

Air Permit Review

Region: Raleigh Regional Office
County: Halifax
NC Facility ID: 4200170
Inspector's Name: Will Wike
Date of Last Inspection: 06/25/2010
Compliance Code: 3 / Compliance - inspection

Permit Issue Date:

Facility Data			Permit Applicability (this application only)
Applicant (Facility's Name): Rosemary Power Station Facility Address: Rosemary Power Station 120 West 12th Street Roanoke Rapids, NC 27870 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:
Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	Application Number: 4200170.10A Date Received: 10/29/2010 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 06586/T15 Existing Permit Issue Date: 12/18/2009 Existing Permit Expiration Date: 07/31/2011
Joe Leslie Sr Environmental Compliance Coordinator (804) 273-3081 5000 Dominion Blvd Glen Allen, VA 23060	C. D. Holley VP Fossil and Hydro (804) 273-3592 5000 Dominion Road Glen Allen, VA 23060	Bill Scarpinato Environmental Consultant (804) 273-3019 5000 Dominion Road Glen Allen, VA 23060	
Review Engineer: Ed Martin Review Engineer's Signature: _____ Date: _____ DRAFT FOR PUBLIC NOTICE		Comments / Recommendations: Issue 06586/T16 Permit Issue Date: Permit Expiration Date:	

I. Purpose of Application:

This permit revision is to renew the existing Title V permit pursuant to 2Q .0513. The renewal application was received on October 29, 2010, or at least nine months prior to the expiration date. Therefore, the existing permit will not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

II. Permit Revisions Since Last Title V Permit Renewal

<u>Permit No.</u>	<u>Date Issued</u>	<u>Type of Change</u>
06586T12	8-25-06	last permit renewal
06586T13	5-7-07	significant modification to add CAM language
06586T14	3-27-09	administrative change to reference most recent stack test
06586T15	12-18-09	significant modification to renew acid rain section of permit

III. Permit Changes:

The following changes were made to the Rosemary Power Station Air Quality Permit No. 06586T15:

Page No.	Section	Change
Cover	--	Modified to reflect current permit number, issue and effective date, and associated application information.
throughout	--	Revised all testing conditions to delete reference to 15A NCAC 2D .2601 and reference 2Q .0508(f) as the citation.
3	Section 1	Removed "maximum permitted" from the "million Btu per hour maximum permitted heat input" description for the turbines and auxiliary boilers.
10	Section 2.2.A	Added language to specify that the maximum heat inputs for the turbines and auxiliary boilers is based on a 24-hour block average, midnight to midnight.
26	Section 3	Updated general conditions to version 3.3.

IV. Facility Description

Rosemary Power Station is a PSD-affected facility, providing power to a grid that serves North Carolina through Dominion Power. The facility consists of one natural gas/No. 2 oil-fired combined cycle General Electric (GE) Frame 7 combustion turbine (ID No. ES1-CT1), one natural gas/No. 2 oil-fired combined cycle GE Frame 6 combustion turbine (ID No. ES2-CT2), two auxiliary steam boilers (ID Nos. ES3-B1 and ES4-B2), one No. 2 fuel oil storage tank (ID No. ES6-STR1), an emergency diesel generator (ID No. ES-5), a recirculation cooling water system, and ancillary support equipment. Each combined-cycle combustion turbine includes an unfired heat recovery steam generator (HRSG). Steam produced by the HRSGs is routed to a common steam turbine (ST) for the additional generation of electricity. The auxiliary boilers are used to produce steam only for plant needs, mainly in the winter.

V. Actual Facility Emissions

The following are the actual facility emissions from most recent emission inventory (2009)

Pollutant	Actual Emissions (TPY)
CO	23.34
NO _x	88.72
PM (TSP)	5.12
PM-10	4.73
PM-2.5	4.73
SO ₂	12.96
VOC	1.82

VI. Summary of Changes to Emission Sources and Control Devices

There are no changes to emission sources or control devices.

VII. Emission and Regulatory Evaluation

The permit contains a 2D .0501(c) condition in Section 2.2.A which limits the heat input to the two turbines and two auxiliary boilers in order to comply with the NAAQS. The Raleigh Regional Office inspector for this facility, Will Wike, states in his last inspection report, that there is no time average for the heat input limits and that the facility in the past has exceeded the limits on an instantaneous basis (hourly), but not on

a daily, or longer, basis. RRO recommends that these limits be removed or that a time average be specified. The heat input limits have been in the permit for years and the documentation regarding modeling, including which pollutants were those that resulted in the limits, is unknown. In the past, the Environmental Management Commission has ruled that, notwithstanding a shorter NAAQS averaging time for a particular pollutant, a 24-hour averaging time is the shortest that can be imposed on a facility. Therefore, a 24-hour averaging time is being placed in the permit for these heat input limits. This will better define the limits for both the facility and the DAQ inspector. To avoid confusion, the emission source description in Section 1 is being changed to remove “maximum permitted” from the heat input description so that it does not appear that the Section 1 heat inputs are tied to, or subject to, the 2D .0501(c) condition heat input limits averaging time restriction.

VIII. Public Notice and EPA Review

Pursuant to 15A NCAC 2Q .0521, a notice of the draft Title V Operating Permit will be published on the DAQ website, to provide for a 30-day comment period with an opportunity for a public hearing. Copies of the draft (proposed) permit, review and public notice will be sent to EPA for their 45-day review, to persons on the Title V mailing list, to the Raleigh Regional Office, and to the Permittee for review.

IX. Other Requirements

PE Seal

A professional engineer’s seal was not required for this renewal since there are no new control devices or changes to any existing control devices.

Zoning

A consistency determination was not required for this renewal since the facility is not being expanded.

Fee Classification

The facility fee classification before and after this modification will remain as “Title V”.

X. Recommendations

after public notice