

# 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	Frito-Lay, Inc Dayville Facility	
Address	1886 Upper Maple Street, Dayville, CT 06241	
Equipment Location	1886 Upper Maple Street, Dayville, CT 06241	
Equipment Description	CB Delta 60 Watertube Boiler No. 3	
Collateral Conditions	Part III.A.2 of this permit contains $NO_{x}$ Premises-Wide emission limitations	
Town-Permit Numbers	089-0027	
Premises Number	0065	
Stack Number	12	
Modification Issue Date	October 5, 2018	
Prior Permit Issue Date	June 1, 1981 (Permit to Construct) June 12, 1987 (Original Permit to Operate)	
Expiration Date	None	

/s/ Robert E. Kaliszewski	10-5-2018
Robert E. Kaliszewski	Date
Deputy Commissioner	

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

Frito-Lay, Inc. manufactures snack food products at their plant in Dayville, Connecticut. Raw material is received at the plant, stored onsite, and processed in various snack food production lines. Manufactured products are then packaged and distributed to offsite locations. Process steam is generated by three onsite Cleaver Brooks boilers (NSR Permit Nos. 089-0025 through 089-0027) and a Solar combustion turbine/duct burner cogeneration system. Each boiler is vented to a common stack, and the cogeneration system is vented to its own dedicated stack.

## B. Equipment Design Specifications

- 1. Make and Model: Cleaver Brooks Delta 60 Watertube Boiler (WT-400X-CN2)
- 2. Maximum Gross Heat Input (MMBTU/hr): 52.89

#### C. Stack Parameters

- 1. Minimum Stack Height (ft): 100
- 2. Minimum Exhaust Gas Flow Rate (acfm): 13,600
- 3. Minimum Stack Exit Temperature (°F): 400
- 4. Minimum Distance from Stack to Nearest Property Line (ft): 600

#### PART II. OPERATIONAL CONDITIONS

## A. Equipment

- 1. Allowable Fuel Type: Natural Gas
- 2. Maximum Fuel Firing Rate(s) (MCF/hr): 51.72
- 3. Maximum Fuel Consumption over any Consecutive 13 (28-Day) Periods (MMcf): 453.09

#### PART III. 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

1. CB Delta 60 Watertube Boiler No. 3

Pollutant	lb/hr	tpy
PM/ PM <sub>10</sub> / PM <sub>2.5</sub>	0.39	1.72
SO <sub>2</sub>	0.03	0.14
NO <sub>x</sub>	4.71	20.62
VOC	0.28	1.25
СО	15.05	65.93

#### 2. Premises-Wide

Pollutant	lb/day (From May 1 to September 30)	tpy
$NO_x$	<274	<50

#### 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 RCSA Section 22a-174-29. [STATE ONLY REQUIREMENT]

## C. Opacity

This equipment shall not exceed 20% 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 may be met by calculating the emission rates using emission factors from the following sources:
  - PM/ PM<sub>10</sub>/ PM<sub>2.5</sub>, SO<sub>2</sub>, and VOC: Compilation of Air Pollutant Emission Factors, AP-42, 5<sup>th</sup> Edition, Volume I, Section 1.4, July 1998
  - 2. NO<sub>x</sub> and CO: 1995 Stack Test Results

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

- The Permittee shall use a non-resettable totalizing fuel metering device or a billing meter to continuously monitor the combined total fuel feed to the Cleaver Brooks boilers (NSR Permit Nos. 089-0025 through 089-0027).
- 2. The Permittee shall perform inspections of the boiler and associated monitoring equipment as recommended by the manufacturer.

#### B. Record Keeping

- 1. The Permittee shall calculate and record the 28-day period and consecutive 13 (28-day) periods fuel consumption. The consecutive 13 (28-day) periods fuel consumption shall be determined by adding the current 28-day period's fuel consumption to that of the previous 12 (28-day) periods. The Permittee shall make these calculations within 28 days of the end of the previous 28-day period.
- 2. The Permittee shall make and keep daily, 28-day period, and consecutive 13 (28-day) periods records of hours of operation. The consecutive 13 (28-day) periods hours of operation shall be determined by adding the current 28-day period's hours of operation to that of the previous 12 (28-day) periods. The Permittee shall make these calculations within 28 days of the end of the previous 28-day period.
- 3. The Permittee shall calculate and record the 28-day period and consecutive 13 (28-day) periods PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC, and CO emissions in units of tons. The consecutive 13 (28-day) periods emissions shall be determined by adding (for each pollutant) the current 28-day period's emissions to that of the previous 12 (28-day) periods. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 28 days of the end of the previous 28-day period.
- 4. During the period from May 1 to September 30, inclusive, the Permittee shall calculate and record the daily premises-wide NO<sub>x</sub> emissions in units of pounds. Such records shall include a sample calculation for each unit. The Permittee shall make these calculations no later than the last day of each 28-day period for every day of operation in the preceding 28-day period.
- 5. The Permittee shall calculate and record the 28-day period and consecutive 13 (28-day) periods premises-wide  $NO_x$  emissions in units of tons. The consecutive 13 (28-day) periods premises-wide  $NO_x$  emissions shall be determined by adding the current 28-day period's emissions to that of the previous 12 (28-day) periods. Such records shall include a sample calculation for each unit. The Permittee shall make these calculations within 28 days of the end of the previous 28-day period.
- The Permittee shall keep records of manufacturer's specifications and written recommendations for the operation, inspection, and maintenance of the boiler and associated monitoring equipment.
- 7. The Permittee shall make and keep records of maintenance and inspections conducted on the boiler and associated monitoring equipment. Such records shall include the date and nature of all services performed.

8. 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.

# C. Reporting

- The Permittee shall notify the commissioner in writing of any malfunction of the boiler and associated monitoring equipment. The Permittee shall submit such notification within ten days of the malfunction. The notification shall include the following:
  - a. A description of the malfunction and a description of the circumstances surrounding the cause or likely cause of such malfunction; and
  - b. A description of all corrective actions and preventive measures taken and/or planned with respect to such malfunction and the dates of such actions and measures.

#### PART V. OPERATION AND MAINTENANCE REQUIREMENTS

The Permittee shall operate and maintain the boiler and associated monitoring equipment in accordance with the manufacturer's specifications and written recommendations.

## **PART VI. SPECIAL REQUIREMENTS**

- A. 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]
- **B.** 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 VII. 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.