



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

**BUREAU OF AIR MANAGEMENT
NEW SOURCE REVIEW PERMIT
TO CONSTRUCT AND OPERATE A STATIONARY SOURCE**

Issued pursuant to Title 22a of the Connecticut General Statutes (CGS) and Section 22a-174-3a of the Regulations of Connecticut State Agencies (RCSA).

Owner/Operator	RockTenn CP, LLC
Address	125 Depot Road, Montville, CT 06382
Equipment Location	125 Depot Road, Montville, CT 06382
Equipment Description	Rentech 170.11 MMBtu/hr natural gas fired boiler
Town-Permit Numbers	107-0058
Premises Number	4
Stack Number	5
Permit Issue Date	February 23, 2015
Expiration Date	None

/s/ Robert Klee
Robert Klee
Commissioner

2/23/15
Date

This permit specifies necessary terms and conditions for the operation of this equipment to comply with state and federal air quality standards. The Permittee shall at all times comply with the terms and conditions stated herein.

PART I. DESIGN SPECIFICATIONS

A. General Description

RockTenn CP, LLC operates a Rentech natural gas fired industrial boiler with ultra-low NO_x burners and flue gas recirculation (FGR) to produce steam in support of their recycled paperboard mill. There is no limit on the hours of operation on this unit.

B. Equipment Design Specifications

1. Fuel Type(s): Natural Gas
2. Maximum Fuel Firing Rate(s): 166,667 ft³/hr
3. Maximum Gross Heat Input (MMBTU/hr): 170.11
4. Maximum Steam Flow (lbs/hr) @ 730°F and 500 psig: 120,000

C. Control Equipment Design Specifications

1. Ultra-Low NO_x Burner/Flue Gas Recirculation
 - a. Make: Coen

D. Stack Parameters

1. Minimum Stack Height (ft): 75
2. Minimum Exhaust Gas Flow Rate at Maximum Rated Capacity (acfm): 49,388
3. Minimum Stack Exit Temperature at Maximum Rated Capacity (°F): 285
4. Minimum Distance from Stack to Property Line (ft): 190

PART II. ALLOWABLE EMISSION LIMITS

The Permittee shall not cause or allow this equipment to exceed the emission limits stated herein at any time.

A. Criteria Pollutants

Pollutant	lb/hr	lbs/MMBtu	Tons/year
PM ₁₀	0.68	0.004	3.0
PM _{2.5}	0.68	0.004	3.0
SO ₂	0.17		0.74
NO _x	1.87	0.011	8.2
VOC	0.68		3.0
CO	6.29		27.5
CO _{2e}		117.02	87,190

B. Hazardous Air Pollutants

This equipment shall not cause an exceedance of the Maximum Allowable Stack Concentration (MASC) for any hazardous air pollutant (HAP) emitted and listed in RCSCA Section 22a-174-29. [STATE ONLY REQUIREMENT]

C. Opacity

This equipment shall not exceed 10% opacity during any six minute block average as measured by 40 CFR 60, Appendix A, Reference Method 9.

D. Demonstration of compliance with the above emission limits shall be met by calculating the emission rates using emission factors from the following sources:

- *NO_x, CO and Opacity: Stack tests results*
- *PM₁₀/2.5 Manufacturer's Guarantee*
- *SO_x: Calculated from sulfur content in fuel*
- *CO_{2e}: 40 CFR Part 98, Tables A-1, C-1, and C-2*
- *All other pollutants: AP-42, Fifth Edition, Volume 1, Chapter 1: External Combustion Sources*

The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.

PART IV. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS

A. Monitoring

1. The Permittee shall continuously monitor fuel consumption using a non-resettable totalizing fuel meter.
2. The Permittee shall perform inspections of the control devices as recommended by the manufacturer.

B. Record Keeping

1. The Permittee shall keep records of monthly and consecutive 12 month fuel consumption. The consecutive 12 month fuel consumption shall be determined by adding (for each fuel) the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month.
2. The Permittee shall calculate and record the combined monthly and consecutive 12 month PM, PM₁₀, PM_{2.5}, SO₂, NO_x, VOC, CO, and CO_{2e} emissions in units of tons. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month.
3. The Permittee shall make and keep records of all maintenance and tune-up activities for this unit.
4. The Permittee shall make and keep records of all inspections of the control devices.
5. The Permittee shall keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request.

PART V. STACK EMISSION TEST REQUIREMENTS

Stack emission testing shall be performed in accordance with the [Emission Test Guidelines](#) available on the DEEP website.

Initial stack testing shall be required for the following pollutant(s):

PM PM₁₀ PM_{2.5} SO₂ NO_x CO
 VOC Opacity Other (HAPs):

The Permittee shall conduct initial stack testing within 60 days of achieving the maximum steam production rate as defined in Part I.B, but not later than 180 days after initial startup. The Permittee shall submit test results within 60 days after completion of testing.

For testing being conducted pursuant to 40 CFR Part 60, the test report shall be submitted within 180 days after the initial startup date or within 60 days after reaching maximum steam production rate. [40 CFR §60.8(a)]

Recurrent stack testing for NO_x, CO and opacity shall be conducted within (5) years from the date of the previous stack test.

Stack test results shall be reported and compared to the emissions limits of this permit.

PART VI. OPERATION AND MAINTENANCE REQUIREMENTS

- A. The Permittee shall operate and maintain, including an annual tune-up, this equipment in accordance with the manufacturer's specifications and written recommendations.
- B. The Permittee shall properly operate the FGR system at all times that this equipment is in operation

and emitting air pollutants.

PART VII. SPECIAL REQUIREMENTS

- A.** The Permittee shall notify the Department within 15 days of when this unit reaches 80% of the maximum rated steam flow, as defined in Part I.B of this permit.
- B.** The Permittee shall not co-fire this unit with the Riley boiler, permit number 107-0008, at any time except during periods of startup or shutdown.
- C.** The Permittee shall comply with all applicable sections of the following New Source Performance Standard(s) at all times.

Title 40 CFR Part 60, Subparts Db and A

Copies of the Code of Federal Regulations (CFR) are available online at the U.S. Government Printing Office website.

- D.** Unless directed otherwise by the Commissioner, if construction does not commence within eighteen (18) months from the date of issuance of this permit, the Permittee shall submit a written updated review of all prior BACT determinations for this unit. The Permittee shall submit this review to the Commissioner within 30 days of the end of such 18 month period.
- E.** The Permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor beyond the property boundary of the premises that constitutes a nuisance as set forth in RCSA Section 22a-174-23. [STATE ONLY REQUIREMENT]
- F.** The Permittee shall operate this facility at all times in a manner so as not to violate or contribute significantly to the violation of any applicable state noise control regulations, as set forth in RCSA Sections 22a-69-1 through 22a-69-7.4. [STATE ONLY REQUIREMENT]

PART VIII. ADDITIONAL TERMS AND CONDITIONS

- A.** This permit does not relieve the Permittee of the responsibility to conduct, maintain and operate the regulated activity in compliance with all applicable requirements of any federal, municipal or other state agency. Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- B.** Any representative of DEEP may enter the Permittee's site in accordance with constitutional limitations at all reasonable times without prior notice, for the purposes of inspecting, monitoring and enforcing the terms and conditions of this permit and applicable state law.
- C.** This permit may be revoked, suspended, modified or transferred in accordance with applicable law.
- D.** This permit is subject to and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut and conveys no property rights in real estate or material, nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby. This permit shall neither create nor affect any rights of persons or municipalities who are not parties to this permit.

- E.** Any document, including any notice, which is required to be submitted to the commissioner under this permit shall be signed by a duly authorized representative of the Permittee and by the person who is responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute."
- F.** Nothing in this permit shall affect the commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the Permittee by the commissioner.
- G.** Within 15 days of the date the Permittee becomes aware of a change in any information submitted to the commissioner under this permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the Permittee shall submit the correct or omitted information to the commissioner.
- H.** The date of submission to the commissioner of any document required by this permit shall be the date such document is received by the commissioner. The date of any notice by the commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.
- I.** Any document required to be submitted to the commissioner under this permit shall, unless otherwise specified in writing by the commissioner, be directed to: Office of Director; Engineering & Enforcement Division; Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.