

NORTH CAROLINA DIVISION OF AIR QUALITY <p style="text-align: center;">Air Permit Review</p>		Region: Wilmington Regional Office County: Duplin NC Facility ID: 3100116 Inspector's Name: Lynette Bryan Date of Last Inspection: 07/22/2005 Compliance Code: 3/In Compliance - Inspection	
Permit Issue Date:		Permit Applicability (this application only) SIP: 2D .0614 NSPS: NESHAP: 10/25 MACT avoidance PSD: PSD Avoidance: NC Toxics: 112(r): Other:	
<p style="text-align: center;">Facility Data</p> Applicant (Facility's Name): United Cogen Fuel LLC (TV) Facility Address: United Cogen Fuel LLC (TV) 1838 NC Highway 11 North & 903 Kenansville, NC 28349 SIC: 4911 / Electric Services NAICS: 221112 / Fossil Fuel Electric Power Generation Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			
Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	Application Number: 3100116.05B Date Received: 04/29/2005 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 05492/T15 Existing Permit Issue Date: 07/01/2005 Existing Permit Expiration Date: 01/31/2006
Boyd Davis Operations Manager (910) 296-1909 1838 NC 11 & 903 Kenansville NC, 28349	Stephen Miller Vice President of Operations (910) 296-1909 PO Box 809 Kenansville NC, 28349	Stephen Miller Vice President of Operations (910) 296-1909 PO Box 809 Kenansville NC, 28349	
Review Engineer: Mike Benson Review Engineer's Signature: Date:		Comments / Recommendations: Issue 05492/T16 Permit Issue Date: Permit Expiration Date:	

I. Introduction:

United Cogen Fuel LLC, located in Kenansville, North Carolina currently holds Title V Permit No. 05492T15, with an expiration date of January 31, 2006. The application was submitted to apply for renewal of the existing Title V Air Permit. This renewal permit will be issued as Permit No. 0549T16. Application No. 3100116.05B was received by the DAQ on April 29, 2005. The application was deemed complete at that time.

II. Proposed changes in Application 1800180.05B.

1. Addition of Section 2.1.A.10; CAM requirements for boilers ID Nos. ES-1A and ES-1B.

III. Facility Description:

This facility makes steam to produce electricity.

IV. Statement of Compliance:

This facility was inspected by Lynette Bryan of WIRO on August 19, 2003. The facility was in operation at the time of the inspection, and was determined to be in compliance with applicable Air Quality regulations.

V. Permitted Emissions Sources and Associated Air Pollution Control Devices and Appurtenances:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-1A PSD and PSD-Avoidance	one coal/natural gas/No. 2 and No. 4 fuel oil/tire derived fuel/pelletized paper fuel/flyash briquette/wood-fired steam, electric generating, boilers (215 million Btu per hour heat input)	CD-1A2 CD-1A	one OPTIONAL multicyclone (120, nine-inch diameter tubes) installed in series with; one bagfilter (16,800 square feet of filter area)
ES-1B PSD and PSD-Avoidance	one coal/natural gas/No. 2 and No. 4 fuel oil/tire derived fuel/pelletized paper fuel/flyash briquette/wood-fired steam, electric generating, boilers (215 million Btu per hour heat input)	CD-1B2 CD-1B	one OPTIONAL multicyclone (120, nine-inch diameter tubes) installed in series with; one bagfilter (16,800 square feet of filter area)
ES-2A and ES-2B PSD	two coal bunkers	CD-2A and CD-2B	two bagfilters (64 square feet of filter area, each)
ES-3 PSD	one fly ash silo with wet slurry pugmill for unloading	CD-3	one silo binvent (100 square feet of filter area)
ES-4 PSD	one bottom ash silo with a retractable bulk unloading spout and enclosed vent return	CD-4	one silo binvent (100 square feet of filter area)
ES-5A and ES-5B PSD	two ash system vacuum transport pumps	CD-5E CD-5D CD-5C CD-5A and CD-5B	one simple cyclone (42 inches in diameter) located on the bottom ash silo one bagfilter (528 square feet of filter area) located on the fly ash silo one simple cyclone (42 inches in diameter) located on the fly ash silo two in-line filters (one per pump)
ES-6 PSD	coal unloading/storage and transfer	Wetsup	wet suppression/chemical binder

Note that the boilers ID Nos. ES-1A and ES-1B only need bagfilter controls to meet Air Quality standards. The multicyclones are used to prevent a fire in the bagfilter and are considered optional equipment.

VI. Emission Source-By-Source Evaluation:

A. Two coal/natural gas/No. 2 and No. 4 fuel oil/tire derived fuel/pelletized paper fuel/flyash briquette/wood-fired boilers (ID Nos. ES-1A and 1B, 215 mmBtu/hr heat input each) and associated bagfilters (ID Nos. CD-1A and 1B) and OPTIONAL multicyclones (ID Nos. CD-1A2 and 1B2)

1. Description: 215 million Btu per hour steam generating boilers.

2. Applicable Regulatory Requirements:

- 15A NCAC 2D .0501
- 15A NCAC 2D .0503
- 15A NCAC 2D .0504
- 15A NCAC 2D .0516
- 15A NCAC 2D .0521
- 15A NCAC 2D .0530
- 15A NCAC 2D .0614 (CAM, as noted below)
- 15A NCAC 2D .1417
- 15A NCAC 2Q .0711

No regulatory review for the above listed regulations is required at this time since there are no new applicable standards for this source under this permit renewal. However, specific stipulation 2.1.A.10 (CAM) was added to this permit.

B. Two coal bunkers (ID Nos. ES-2A and ES-2B) and associated bagfilters (ID Nos. CD-2A and CD-2B)

One fly ash silo (ID No. ES-3) with wet slurry pugmill for unloading and associated binvent (ID No. CD-3),

One bottom ash silo (ID No. ES-4) with a dry bulk unloading spout with vent return line and associated binvent (ID No. CD-4)

Two ash system vacuum transport pumps (ID Nos. ES-5A and ES-5B) and associated inline filters (ID Nos. CD-5A and CD-5B), simple cyclones (ID Nos. CD-5C and 5E), and bagfilter (ID No. CD-5D)

1. Description: coal bunkers and silos.

2. Applicable Regulatory Requirements:

- 15A NCAC 2D .0515
- 15A NCAC 2D .0521
- 15A NCAC 2D .0530

No regulatory review is required at this time since there are no new applicable regulations for this source under this permit renewal.

C. Coal unloading/storage and transfer (ID No. ES-6)

1. Description: coal transfer and storage.
2. Applicable Regulatory Requirements:
 - 15A NCAC 2D .0521
 - 15A NCAC 2D .0530

No regulatory review is required at this time since there are no new applicable regulations for this source under this permit renewal.

VII. Compliance Assurance Monitoring (CAM):

CAM does apply to boilers ID Nos. ES-1A and ES-1B, which are considered “other” PSEUs (before control emissions are more than major source amounts). The Company submitted a CAM plan in accordance with 40 CFR 64 with this application. This was incorporated into the permit. However, in accordance with EPA and DAQ policy, “normal” visible emissions are not used for determining an excursion or exceedance. The Permittee will be required to observe the visible opacity from each boiler every day using EPA Method 22. Any visible emissions above zero percent is considered an excursion. If six excursions occur within six months it is considered an exceedance. An excursion requires the Permittee to perform inspection and maintenance on the fabric filter in accordance with Part 70 monitoring as per 2.1.A.1.c and d.

VIII. NSPS Issues:

This facility is not subject to NSPS.

IX. PSD/NAA Issues:

This facility has a variety of full PSD limits and PSD-avoidances for both boilers (ID Nos. ES-1A and ES-1B), and full PSD limits for the remaining equipment.

X. MACT Issues:

This facility would be subject to MACT, Subpart DDDDD, however, the facility has requested a 10/25 MACT avoidance limit to be included in this permit renewal.

XI. 112(r) Issues:

This facility is not subject to 112(r).

XII. Facility-Wide Air Toxics:

The facility is subject to 2Q .0700, and has stipulations regarding feed rates and type of fuels. The facility does not have any limit for 2D .1100 or 2Q .0711. The current Primary Operating Scenario gives the Permittee the flexibility to combust wood/coal/TDF. The Permittee has indicated that at this time, and the foreseeable future, the facility will most likely combust only unadulterated wood. The Permittee indicated that if they were to combust TDF on a regular basis, they would first need to submit a revised Toxics modeling protocol. The currently permitted POS was not modified so as to allow the facility to keep process flexibility.

XIII. Facility Emissions Summary:

Criteria pollutant emissions were obtained from the 2004 emissions inventory submitted to the Division.

Pollutant	Actual Emissions, TPY
CO	24.03
NOx	69.84
PM	57.72
PM10	14.63
PM2.5	4.53
SO2	204.19
VOC	0.69

The HAP with the largest emission is sulfuric acid at 4.45 TPY. HAP emissions are below the 10/25 level.

XIV. Miscellaneous:

1. A consistency determination was not required for this renewal application.
2. A Professional Engineer seal was not required for this application.
3. An application-processing fee was not required for this application.
4. A 30-day public notice is required for this application. This application will also be submitted for a 45-day EPA review concurrent to the public notice period. There are no effected States other than North Carolina.

XVI. Conclusions, Comments, and Recommendations.

This Air Permit issued as a renewal permit for United Cogen Fuel LLC, located in Kenansville, North Carolina has been reviewed by the DAQ to determine compliance with all procedures and requirements. The DAQ has determined that this facility is complying with all applicable requirements.

Issue Air Quality Permit No. 05492T16 to United Cogen Fuel LLC.