

Notice of Rulemaking Hearing  
Tennessee Department of Environment and Conservation  
Division of Air Pollution Control

There will be a public hearing before the Technical Secretary of the Tennessee Air Pollution Control Board to consider the promulgation of an amendment to the Tennessee Air Pollution Control Regulations and the State Implementation Plan pursuant to Tennessee Code Annotated, Section 68-201-105. The comments received at this hearing will be presented to the Tennessee Air Pollution Control Board for their consideration in regards to the proposed regulatory amendment. The hearing will be conducted in the manner prescribed by the Uniform Administrative Procedures Act, Tennessee Code Annotated, Section 4-5-201 et seq. and will take place in the 9th Floor Conference Room of the L & C Annex, located at 401 Church Street, Nashville, Tennessee 37243-1531, at 9:30 a.m. CST on Monday, August 25, 2008. Anyone desiring to make oral comments at this public hearing is requested to prepare a written copy of their comments to be submitted to the hearing officer at the public hearing.

Written comments not submitted at the public hearing will be included in the hearing record only if received by the close of business on Monday, August 25, 2008, at the following address: Technical Secretary, Tennessee Air Pollution Control Board, 9th Floor, L & C Annex, 401 Church Street, Nashville, TN 37243-1531.

Any individuals with disabilities who wish to participate in these proceedings or to review these filings should contact the Tennessee Department of Environment and Conservation to discuss any auxiliary aids or services needed to facilitate such participation. Such initial contact may be in person, by writing, telephone, or other means, and should be made no less than ten (10) days prior to Monday, August 25, 2008, or the date such party intends to review such filings, to allow time to provide such aid or service. Contact Mr. John Rae White, Tennessee Department of Environment and Conservation ADA Coordinator, 12th Floor, 401 Church Street, Nashville TN 37243, (615) 532-0207. Hearing impaired callers may use the Tennessee Relay Service (1-800-848-0298).

If you have any questions about the origination of this rule change, you may contact Mr. Travis Blake at 615-532-0617. Copies of documents concerning this matter are available for review at the office of the Technical Secretary and at certain public depositories. For information about reviewing these documents, please contact Mr. Travis Blake or Mr. Malcolm Butler, 9th Floor, L & C Annex, 401 Church Street, Nashville, TN 37243-1531, telephone (615) 532-0554.

Summary of Proposed Rule

The Tennessee Air Pollution Control Rule 1200-03-27 is proposed to be amended by revising the regulations for bio-mass fired cogeneration plants in accordance with Federal changes to 40 CFR §96.102.

Substance of Proposed Changes

Chapter 1200-03-27  
Nitrogen Oxides

Amendment 1

Paragraph (2) of Rule 1200-03-27-.10 CAIR NO<sub>x</sub> Annual Trading Program is amended by inserting a new definition of "biomass" with the following text (Biomass means – (1) Any organic material grown for the purpose of being converted to energy; (2) Any organic byproduct of agriculture that can be converted to energy;

or (3) Any material that can be converted into energy and is nonmerchantable for other purposes, that is segregated from other nonmerchantable material, and that is; (i) A forest-related organic resource, including mill residues, precommercial thinning, slash, brush, or byproduct from conversion of trees into merchantable material; or (ii) A wood material, including pallets, crates, dunnage, manufacturing and construction material (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.) after the definition of “Boiler” and before the definition of “Bottoming-cycle cogeneration unit” so that, as amended, the sequence of definitions from “Boiler” to “Bottoming-cycle cogeneration unit” in paragraph (2) shall read:

(2) Boiler means an enclosed fossil- or other-fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

Biomass means –

- (1) Any organic material grown for the purpose of being converted to energy;
- (2) Any organic byproduct of agriculture that can be converted to energy; or
- (3) Any material that can be converted into energy and is nonmerchantable for other purposes, that is segregated from other nonmerchantable material, and that is;
  - (i) A forest-related organic resource, including mill residues, precommercial thinning, slash, brush, or byproduct from conversion of trees into merchantable material; or
  - (ii) A wood material, including pallets, crates, dunnage, manufacturing and construction material (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

Bottoming-cycle cogeneration unit means a cogeneration unit in which the energy input to the unit is first used to produce useful thermal energy and at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.

#### Amendment 2

Paragraph (2) of Rule 1200-03-27-.10 CAIR NO<sub>x</sub> Annual Trading Program is amended by adding a new paragraph (3) with the following text (Provided that the total energy input under paragraphs (2)(i)(B) and (2)(ii) of this definition shall equal the unit’s total energy input from all fuel except biomass if the unit is a boiler.) to the existing definition of “cogeneration unit” so that, as amended, paragraph (2) shall read:

- (2) Cogeneration unit means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine:
- (1) Having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and
  - (2) Producing during the 12-month period starting on the date the unit first produces electricity and during any calendar year after the calendar year in which the unit first produces electricity—
    - (i) For a topping-cycle cogeneration unit,
      - (A) Useful thermal energy not less than 5 percent of total energy output; and

- (B) Useful power that, when added to one-half of useful thermal energy produced, is not less than 42.5 percent of total energy input, if useful thermal energy produced is 15 percent or more of total energy output, or not less than 45 percent of total energy input, if useful thermal energy produced is less than 15 percent of total energy output.
- (ii) For a bottoming-cycle cogeneration unit, useful power not less than 45 percent of total energy input;
- (3) Provided that the total energy input under paragraphs (2)(i)(B) and (2)(ii) of this definition shall equal the unit's total energy input from all fuel except biomass if the unit is a boiler.

### Amendment 3

Paragraph (2) of Rule 1200-03-27-.10 CAIR NO<sub>x</sub> Annual Trading Program is amended by replacing the existing definition of "total energy input" with a new definition of "total energy input" so that, as amended, the definition of "total energy input" in paragraph (2) shall read:

- (2) Total energy input means, with regard to a cogeneration unit, total energy of all forms supplied to the cogeneration unit, excluding energy produced by the cogeneration unit itself. Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

$$\text{LHV} = \text{HHV} - 10.55(\text{W} + 9\text{H})$$

Where:

LHV = lower heating value of fuel in Btu/lb,  
 HHV = higher heating value of fuel in Btu/lb,  
 W = weight % of moisture in fuel, and  
 H = weight % of hydrogen in fuel.

Authority: T.C.A. §§68-201-105 and 4-5-201 et. seq. Administrative History: Original rule filed August 10, 2006; effective October 24, 2006.

This notice of rulemaking set out herein was properly filed in the Department of State on the 30th day of June, 2008. (FS 06-37-08; DBID 875)