

ISSUANCE DATE:



# GEORGIA

DEPARTMENT OF NATURAL RESOURCES

## ENVIRONMENTAL PROTECTION DIVISION

### Air Quality - Part 70 Operating Permit Amendment

**Facility Name:** Rayonier Performance Fibers, LLC  
**Facility Address:** 4470 Savannah Highway  
Jesup, Georgia 31545, Wayne County  
**Mailing Address:** 4470 Savannah Highway  
Jesup, Georgia 31545  
**Parent/Holding Company:** Rayonier Performance Fibers, LLC  
**Facility AIRS Number:** 04-13- 305-00001

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued an amendment to the Part 70 Operating Permit for:

The amendment of Condition 6.2.20.c to authorize the use of Toxchem® modeling software in lieu of Water9 modeling software.

This Permit Amendment is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Amendment and Permit No. 2611-305-0001-V-05-0. Unless modified or revoked, this Amendment expires simultaneously with Permit No. 2611-305-0001-V-05-0. This Amendment may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in App No. 573372 dated June 15, 2021; any other applications upon which this Amendment or Permit No. 2611-305-0001-V-05-0 are based; supporting data entered therein or attached thereto; or any subsequent submittal or supporting data; or for any alterations affecting the emissions from this source.

This Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached 2 pages.



Richard E. Dunn, Director  
Environmental Protection Division

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**PART 1.0 FACILITY DESCRIPTION****1.3 Process Description of Modification**

Rayonier Performance Fibers, LLC (RPF) is proposing to modify the development of emission factors currently used to determine the daily and 15-day average total hazardous air pollutant (HAP) or Methanol removal and daily and 12-month rolling average volatile organic compound (VOC) emissions from the Wastewater Treatment Plant (WWTP). Within the first 45 days of each calendar year, RPF conducts a characterization study of the WWTP to determine the total HAP emissions factors used to determine daily and 15-day average total HAP or methanol removal and to calculate daily and 12-month rolling average VOC emissions from this system. The characterization study is required by Title V Operating Permit 2611-305-0001-V-05-0, Condition Nos. 4.2.7 and 6.2.20.

RPF has historically used the Water9 model to develop emissions factors for total VOCs and HAPs, as described in the Clean Condensate Alternatives application dated August 31, 2004 for compliance with 40 CFR 63, Subpart S (National Emissions Standards for Hazardous Air Pollutants from the Pulp and Paper Industry). The annual characterization study calibrates the model by sampling in multiple distinct locations in each of the mixing zones in the aerated stabilization basins (ASBs). 40 CFR Part 63 Appendix C procedures are used to determine  $F_{bio}$  in non-thoroughly mixed biological treatment units, following U.S. EPA issued guidance in the July 1999 *“Technical Support Document for the Evaluation of Aerobic Biological Treatment Units with Multiple Mixing Zones”*.

Newer computers and operating systems no longer support the use of the Water9 modeling software, which is no longer being updated by U.S. EPA. To continue using the same methodology for estimating VOC and HAP emissions factors for the annual characterization studies of the WWTP, RPF proposed in December 2020 to use Toxchem® modeling software in lieu of Water9. Toxchem® is a newer modeling software that is supported by current operating systems. Toxchem® is included in Appendix C of 40 CFR Part 63 as an acceptable alternative to Water9 for estimation of wastewater treatment emissions.

The same sampling data used for Water9 will be used for calibration of Toxchem®. The use of Toxchem® will have no other impact on RPF’s compliance method for 40 CFR Part 63, Subpart S other than for developing newer emission factors. RPF proposes to use the Toxchem® model  $F_{bio}$  factors for VOC and HAP emissions estimates beginning from the starting date of the current ASB-2 treatment trial.

**PART 3.0 REQUIREMENTS FOR EMISSION UNITS**

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

**3.1.3 Emission Units**

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
EN99	Wastewater Treatment Plant (Including the Aeration Basin #1, Aeration Basin #2A, and Anaerobic System)	40 CFR 52.21 Avoidance 40 CFR 63 Subpart S	None	None

\* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards and corresponding permit conditions are intended as a compliance tool and may not be definitive.

**PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS**

**6.2 Specific Record Keeping and Reporting Requirements**

Modified Condition

6.2.20 The Permittee shall maintain daily records sufficient to calculate VOC emissions from the Wastewater Treatment Plant (Source Code EN99) in pounds per short ton of unbleached ODP. For the purpose of demonstrating compliance with Condition 3.3.34, total HAPs as defined in 40 CFR 63.457(g) shall be used as the equivalent of total VOCs. The Permittee shall conduct the following to demonstrate compliance with the VOC limit in Condition 3.3.34:

[a., b., and d. – No Changes]

c. Use Toxchem® model to develop emissions factors for total VOCs (HAPs) emissions.