

**NORTH CAROLINA
DIVISION OF AIR QUALITY
Air Permit Review**

Region: Fayetteville Regional Office
County: Bladen
NC Facility ID: 0900043
Inspector's Name: James Moser
Date of Last Inspection: 06/09/2011
Compliance Code: 3 / Compliance - inspection

Permit Issue Date: xx

Facility Data			Permit Applicability (this application only)		
Applicant (Facility's Name): Elizabethtown Energy, LLC Facility Address: Elizabethtown Energy, LLC 3100 West Broad Street Elizabethtown, NC 28337 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			SIP: NSPS: NESHAP: PSD: PSD Avoidance: NC Toxics: 112(r): Other: Title V Permit Renewal, Acid Rain Permit Renewal		
Contact Data			Application Data		
Facility Contact	Authorized Contact	Technical Contact	Application Number: 0900043.05A Date Received: 05/31/2005 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 05455/T15 Existing Permit Issue Date: 05/18/2010 Existing Permit Expiration Date: 03/31/2013		
Michael Wood Regional EHS Coordinator (910) 296-1909 1838 NC 11 & 903 Kenansville, NC 28349	Mr. Benny Ethridge, Jr. President Topaz Power Management Austin, TX 78746	Mark Shepherd Director EHS & Compliance (512) 314-8624 Topaz Power Management Austin, TX 78746			
Review Engineer: Rahul Thaker Review Engineer's Signature:		Date: December 5, 2011	Comments / Recommendations: Issue 05455/T16 Permit Issue Date: xx Permit Expiration Date: xx		

1. Purpose of Application

This permitting action is a renewal of an existing Title V permit pursuant to 2Q .0513.

The application to renew air permit (05455T12) was received on May 31, 2005, or at least nine months prior to the expiration date of this air permit (February 28, 2006). Thus, the application was timely filed and afforded application shield as per 15A NCAC 2Q .0512(b)(1). Thus, all terms and conditions of the current permit (05455T15) remain in effect until the above renewal application is denied or the renewal permit is issued.

Separately, an application to renew the Acid Rain permit was also received on May 31, 2005. This application was consolidated into the above Title V renewal application.

2. Facility Description

The facility is an electric power plant, fueled primarily with coal, although it is also permitted to burn fuel oils, natural gas and other fuels. Presently, the facility has been shut-downed and mothballed for a long-term storage. Last time it operated was in 1st quarter of 2009. Historically, it has been a stand-by source for power generation for Progress Energy Inc.

It needs to be emphasized here that this facility is not expected to resume operation until it obtains a permit to fire wood fuels. The permit application for firing wood fuels in the boilers is separately being processed by DAQ.

3. Permitting History

- 05455T09 - This initial Title V permit was issued on 3/1/01, using the provision in 15A NCAC 2Q .0513 Permit Renewal and Expiration. The expiration date for this initial Title V permit was 2/28/06.
- 05455T10 - This Title V permit revision was issued including Acid Rain permit on 12/5/01. It is presumed that DAQ had used the provision in 15A NCAC 2Q .0516 Significant Permit Modification.
- 05455T11 - This Title V permit was issued on 4/23/03 allowing burning of tire-derived fuel, using the provision in 15A NCAC 0523 Changes not Requiring Permit Revisions.
- 05455T12 - This Title V permit was issued on 6/2/04 including NOx SIP-Call requirement, using the provision in 15A NCAC 2Q .0515 Minor Permit Modifications.
- 05455T13 - This Title V permit was issued on 4/22/08 approving operation of MOBOTECH control equipment, using the provision in 15A NCAC 2Q .0501(c)(2).

The Permittee has submitted an application to renew Permit No. 05455T12 on a timely basis, so that an application shield pursuant to 15A NCAC 2Q .0512(b)(1) remains in effect. This permit 05455T13, thus, does not expire until the renewal permit has been issued or the request has been denied, and all terms and conditions of the permit shall remain in effect until the renewal permit has been issued or the request has been denied pursuant to 15A NCAC 2Q .0513(c).

- 05455T14 - This Title V permit was issued on 7/28/09 approving change in ownership, using the provision in 15A NCAC 2Q .0524 Ownership Change.

The Permittee has submitted an application to renew Permit No. 05455T12 on a timely basis, so that an application shield pursuant to 15A NCAC 2Q .0512(b)(1) remains in effect. This permit 05455T14, thus, does not expire until the renewal permit has been issued or the request has been denied, and all terms and conditions of the permit shall remain in effect until the renewal permit has been issued or the request has been denied pursuant to 15A NCAC 2Q .0513(c).

- 05455T15 - This Title V permit was issued on 5/18/10 including CAIR permit, using the provision in 15A NCAC 2Q .0516 Significant Permit Modification.

The Permittee has submitted an application to renew Permit No. 05455T12 on a timely basis, so that an application shield pursuant to 15A NCAC 2Q .0512(b)(1) remains in effect. This permit 05455T15, thus, does not expire until the renewal permit has been issued or the request has been denied, and all terms and conditions of the permit shall remain in effect until the renewal permit has been issued or the request has been denied pursuant to 15A NCAC 2Q .0513(c).

4. Statement of Compliance

Jim Moser of Fayetteville Regional Office had inspected the facility in 2011. His inspection report included, “at the time of inspection, June 9, 2011, Elizabeth Energy appeared to be operating in compliance with their permit No. 05455T15 issued May 18, 2010”.

5. Regulatory Review

The permitted sources are currently subject to the following regulations:

15A NCAC 2D .0501(e), Compliance with National Ambient Air Quality Standards
15A NCAC 2D .0503, Particulates from Fuel Burning Indirect Heat Exchangers
15A NCAC 2D .0515, Particulates from Miscellaneous Industrial Processes
15A NCAC 2D .0516, Sulfur Dioxide Emissions from Combustion Sources
15A NCAC 2D .0521, Control of Visible Emissions
15A NCAC 2D .0530, Prevention of Significant Deterioration
15A NCAC 2D .0614, Compliance Assurance Monitoring
15A NCAC 2D .2400, Clean Air Interstate Rules
15A NCAC 2Q .0402, Acid Rain Procedures
15A NCAC 2Q .0700, Toxic Air Pollutant Procedures

A regulatory review for these existing requirements will not be included in this permit review because none of these requirements are being amended in the revised permit through processing of this renewal application. Although, an explanation on renewal of Acid Rain permit portion of the Title V permit is included below.

The Permittee has submitted new application forms via designated representative (Dale Lebsack) to renew the existing Acid Rain permit on 11/8/11. Thus, the existing Acid Rain permit can be renewed for 5 years from the effective date of the acid rain renewal permit. The effective and expiration dates of renewed Acid Rain permit will be aligned with the effective and expiration dates of the renewed Title V permit.

As included in the current Acid Rain permit, the affected units are not subject to a NO_x emission limitation under 40 CFR Part 76 since they are not subject to an Acid Rain emissions limit for SO₂ under Phase I or Phase II of the CAA as specified in 40 CFR 76.1(a). The renewal application for Acid Rain permit does not change these conclusions.

6. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

NSPS

Not Applicable. The renewal application does not change this conclusion.

NESHAPS/MACT

40 CFR 63 Subpart DDDDD

As per the potential to emit emissions summary included in Section 8 below, presently, the facility can be deemed a major source of HAP emissions when firing coal in boilers.

EPA has promulgated “National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters” [40 CFR 63 Subpart DDDDD] at 76 FR 15608 on March 21, 2011. The effective date of this standard is May 20, 2011. However, EPA has delayed the effective date of the standard via 76 FR 28662, May 18, 2011.

This standard includes requirements for boilers firing solid fuels (coal, biomass), liquid fuels (oils) and gaseous fuels (natural gas). The boilers at the Elizabeth Energy facility can be deemed “industrial boilers” in the context of this stayed MACT standard. When EPA publishes in the FR the effective date of this rule, the applicability of the standard needs to be evaluated for the coal/oil/gas-fired boilers at the facility.

40 CFR 63 Subpart UUUUU

Separately, EPA has proposed “National Emission Standards for Hazardous Air Pollutants from Coal- and Oil-Fired Electric Utility Steam Generating Units” [40 CFR 63 Subpart UUUUU] at 76 FR 24976, May 3, 2011. This standard applies to coal- and oil-fired electric utility steam generating units (EGUs). The definitions of coal-fired electric utility steam generating unit and fossil fuel fired under this standard are as follows:

Coal-fired electric utility steam generating unit means an electric utility steam generating unit meeting the definition of “fossil fuel-fired” that burns coal or coal refuse either exclusively, in any combination together, or in any combination with other fuels in any amount.

Fossil fuel-fired means an electric utility steam generating unit (EGU) that is capable of combusting more than 73 MWe (250 million Btu/hr, MMBtu/hr) heat input (equivalent to 25 MWe output) of fossil fuels. To be “capable of combusting” fossil fuels, an EGU would need to have these fuels allowed in their permits and have the appropriate fuel handling facilities on-site (e.g., coal handling equipment, including coal storage area, belts and conveyers, pulverizers, etc.; oil storage facilities). In addition, fossil fuel-fired means any EGU that fired fossil fuels for more than 10.0 percent of the average annual heat input during the previous 3 calendar years or for more than 15.0 percent of the annual heat input during any one of those calendar years.

The heat input rate as permitted, when firing coal for each boiler, is 215 million Btu/hr, which is less than the above criteria of 250 million Btu/hr. Hence, these boilers are not “fossil fuel-fired” and thus, they are not “coal-fired electric steam generating units”. In brief, the boilers are not subject to the proposed MACT standard (UUUUU).

40 CFR 63 Subpart JJJJJ

It also needs to be stated here that the facility has submitted a separate PSD application (0900043.10A) to obtain approval for burning biomass in these boilers. Based on the potential to emit emissions summary included in this application, it appears that the emissions for single and aggregate HAPs on a facility-wide basis are less than 10 tons/yr and 25 tons/yr, respectively. Thus, the facility can be deemed an “area source” for HAPs. EPA has promulgated “National emission Standard for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers”[40 CFR 63 Subpart JJJJJ] at 76 FR 15554, March 21, 2011. The boilers (when firing coal, biomass, fuel oils, or natural gas) may be subject to this MACT standard. The applicability review for this MACT will be performed during the processing of PSD application.

PSD

The boilers at the facility are currently subject to PSD including BACT requirements for various pollutants. The renewal application does not change this conclusion.

112(r)

The facility is not subject to the requirements for any regulated pollutant under this Section of CAA.

CAM

In general, if the pollutant specific emission unit (PSEU) is subject to any non-exempt emission standard or limitation, its potential pre-control emission rate equals to or exceeds the major source threshold, and the emissions of that pollutant are controlled by an “active” control device, then the unit is subject to Compliance Assurance Monitoring (CAM) requirements at the time of renewing the Title V permit.

As per the current permit, the coal-fired boilers are subject to CAM requirements for PM10 emissions, controlled by baghouses. The permit includes a CAM plan for PM10 emissions for each of these units.

The potential pre-control emission rate for NOx and SO₂ exceeds 100 tons/yr each for each coal-fired boiler. The control device for NOx (ROFA) is considered a “passive” control in the context of Part 64 while the SO₂ control device (ROTAMIX) is considered “active” control. Moreover, the Permittee is required to operate CEMs for both NOx and SO₂ for complying with the existing requirements in 2D .0501(e) and .0530, as included in the current Title V permit.

As per this Part, if the PSEU is using a “passive” control device or if it uses a continuous compliance determination method (CCDM) such as CEMs, then the PSEU is exempt from requiring a CAM plan.

Thus, CAM requirements are not triggered for both NO_x and SO₂ for coal-fired boilers.

Finally, for none of the other pollutants, either the emission rate for an existing PSEU does not equal to or exceed the major source threshold or the unit is not using an “active” control device to comply with the applicable requirement.

7. Facility Wide Air Toxics

As per the current permit, the facility wide emissions of cadmium and nickel are each less than the applicable toxic pollutant emission rates (TPER) in 2Q .0711.

8. Facility Emissions Review

There is no change in emissions for this renewal application.

The following Table includes facility wide emissions summary. Actual emissions have been taken from the 2008 emission inventory while potential emissions data are copied from the previous application. As per the last inspection report (June 14, 2011), the facility had operated partially in the 1st quarter of 2009 and had not operated since that time. Hence, the first full year emission inventory is for year 2008.

Pollutant	Actual Emissions	Potential Emissions
	tons/year	tons/year
Particulate (TSP)	2.4	77
Particulate (PM-10)	1.4	71
Particulate (PM-2.5)	0.6	16.5
Carbon Monoxide	3.6	1,055
Nitrogen Oxides	43.8	746
Sulfur Dioxide	119.2	989
Volatile Organic Compounds	0.5	2
Single largest HAP (HCl)	6.6	139
Total HAP	6.8	> 139

9. Public Notice/EPA and Affected State(s) Review

Pursuant to 15A NCAC 2Q .0521, a notice of the renewed DRAFT Title V Permit shall be placed on DAQ website. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 2Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also pursuant to 2Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 2Q .0521 above.

10. Stipulation Review

The following changes were made to the Elizabethtown Energy, LLC Air Permit No. 05455T15:

Old Page No. [Air Quality Permit No. 05455T15]	New Page No. [Air Quality Permit No. 05455T16]	Condition No.	Changes
Entire Permit	Entire Permit	-	Replace the basis of applicable requirement for testing stipulation from 2D .2601 to 2Q .0508(f).

			Revise testing stipulation to state that the performance of testing shall be in accordance with General Condition JJ and not 2D .2601.
14	14	Section 2.1 B.2.c.ii.	Change the citation from 2D .2601 to 2D .2610.
15	15	Section 2.1 C.1.c.ii.	
18	17	Section 2.1 D.2.c.ii.	
19	18	Section 2.3	Include years in Table for allocations for SO ₂ .
21 through 30	22 through 30	Section 3	Include the latest set of General Conditions.

11. Conclusions, Comments, and Recommendations

- A professional engineer's seal was not required for this renewal.
- A consistency determination was not required for this renewal.
- The draft permit was emailed to the company on November 10, 2011. The company representative (Mark Shepherd) emailed on 11/17/11 with no significant comments.
- The draft permit was emailed to the regional office on November 10, 2011. The FRO (Jim Moser) emailed on 11/18/11 with no major comments.
- This permit engineer recommends issuing the revised permit.