: Permit # 2631-245-0006-V-05-0

EPA Region 4 Investigator(s)/Inspector(s):

1. Daniel Slade, Environmental Engineer
2. Kevin Taylor, Environmental Engineer
3. Andrew Mills, Environmental Engineer

State/Local Investigator(s)/Inspector(s):

1. Lauren Wheeler, GA EPD
2. Adrienne Tabor, GA EPD
3. Whitney DeMoor, GA EPD
4. Gerson Martinez, GA EPD

Person(s) Contacted at Facility (Name and Title):

1. Paula Wentzell, Environmental Manager
2. Chris Wellman, Environmental Engineer
3. Dean Messner, EHS Manager
4. Dylan Stewart, Environmental 360 Contractor

Report Prepared by: Daniel Slade

II. FACILITY INFORMATION

A. Facility and Permit Information

Facility and Permit Information	Comments
1. Type of facility (e.g., chemical plant, refinery, cement manufacturer, etc.).	Bleached Kraft Pulp and Paperboard Mill
2. Air permit number(s) and type of permit (e.g., Title V, PSD, Synthetic Minor, etc.).	Permit # 2631-245-0006-V-05-0
3. Air permit issuance date.	February 15, 2021
4. Air permit expiration date.	February 15, 2026
5. Facility classification (Major, Synthetic Minor/Conditional Major, Minor).	Major
6. Major source pollutants (if applicable).	Particulate Matter (PM) Sulfur Dioxide (SO_2) Hazardous Air Pollutants (HAPs) Volatile Organic Compounds (VOCs) Nitrogen Oxides (NO_x) Carbon Monoxide (CO) Total Reduced Sulfur (TRS)
7. Applicable regulations (e.g., State Implementation Plan, MACT Subpart FFFF, NSPS Subpart EEEE, etc.).	40 C.F.R. Part 60, Subpart A 40 C.F.R. Part 60, Subpart BB 40 C.F.R. Part 60, Subpart BBa 40 C.F.R. Part 60, Subpart Db 40 C.F.R. Part 60, Subpart IIII 40 C.F.R. Part 60, Subpart Y 40 C.F.R. Part 61, Subpart A 40 C.F.R. Part 61, Subpart E 40 C.F.R. Part 63, Subpart A 40 C.F.R. Part 63, Subpart S 40 C.F.R. Part 63, Subpart MM

Facility and Permit Information	Comments
	40 C.F.R. Part 63, Subpart DDDDD 40 C.F.R. Part 63, Subpart ZZZZ State Implementation Plan (SIP)
8. Types of air emission points (e.g., tanks, process vents, boilers, etc.).	Tanks, Process Vents, Boilers, Kilns, Wastewater Treatment Ponds
9. Types of air pollution control equipment (e.g., baghouse, scrubber, afterburner, etc.).	Baghouses, Scrubbers, Electrostatic Precipitators, Cyclones, Boilers, Kilns

B. Process Description

Clearwater Paper is a bleached Kraft pulp and paperboard mill in Augusta, Georgia. The facility has recently changed ownership, on May 1, 2024, from previously Graphic Packaging International to Clearwater Paper. The facility processes log and chipped hardwood and softwood to make rolls of stock paper to be sent to other facilities to finish into consumer products.

III. INSPECTION ACTIVITIES

Activity	Yes No NA	Comments
Opening Meeting		
1. Date and time entered the facility.	Y	The EPA Region 4 inspection team and GA EPD personnel arrived at the facility on June 25, 2024, at 9:00 AM EDT.
2. Credentials presented to facility personnel (include name and title).	Y	Upon arrival, the inspection team presented credentials to Paula Wentzell, Environmental Manager.

Activity	Yes No NA	Comments
3. Conducted an opening meeting to explain the purpose and objectives of the inspection.	Y	The inspection team held an opening conference to discuss inspection objectives. An opening meeting was conducted around 9:17 AM EDT in a facility conference room on June 25, 2024. The inspection team informed facility representatives that the inspection would occur over three days with the first day consisting of a review of records and general process overview/walkthrough and the remaining two days to be spent in the process conducting Method 21 and sensory leak monitoring.
4. Discussed safety issues.	Y	The inspection team discussed appropriate personal protective equipment prior to going to process areas. Steel-toe boots, hardhats, visibility vests, safety glasses, ear protection, and gloves were required at the facility.
5. Discussed which records to be reviewed.	Y	The inspection team discussed which records would be reviewed onsite and that additional records would be obtained through an information request following the inspection.
6. Discussed the facility walk-through and the areas to be observed in the facility.	Y	The inspection team discussed the Facility operations each day prior to entering the process. The inspection team stated the plan to monitor as much of the LDAR components as time permitted.
7. Discussed facility policy regarding photographs or video (if applicable).	Y	The inspection team notified facility staff when photographs or videos were taken during the walk-through. All photographs are considered Confidential Business Information (CBI) until reviewed by facility staff.

Activity	Yes No NA	Comments
8. Discussed the use of the infrared camera, TVA, PID, and any other equipment.	Y	The inspection team indicated that FLIR cameras, toxic vapor analyzer (TVA), and QRAE 4-gas monitors would be used during the process walkthrough.
9. Discussed CBI.	Y	The inspection team indicated that any material claimed to be CBI would be treated in accordance with regulations.
Records Reviewed at the Facility		
10. The types of records reviewed, and the time period reviewed.	Y	The inspection team reviewed the following records on-site: 1. Monthly LDAR records from January 2024 to June 2024. 2. Annual LDAR report from August 2023 3. Daily lime production, mud flow, mud density and percent solids records from January 2024 to June 2024 4. Daily black liquor firing rate and percent black liquor solids from January 2024 to June 2024 5. 15 Day rolling average for methanol collection from January 2024 to June 2024
Facility Walk-Through Observations		

11. The process equipment observed and the associated operational rate observed (e.g., Furnace 1 production rate was 5 lbs/hr on 1/1/15, at 2:00 pm – permit requires max rate at 6 lbs/hr). Provide the date and time the information was recorded by the inspector. Identify the permit limit (if applicable). An attachment may be used for a large amount of information.	Y	On June 25, 2024, at approximately 1:27 PM EDT, a general overview tour of the facility began. The inspection team used FLIR GF77 and GF320 IR cameras to view process and control equipment to identify any leaks or areas that may need additional monitoring the following days of the inspection. No major areas of concern were noted during the general walkthrough. The path taken during the walkthrough started at the No.1 and No. 2 Lime Kilns then proceeded to the No. 3 Digestor where the inspection team got a bird's eye view of the facility from the top of the digestor. One image (FLIR0021) was taken from the top of the digestor showing the wastewater treatment ponds. The next areas visited were the No. 3 Paper Machine (PAPR) and Brown Stock Washers (BSW3). The walkthrough of process equipment concluded with a visit to the boilers and No. 2 and No. 3 Evaporator sets. On the walk back to the office, a video (MOV_1274) was taken showing an intermittent plume exiting from the Digestor Heater Relief Stack. The last area viewed before leaving the facility was the wastewater treatment ponds. The first day concluded at 4:20 PM EDT. On June 26, 2024, at approximately 10:05 AM EDT, the inspection team, facility personnel and facility LDAR contractor began LDAR monitoring at the Main Foul Condensate Tank conducting sensory monitoring for the non-Method 21 components. The morning monitoring was only sensory checks and viewing of components with the GF320 as the LDAR contractor's TVA2020 had not arrived at the facility at the time of the first monitoring.

		The other areas monitored during the morning were the No. 2 and No. 3 Evaporator sets and the Innovations Condensate Tank. One leak was noted at component T-18097 and a video (MOV_1276) was taken showing a leak at the valve on a condensate line. One photo (DC_1275) was taken of discoloration on a valve (MV-19028) in the condensate collection system. In the afternoon, the monitoring resumed at approximately 2:30 PM EDT at the low volume high concentration (LVHC) gases at the No. 1 and No. 2 Power Boilers. One leak was found at component SE-14009. The inspection team's TVA recorded a reading of 981 ppm and this exceedance was confirmed by the contractor's TVA reading of 700 ppm. A video (MOV_1278) of the leak was taken showing what appeared to be multiple leaks coming from the bolts on a flange. Monitoring in the area continued until the TVA plugged around 3:20 PM EDT. The second day concluded around 4:20 PM EDT. On June 27, 2024, at approximately 8:45 AM EDT, the inspection team, facility personnel and facility LDAR contractor began LDAR monitoring of the remaining components. The inspection team used the GF320 and TVA during the monitoring beginning in the Lime Kiln area. Then the Main Condensate Tank was revisited to monitor the Method 21 applicable components. The final areas monitored were the digestors and bleach plants. No leaks were found with the GF320 or TVA and no detectable odors or visual leaks were noted during the monitoring.

Activity	Yes No NA	Comments
		Any noted pictures or videos can be found in appendix A and collected operational data can found in appendix C.
12. The type of process parametric monitoring observed and the associated value observed (e.g., Furnace 1 flux injection rate was 200 lbs/batch at 1/1/15, at 2:00 pm – permit requires max rate at 225 lbs/batch). Provide the date and time the information was recorded by the inspector. Identify the permit limit (if applicable). An attachment may be used for a large amount of information.	Y	Refer to Item 11 for the description of the process walk through and collected parametric data can found in appendix C.
13. If process equipment or parametric monitoring equipment was not operating, state the reason by facility personnel why the equipment was not operating.	Y	During the inspection, the No. 1 Lime Kiln was down as replacement of a slaker was being done.

Activity	Yes No NA	Comments
14. The type of air pollution control equipment, the process equipment it is controlling, and the associated parametric monitoring value observed (e.g., baghouse pressure drop, temperature, scrubber flow rate, etc.). (For example - RTO 1 controlling furnace 1, 1,500 degrees F on 1/1/15, at 2:00 pm – permit requires 1,400 degree F or higher). Provide the date and time the information was recorded by the inspector. Identify the permit limit (if applicable). An attachment may be used for a large amount of information.	Y	Refer to Item 11 for the description of the process walk through and collected control equipment data can be found in Appendix C.

Activity	Yes No NA	Comments
15. Continuous emissions monitoring devices and values observed. (e.g., CEMS, COMs, etc.). Provide the date and time the information was recorded by the inspector. Identify the permit limit (if applicable). An attachment may be used for a large amount of information.	N/A	Refer to Item 11 for the description of the process walk through and collected continuous emissions monitoring data can be found in Appendix C.
16. If air pollution control equipment was not operating, state the reason by facility personnel why the equipment was not operating.	N/A	White Liquor Scrubber A (WLSA) controlling emissions from the LVHC Gas Control System was not in operation during the inspection. Gases were being routed through White Liquor Scrubber B (WLSB). When combusting concentrated TRS stream in the No. 1 and No. 2 Power Boilers, the gases shall be scrubbed in one of the White Liquor Scrubbers.
17. Capture and collection system (enclosures and hoods) observations, if applicable (e.g., the magnitude and duration of emission escaping capture from the hood).	N/A	

Activity	Yes No NA	Comments
18. Ductwork transferring the emissions to the air pollution control device observations, if applicable (e.g., the magnitude and duration of emission escaping from the ductwork, holes or deterioration in ductwork, no deterioration observed, etc.).	N/A	
19. Any existing unpermitted emission points, new unpermitted emission points, or non-permitted construction activities observed. (if yes, describe in the comments field).	N	
20. Were any visible emissions observed? (if yes, identify the location and equipment).	N	
21. Was a Method 9 reading performed? (if yes, identify the location and equipment).	N	
22. Was the cause of the visible emissions investigated and the information documented?	N	
23. Was a Method 22 performed for visible emissions? (if yes, identify the location and equipment).	N	
24. Identify the cause of the visible emissions as explained by facility personnel, if applicable.	N/A	

Activity	Yes No NA	Comments
25. Was the infrared camera used? If so, attach the video log (which includes the equipment ID, and the date and time the video was recorded) and videos to this report.	Y	The inspection team used IR cameras all three days of the inspection. The first day the FLIR GF77 and GF320 were both used during the initial walkthrough of the Facility. The GF320 was used during the remaining days of the inspection during the NCG and condensate LDAR monitoring. All videos and pictures can be found in Appendix A.
26. Was the TVA used? If so, identify the equipment monitored and the results. Provide the date and time the information was recorded by the inspector. Include actual instrument readings for each piece of equipment monitored above the leak definition and/or where the infrared camera identified a release. An attachment may be used for a large amount of information.	Y	The inspection team used a TVA to monitor LDAR components that require Method 21 monitoring. Any component that is subject to sensory checks that had any concerns of a possible leak was also checked with the TVA. One leak was found at Tag # SE-14009 on the LVHC gases at the No. 1 and No. 2 Power Boilers. The inspection team's TVA recorded a reading of 981 ppm and this exceedance was confirmed by the contractor's TVA reading of 700 ppm. A video (MOV_1278) of the leak was taken showing what appeared to be multiple leaks coming from the bolts on a flange.
27. Was the PID used? If so, identify how the PID was used and the results. Provide the date and time the information was recorded by the inspector. An attachment may be used for a large amount of information.	N	
Closing Meeting		

Activity	Yes No NA	Comments
28. Conducted a closing meeting.	Y	The inspection team conducted a closing meeting on June 27, 2024, at 1:30 PM EDT with facility personnel.
29. Summarize any additional information needed, if applicable?	N/A	
30. Accept a declaration of CBI, if applicable?	N/A	Facility claimed no CBI after review of the draft report.
31. Discussed observations.	Y	The inspection team thanked facility staff for their time. The team discussed the facility walkthrough and monitoring activities.
32. Discussed next steps, if applicable?	Y	A final inspection report from EPA Region 4 will be sent to the company within a 60-day timeframe.
33. Date and time inspection concluded.	Y	The inspection concluded on June 27, 2024, at 2:00 PM EDT.
Miscellaneous		
34. Include any additional observations, if applicable.	N/A	

EPA Investigator/Inspector Signature: DANIEL SLADE Digitally signed by DANIEL SLADE Date: 2024.08.19 11:51:24 -04'00'

EPA Supervisor Signature & Title: TODD GROENDYKE Digitally signed by TODD GROENDYKE Date: 2024.08.19 12:42:42 -04'00'

Chief, South Air Enforcement Section

Appendix A
Inspection Picture and Video Log

During the June 25-27, 2024, inspection EPA Region 4 staff used a FLIR GF77 and GF320 camera to take pictures and videos at Clearwater Paper, located in Augusta, Georgia. Below is an inventory of the pictures and videos. All times are in Eastern Daylight Time (EDT).

File Name	Device	Videographer/ Photographer	Date	Approximate Time	Description
FLIR0021	GF77	Daniel Slade	6/25/2024	1:50 PM	View of Wastewater ponds from the top of the No. 3 Digestor
MOV_1274	GF320	Andrew Mills	6/25/2024	3:45 PM	Digestor Heater relief valve stack
DC_1275	GF320	Andrew Mills	6/26/2024	10:30 AM	Discoloration at valve (MV-19028)
MOV_1276	GF320	Andrew Mills	6/26/2024	10:45 AM	Leaking valve (T-18097) at the #2 Evaporator set
MOV_1278	GF320	Andrew Mills	6/26/2024	2:30 PM	Leak at flange on component (SE-14009) LVHC gases to #1 & #2 Power Boilers

Appendix B
Calibration Data

Instrument Information

Instrument Type	Informal Identifier	Formal Identifier
TVA 2020	TVA 1	Property Tag # B10375

Calibration Checks TVA

Date/Time	Gas Concentration (ppm)	TVA 1 Reading (ppm)
6/26/2024 9:04 AM	500	497
	1000	1005
	10000	9900
6/26/2024 12:55 PM	500	515
	1000	1030
	10000	10000
6/27/2024 8:12 AM	500	534
	1000	1042
	10000	10000

The instrument was calibrated according to Method 21 and manufacturer instructions with the gases listed below.

Calibration Gases

Team	Gas Type	Concentration (ppm)	Lot #	Expiration Date
Team 2	Zero	-	304-402834783-1	9/21/2027
	Methane	500	304-402851118-1	9/21/2027
	Methane	1000	304-402606646-1	12/2/2026
	Methane	10000	304-402606645-1	12/2/2026

Appendix C
Daily Operating Data

Emission Unit	Control Device	Parameter Monitored	Permit Limit	6/25/24	6/26/24	6/27/24
No. 1 Lime Kiln (LK1A)	None	TRS (ppm) Oxygen (%)	<40 ppm -	Down		
	Scrubber (LK1B)	Pressure Drop (in H_2O) Flow Rate (gpm) Visible Emissions (%)	>25 in H_2O* >240 gpm* <40%			
No. 2 Lime Kiln (LK2A)	None	TRS (ppm) Oxygen (%)	<8 ppm -	3.05 9	5.95 8.4	2.33 5.3
	Scrubber (LK2B)	Pressure Drop (in H_2O) Flow Rate (gpm) Visible Emissions (%)	>23.4 in H_2O* >540 gpm* <40%	48 700 0	48 700 0	48 700 0
No. 3 Recovery Boiler (RB3A)	None	TRS (ppm) Oxygen (%) Opacity (%) BLS Firing Rate (MMlb/h) BLS Concentration (%)	<5 ppm - <20% - -	0.1 5.6 15 4.24 69.8	0.1 5.7 6.3 2.83 70.3	0.1 9.1 7.6 2.39 68.8
	ESP (RB3B)	Total Secondary Power (kW)	>370.5 kW*	507	752	703
No. 3 Smelt Tank (ST3A)	Scrubber (ST3B)	Flow Rate (gpm) Fan Current (amps) Visible Emissions (%)	>340 gpm >68 A <40%	424 121 0	434 124 0	428 126 0
No. 1 Power Boiler (PB1A)	None	Clarifier Sludge Feed Rate Oxygen (%)	- -	0 9.4	0 9.4	0 8.4
	Scrubber (PB1B) North	Pressure Drop (in H_2O) Flow Rate (gpm) Visible Emissions (%)	>8.5 in H_2O* >315 gpm* <40%	NG**	10.4 300 0	10.3 300 0
	Scrubber (PB1C) South	Pressure Drop (in H_2O) Flow Rate (gpm) Visible Emissions (%)	>9.3 in H_2O* >315 gpm* <40%	NG**	11.6 300 0	11.6 300 0
No. 2 Power Boiler (PB2A)	None	Visible Emissions (%)	<40%	Down		
No. 3 Power Boiler (PB3A)	None	Opacity (%) NO_x (lb/MMBtu) Oxygen (%) Clarifier Sludge Feed Rate	<20% <0.3 lb/MMBtu - -	5.3 0.2 5.7 0	5.7 0.2 6.5 0	6.7 0.2 5.8 0
	ESP (PB3B)	Secondary Power (kW)	>82.3 kW*	212.6	217.8	215.5
No. 2 Bleach Plant (BP2B)	Scrubber (BP2B)	Pressure Drop (in H_2O) Influent Flow Rate (gpm) Fan Load (amps) Liquid Ox/Re Potential (mV) Visible Emissions (%)	>17.8 in H_2O* >460 gpm* >60 A* <-280 mV* <40%	10.5 521 110 -430 0	10.8 516 112 -468 0	10.6 519 110 -476 0

Emission Unit	Control Device	Parameter Monitored	Permit Limit	6/25/24	6/26/24	6/27/24
No. 3 Bleach Plant (BP3B)	Scrubber (BP3B)	Pressure Drop (in H_2O) Influent Flow Rate (gpm) Fan Load (amps) Liquid Ox/Re Potential (mV) Visible Emissions (%)	>1.2 in H_2O* >1350 gpm* >90 A* <-280 mV* <40%	10.7 2242 147 -484 0	Down	Down
Chlorine Dioxide Generator (R10A)	Scrubber (R10B and R2AB) (R2AB only recorded when being used as the primary control device per permit)	Pressure Drop (in H_2O) Recirculation Rate (gpm) Liquid Ox/Re Potential (mV) Visible Emissions (%)	>5.7 in H_2O* >64 gpm* <-350 mV* <40%	8.6 73 -581 0	Down	Down
LVHC	White Liquor Scrubber (WLSA)	Pressure Drop (in H_2O) Flow Rate (gpm) Visible Emissions (%)	>3.2 in H_2O* >22.6 gpm* <40%	Down	Down	Down
	White Liquor Scrubber (WLSB)	Pressure Drop (in H_2O) Flow Rate (gpm) Visible Emissions (%)	>3.2 in H_2O* >22.6 gpm* <40%	20.7 25 0	20.7 25 0	20.7 25 0

***** The listed limit in the Permit but limits can be changed through setting a new Georgia EPD approved limit when conducting performance testing.

****** The No. 1 Power Boiler was operating on natural gas so emission control through scrubbers PB1B and PB1C is not required so no parameters were recorded.