

April 21, 1997

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BUREAU OF AIR REGULATION

Mr. Scott M. Sheplak, P.E. Administrator, Title V Section Florida Department of Environmental Protection Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Re:

Additional Information Regarding Initial Title V Permit Application

File No. 1050217-001-AV

Mulberry Cogeneration Facility, Polk County

Dear Mr. Sheplak:

In response to your letter of January 24, 1997, the following information has been prepared that addresses the specific comments made regarding the initial Title V application for this project.

Combustion Turbine (Emission Unit 1)

- 1. The heat content for natural gas that was used to develop fuel usage and emission rates for this project was 950 Btu/cf. Based on the information requested in field 9 under Segment Information, the heat content should have been listed as 950 MMBtu per SCC instead of the 946 shown in the application. The heat content of 950 Btu/cf is consistent with the information provided in the air construction permit application for the project.
- Comment noted. Segment G, Emissions Unit Pollutants, has been revised to include water injection (code 28) as a method to control NOx emissions when firing oil.
- The carbon monoxide (CO) emission factor of 35 ppmvd is correct when firing distillate fuel oil (25 ppmvd refers to the emission limit when firing natural gas). Therefore, no revisions to the application's pages are warranted.
- 4. The SO₂ emission calculations for field 3 (Potential Emissions) under Section H, and field 4 (Equivalent Allowable Emissions) for sections A and B under Allowable Emissions are provided in the revised pages to this section.
- 5. The appropriate information regarding the continuous monitoring and recording of the flow rates of natural gas, fuel oil and water injection to the cogeneration turbine, and power output of the generators has been included in the revised Section J (Continuous Monitor Information).

Mr. Scott M. Sheplak, P.E. Page Two April 21, 1997

Secondary Boiler (Emission Unit 2)

 The SO₂ emission calculations for field 3 (Potential Emissions) under Section H, and field 4 (Equivalent Allowable Emissions) for sections A and B under Allowable Emissions are provided in the revised pages to this section.

Exempt, Unregulated, and Trivial Emissions Units and/or Activities

7. An updated attachment (MB-E03-B6R) is provided that classifies the emission units and/or activities into two categories - those that are "exempt" and those that are "unregulated". Trivial sources are not included in the list.

Miscellaneous

- 8. The facility uses non-halogenated solvents for cleaners and degreasers.
- The distillate fuel oil tank is a fixed roof and was constructed in 1994.

Also, we have attached additional revised pages to the application to indicate that:

- 1. The combustion turbine has a Unit ID no.:
- 2. There is a change in facility contact name;
- 3. Hydrazine and hydrochloric acid are not used at the facility and were eliminated from the fugitive emission list; and
- 4. The secondary boiler has dry-low NO_x burner design (control device code 024).

If you have any questions or need additional information, please give me a call at (941) 682-6338.

Sincerely,

Polk Power Partners, L.P. By: Polk Power G.P., Ing.

its General Partner

Allan Wade Smith

cc: W. Thomas, FDEP, SWD

K. Kosky, Golder

G. Johnson, CSW Energy

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:

Allan Wade Smith, General Manager

2. Owner/Authorized Representative or Responsible Official Mailing Address:

Organization/Firm: Polk Power G.P., Inc.

Street Address: 1125 US 98 South, Suite 100

City: Lakeland

State: FL

Zip Code:

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:

Telephone:

(941) 682-6338

Fax:

(941) 683-8257

- 4. Owner/Authorized Representative or Responsible Official Statement:
 - I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.

Signature

Date

4/22/9

^{*} Attach letter of authorization if not currently on file.

Scope of Application

This Application for Air Permit addresses the following emissions unit(s) at the facility. An Emissions Unit Information Section (a Section III of the form) must be included for each emissions unit listed.

Emissions Unit ID	Description of Emissions Unit	Permit Type

Elitissions	<u> </u>	Description of Emissions Chit	турс
Unit #	Unit ID		
1R	. 1	Combustion Turbine (CT) with HRSG	
2R		Secondary Heating Boiler	
3		Facility-wide Fugitive/De Minimis Emission	ns

See individual Emissions Unit (EU) sections for more detailed descriptions.

Multiple EU IDs indicated with an asterisk (*). Regulated EU indicated with an "R".

4. Professional Engineer's Statement:

- I, the undersigned, hereby certify, except as particularly noted herein*, that:
- (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
- (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here $[\chi]$ if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Manual 7. Gray 8 April 1997

Artiach any exception to certification statement.

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4/8/97

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: 413.6 Zone: 17 East (km): North (km): 3080.6 2. Facility Latitude/Longitude: Latitude (DD/MM/SS): Longitude: (DD/MM/SS): 81 / 52 / 39 27 / 50 / 56 3. Governmental 4. Facility Status 5. Facility Major 6. Facility SIC(s): Group SIC Code: Facility Code: Code: 4911 Α 49

7. Facility Comment (limit to 500 characters):

Facility consists of one combustion turbine (CT) with gases that exhaust through primary Heat Recovery Steam Generator (HRSG) stack and a portion of gases that can exhaust through secondary boiler stack. The CT is natural gas and oil-fired through Dec. 31, 1997. After Dec. 31, 1997, fuel oil can be used as backup fuel (720 hr/yr). Secondary boiler (duct burner) fires secondary HRSG with gases that exhaust through separate stack. Boiler fired by natural gas only.

Facility Contact

1. Name and Title of Facility Contact:

Dennis J. Oehring, Plant Manager

2. Facility Contact Mailing Address:

Organization/Firm: CSW Energy, Inc.

Street Address: 3600 Hwy 555

City: Bartow

State: FL

Zip Code: 33830-0824

3. Facility Contact Telephone Numbers:

Telephone: (941) 533-9073

Fax:

(941) 533-4092

ATTACHMENT MB-FI-E5

FUGITIVE EMISSIONS IDENTIFICATION

Many fugitive emissions at the plant site have been classified as "trivial activities" (as presented in EPA's memorandum, "White Paper for Streamlined Development of Part 70 Permit Applications," July 10, 1995). As a result, these activities are not included as part of this permit application. For example, emissions from general plant maintenance and upkeep activities at the facility would be considered fugitive emissions, but have been judged to be trivial since these activities are not conducted as part of a manufacturing process, not related to the source's primary business activity, and do not otherwise trigger a permit modification.

Fugitive emissions that may result from the operation or activities that are not trivial at the facility are addressed in Emission Unit No. 3. This emission unit contains information on fugitive emissions that occur on a facility-wide basis. A summary of potential fugitive emission sources at the facility is presented in the following sections.

Criteria and Precursor Air Pollutants

Mulberry Cogeneration has not identified fugitive emission of sulfur dioxide, nitrogen oxides, carbon monoxide, or lead compounds which would exceed the thresholds defined in the permit application instructions.

Volatile Organic Compounds (VOCs)

Fugitive emissions of VOCs include those resulting from the use of cleaners and solvents for maintenance and operation.

Fugitive HAPs Emissions

The following hazardous air pollutants are present on the facility property and are potential sources of fugitive HAPs emissions:

chlorine

toluene

methyl ethyl ketone

xylene

Chlorine - Present in three 1-ton containers and six 150 lb cylinders. Used for water treatment at the facility.

Methyl Ethyl Ketone, Toluene, Xylene - The facility maintains several containers of paint thinner and solvents (which may contain MEK, toluene, or xylene) for use in plant maintenance activities. These containers are kept closed and are stored in weather-tight buildings. These emissions as a whole are addressed in the VOC section (preceding page).

Regulated Toxic or Flammable Substances

The following regulated toxic or flammable substances are present at the Mulberry Cogeneration facility:

- chlorine
- acetylene
- methane (natural gas)

Acetylene - Present on the facility property in 100-lb cylinders which are used for plant maintenance (welding and cutting).

Methane - Is a primary component of natural gas. The facility has a natural gas pipeline which delivers fuel to the generating unit. This fuel delivery system is normally airtight, but does have safety valves which may open if an overpressure condition develops in the gas line.

Emissions	Unit Information Section	1	of	3

B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

Description of Emissions Unit Addressed in This Section (limit to 60 characters): Combustion Turbine (CT) with HRSG				
2. Emissions Unit Identific 1	ation Number: [] No Corr	esponding ID [] Unknown		
3. Emissions Unit Status Code: A	Code Circum Circ			
6. Emissions Unit Comment (limit to 500 characters): CT gases exhaust through a Heat Recovery Steam Generator (HRSG). HRSG services steam generator rated at 44 MW and furnishes steam to other facilities. The nameplate rating of the combustion turbine is 82 MW at 59° F. Portion of CT exhaust can be vented through secondary stack along with exhaust from gas-fired secondary boiler.				

Emissions Unit Control Equipment Information

A.

1. Description (limit to 200 characters):

Stage Combustion Technology - Dry Low NOx Burners (natural gas-firing)

2. Control Device or Method Code: 24

В.

1. Description (limit to 200 characters):

Water injection (oil-firing) - NOx Control

2. Control Device or Method Code: 28

C.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

Emissions	Unit	Information	Section	1	of	3	

F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment ____ of ____

<u> </u>					
1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):					
Internal Combustion Engines; Electric (Generation; Natural Gas Turbine				
<u> </u>					
· .					
2 Course Classification Code (CCC):					
2. Source Classification Code (SCC):	2-01-002-01				
3. SCC Units:					
Million Cubic Feet Burned	_				
4. Maximum Hourly Rate:	5. Maximum Annual Rate:				
1.013	8,877				
6. Estimated Annual Activity Factor:					
-					
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:				
O Melling Decrease GOO Marks					
9. Million Btu per SCC Unit:	050				
	950				
10. Segment Comment (limit to 200 char	racters):				
	o 1.013). Max Annual Rate = 8,877.4 (rounded to 8877).				
Max rate at 20°F. Max percent sulfur	Max rate at 20°F. Max percent sulfur: 1 grain/100 cf.				

G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
NOX CO VOC SO2 PM PM10	024	028	EL EL EL NS NS
	~		
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Effective: 03-21-96

Emissions Unit Information Section	1	of	3	
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H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

	_			
1. Pollutant Emitted: SO2				
2. Total Percent Efficiency of Control: %				
3. Potential Emissions: 95.1 lb/hour 416.5 tons/year				
4. Synthetically Limited? [x] Yes [] No				
5. Range of Estimated Fugitive/Other Emissions:				
[] 1 [] 2 [] 3totons/yr				
6. Emission Factor: 0.1 % S content oil				
Reference: See Comment				
7. Emissions Method Code:				
[x]0 []1 []2 []3 []4 []5	•			
8. Calculation of Emissions (limit to 600 characters):				
AC Permit Limit SO2 (lb/hr) at 59 °F = 50,043 lb oil/hr \times 0.001 lb S/lb oil \times 64 MW SO2/32 MW S \times 0.95 (SO2 fraction emitted) = 95.1; SO2 (TPY) = 95.1 lb/hr \times 8,760 hr/yr \times 1 ton/2,000 lb = 416.5 TPY				
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):				
Potential emissions based on base load operating conditions at 59 °F for oil-firing through Dec. 31, 1997. Emission Factor Reference: AC Permit Limit-BACT. On 1/1/98, oil-firing limited to 720 hr/yr.				

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1.	Basis for Allowable Emissions Code: OTHER
2.	Future Effective Date of Allowable Emissions:
3.	Requested Allowable Emissions and Units:
	0.1 %sulfur content
4.	Equivalent Allowable Emissions: 95.1 lb/hour 416.5 tons/year
5.	Method of Compliance (limit to 60 characters):
	Fuel Analysis (sulfur content)
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):
	Based on oil-firing. AC Permit Limit, AC53-211670, Specific Condition No.2. See poll. detail info., field 8, for emiss calc.

В.

1. Basis for Allowable Emissions Code: OTHER			•
2. Future Effective Date of Allowable Emissions:	1 Jan 1998		<i>y</i> .

- 3. Requested Allowable Emissions and Units:
 - 0.1 %sulfur content
- 4. Equivalent Allowable Emissions:

95.1 lb/hour

34.2 tons/year

5. Method of Compliance (limit to 60 characters):

Fuel Analysis (sulfur content)

6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

Based on oil-firing. AC Permit Limit, AC53-211670, Specific Condition No.2,3; tons/yr based on 720 hr fuel use. Emiss. = 95.4 lb/hr x 720 hr/2,000 lb = 34.2 TPY.

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Timin Timin To Commention Continu	1	- C	3
Emissions Unit Information Section		_ of	

Cont	inuous Monitoring System Continuou	s Monitor 1 of 7	
1.	Parameter Code: EM	2. Pollutant(s):	NOx
3.	CMS Requirement: [x] Rule []	Other	,
4.	Monitor Information: Monitor Manufacturer: Rosemount Model Number: 951C	Serial Number: 100195	
5.	Installation Date: 18 Dec 1995		
6.	Performance Specification Test Date:	27 Dec 1995	
7.	Continuous Monitor Comment (limit to	o 200 characters):	
	NSPS (40 CFR60 Subpart GG). Syster AC53-211670.	n installed in accordance with A	AC Permit,
Cont	inuous Monitoring System Continuou	us Monitor 2 of 7	
1.	Parameter Code: EM	2. Pollutant(s):	O2
3.	CMS Requirement: [x] Rule []	Other	
4.	Monitor Information: Monitor Manufacturer: Servomex Model Number: 1400 B 410000210	Serial Number: 1420 B/6	97
5.	Installation Date: 18 Dec 1995		
6.	Performance Specification Test Date:	27 Dec 1995	_
7.	Continuous Monitor Comment (limit to	o 200 characters):	_

	1		3
Emissions Unit Information Section		of	_

Cont	inuous Monitoring System Continuou	s Monitor 3 of 7
1.	Parameter Code:	2. Pollutant(s):
3.	CMS Requirement: [] Rule [x]	Other
4.	Monitor Information: Monitor Manufacturer: Rosemount Model Number: 1151 SMART	Serial Number: 1462844
5.	Installation Date: 10 Aug 1994	
6.	Performance Specification Test Date:	17 Dec 1996
7.	Continuous Monitor Comment (limit to	o 200 characters):
	Natural gas flow required by AC Perm	it. SN for low range; SN, high range - 1549634.
Cont	inuous Monitoring System Continuou	us Monitor 4 of 7
1.	Parameter Code:	2. Pollutant(s):
3	CMS Requirement: [] Rule [x]	Other
4.	Monitor Information: Monitor Manufacturer: Badger Meter, Model Number: PET 420/2	Inc. Serial Number: 15608285
5.	Installation Date: 01 Apr 1996	
6.	Performance Specification Test Date:	17 Dec 1996
7.	Continuous Monitor Comment (limit to	o 200 characters):
- 6	Fuel oil flow required by AC Permit.	

Emissions Unit Information Section	1	of	3

Cont	inuous Monitoring System Continuou	s Monitor 5 of 7
1.	Parameter Code:	2. Pollutant(s):
3.	CMS Requirement: [] Rule [x]	Other
4.	Monitor Information: Monitor Manufacturer: Scientific Colur Model Number: JEM 1	nbus Serial Number: 93111248
5.	Installation Date: 18 Jan 1994	
6.	Performance Specification Test Date:	20 Nov 1996
7.	Continuous Monitor Comment (limit to	200 characters):
	Power output - CT generator required meter - 93111249.	by AC Permit. SN - primary meter; SN, secondary
<u>Cont</u>	inuous Monitoring System Continuou	<u></u>
1.	Parameter Code:	2. Pollutant(s):
3.	CMS Requirement: [] Rule [X]	Other
4.	Monitor Information: Monitor Manufacturer: Scientific Colu	mbus
	Model Number: JEM 1	Serial Number: 93111246
5.	Installation Date: 18 Jan 1994	
6.	Performance Specification Test Date:	20 Nov 1996
7.	Continuous Monitor Comment (limit to	o 200 characters):
	Power output - steam turbine required by secondary meter - 93111247.	AC Permit. SN - primary meter; SN,

	1		3
Emissions Unit Information Section	•	of	•

<u>Cont</u>	inuous Monitoring System Continuou	s Monitor 7 of 7
1.	Parameter Code:	2. Pollutant(s):
3.	CMS Requirement: [] Rule [x]	Other
4.	Monitor Information: Monitor Manufacturer: Hoffer Flow Con Model Number: HTM-12-2-MT6	ntrols, Inc. Serial Number: 49091
5.	Installation Date: 10 Aug 1994	
6.	Performance Specification Test Date:	
7.	Continuous Monitor Comment (limit to	200 characters):
	Water injection when burning fuel oil i 49094, 49095, and 49096.	required by AC Permit. Add SN - 49092, 49093,
<u>Cont</u>	inuous Monitoring System Continuou	s Monitor of
1.	Parameter Code:	2. Pollutant(s):
3.	CMS Requirement: [] Rule []	Other
4.	Monitor Information: Monitor Manufacturer: Model Number:	Serial Number:
5.	Installation Date:	
6.	Performance Specification Test Date:	
7.	Continuous Monitor Comment (limit to	o 200 characters):

Emissions Unit Control Equipment Information

A.

1. Description (limit to 200 characters):

Dry Low Nox Burners

2. Control Device or Method Code: 24

В.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

Emissions Unit Details

1. Initial Startup Date: 10 Aug 1994	
2. Long-term Reserve Shutdown Date:	
Package Unit: Manufacturer: Foster Wheeler	Model Number:
4. Generator Nameplate Rating:	MW
5. Incinerator Information:	
Dwell Temperature:	°F
Dwell Time:	seconds °F
Incinerator Afterburner Temperature:	Γ

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:	99	mmBtu/hr	
2. Maximum Incineration Rate:	lbs/hr	tons/day	
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Operating Capacity Comment (limit to 20	0 characters):		
Maximum Design Heat Input Capacity; 0.1	042 MMcf/hr and 950 E	Stu/cf.	

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:				
. 24	hours/day	7	days/week	
52	weeks/yr	8,760	hours/yr	

G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
NOX CO	024		EL
SO2			EL
•			
			. •
•			

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: SO2	· ·	
2. Total Percent Efficiency of Co	ontrol:	%
3. Potential Emissions:	4.67 lb/hour	20.5 tons/year
4. Synthetically Limited? [x] Yes [] No	
5. Range of Estimated Fugitive/	Other Emissions:	
[]1 []2 [] 3	to tons/yr
6. Emission Factor:	0.1 % S content oil	· · · · · · · · · · · · · · · · · · ·
Reference: See Comment		
7. Emissions Method Code:		
[x]0 []1 []2 []3	[]4 []5
8. Calculation of Emissions (limi	t to 600 characters):	
	2 SO2/1 S = 4.37 + 0.3 =	action) x 95.1 lb/hr)] + 1 gr S/100 cf x 4.67 lb/hr; TPY = 4.67 lb/hr x 8,760
	. conditions at baseload	mit to 200 characters): ; includes portion of CT exhaust with e limited to 4320 hr/yr. Emis. Factor
•		

Emissions Unit Information	Section 2	of _	3
Allowable Emissions (Polluta	int identified	on front	t page)

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r	ı	•

1.	Basis for Allowable Emissions Code: OTHER			
2.	Future Effective Date of Allowable Emission	ns:	*.	
3.	Requested Allowable Emissions and Units:			
	0.1 % S content oil			
4.	Equivalent Allowable Emissions:	4.67	lb/hour	20.5 tons/year
5.	Method of Compliance (limit to 60 character	ers):		
	Fuel analysis for sulfur content			
6.	Pollutant Allowable Emissions Comment (I (limit to 200 characters):	Desc.	of Related O	perating Method/Mode)
	AC Permit Limit, AC53-211670, Specific Confield 8. for emis. calc.	dition	No.2,3. CT fi	ring oil. See poll. detail info.,

В.

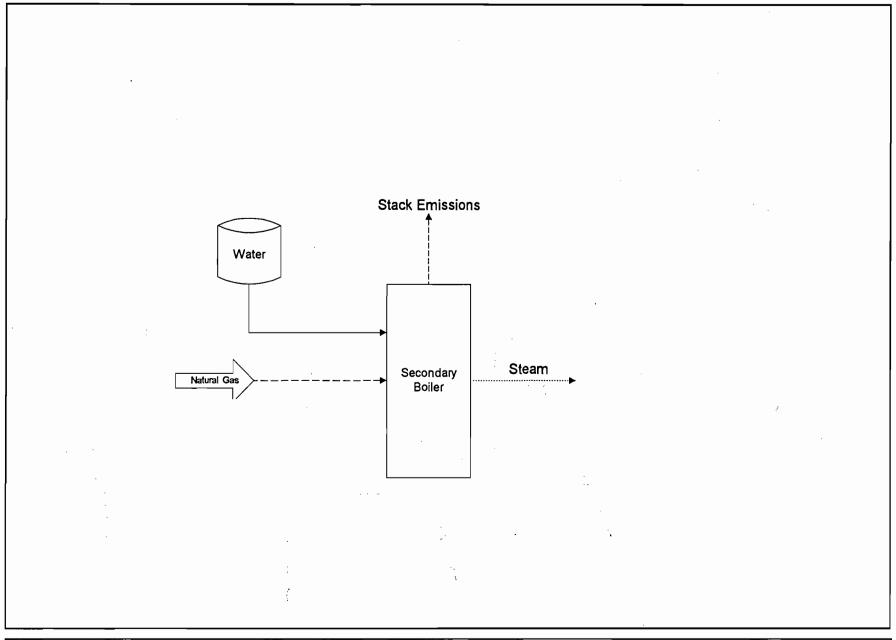
Basis for Allowable Emissions Code: OTHER				
2. Future Effective Date of Allowable Emissions: 1 Jan 1998				
3. Requested Allowable Emissions and Units:				
0.1 % S content oil				
4. Equivalent Allowable Emissions: 4.67 lb/hour 2.9 tons/year				
5. Method of Compliance (limit to 60 characters):				
Fuel analysis for sulfur content				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):				
AC Permit Limit, AC53-211670, Specific Condition No.2,3. CT firing oil. TPY = [oil-4.37 lb/hr x 720 hr/2,000 lb/ton] + [gas-1.3 TPY] = 2.9				

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Emissions Unit Information Section		of	

Secondary Heating Boiler

Cont	inuous Monitoring System Continuou	s Monitor 1 of 1					
1.	Parameter Code:	2. Pollutant(s):					
3.	CMS Requirement: [] Rule [x] Other						
4.	Monitor Information: Monitor Manufacturer: Rosemount Model Number: 1151 SMART	Serial Number: 1677591					
5.	Installation Date: 10 Aug 1994						
6.	Performance Specification Test Date:	17 Dec 1996					
7.	Continuous Monitor Comment (limit to	o 200 characters):					
	Natural gas flow required by AC Perm	it. Add SN - 1677590.					
Cont	inuous Monitoring System Continuou	us Monitor of					
1.	Parameter Code:	2. Pollutant(s):					
3.	CMS Requirement: [] Rule []	Other					
4.	Monitor Information: Monitor Manufacturer: Model Number:	Serial Number:					
5.	Installation Date:						
6.	Performance Specification Test Date:						
7.	Continuous Monitor Comment (limit to	o 200 characters):					
	·						



Process	Flow Legend
	Steam Flow
	Gas Flow
──	Solid / Liquid Flow

Attachment MB-E02-L1 Process Flow Diagram Mulberry Cogeneration Facility

Emission Unit: Secondary Boiler
Process Area: Overall Plant
Filename: MBCOGEN.VSD
Latest Revision Date: 5/26/96 11:17 AM



Engineering and Applied Sciences, Inc.

Attachment MB-E03-B6 General Emissions Unit Information for Unregulated Emissions Unit

Table 1. Mulberry Cogeneration Facility, Unregulated Emissions Unit

Area	Emission Unit Description	Status
Plant Service Building Offices/ Administrative		
	Sand Blasting/ Grit Blasting	ER/TR- related to plant maintenance and upkeep
	Flammable Storage Locker (chemicals, solvents, and oils)	UR
Water Treatment Area	•	
Water Treatment Building	Sample Recovery Tank (1,500 gal)	UR
	R O Water Treatment System	UR
	Chemical Day Tanks RO Antiscalant- 100 gal Sodium Sulfite - 100 gal R O Chemical Cleaning - 350 gal Anionic Flocculant (15 gal)	UR
	Caustic Tank (5,109 gal) (50% NAOH)	UR
	Service Water Pressure Tank (1,369 gal)	UR · · · · · · · · · · · · · · · · · · ·
	Service Water Pumps (2)	UR
	HRSG Boiler Chemical Injection Amine Tank (200 gal) Phosphate Tank (200 gal)	UR UR
Zero Discharge System	Brine Blowdown Surge Tank (8,400 gal)	UR
	Crystallizer System	UR/TR
Water Treatment Outside		
	Lime Storage Hopper (2,800 cu ft)	UR
	Soda Ash Storage Hopper (2,800 cu ft)	UR

Attachment MB-E03-B6 General Emissions Unit Information for Unregulated Emissions Unit

Table 1. Mulberry Cogeneration Facility, Unregulated Emissions Unit

Area	Emission Unit Description	Status
Cooling Towers		
	Main Cooling Tower	UR
	Inlet Air Cooling Tower	UR
	Circulating Water Pumps (4)	UR
	Evaporative Condenser Acid Tank (600 gal)	UR
	Cooling Tower Chemicals Dispersant Tank (400 gal) Corrosion Inhibitor Tank (400 gal) Cooling Tower Acid Tanks (2 - 600 gal)	UR
CT/HRSG & Steam Turbi	ine Area	
CTs	Lube Oil Vapor Extractor (Mist Elimination System)	UR
	Turbine/Generator lube Oil Vents	UR
	Turbine Bearing Oil Vents	UR
HRSG	STG Drain Flash Tank	UR .
	Various Pumps (sumps, condensate, etc.)	UR
	Miscellaneous Drains Tank	UR
	Boiler Feed Water Pumps	UR
ST	Lube Oil Drain Tank (2.000 gal)	UR
	Lube Oil Tank Storage Tank (2,000 gal)	UR
	Hydraulic System (90 gal)	UR
Fuel Oil System	Fuel Oil Tank (720,000 gal)	UR
	Fuel Oil Transfer Pump	UR

Attachment MB-E03-B6 General Emissions Unit Information for Unregulated Emissions Unit

Table 1. Mulberry Cogeneration Facility, Unregulated Emissions Unit

Area Emission Unit Description		Status
	Fuel Oil Unloading Pump	UR
	False Start Drain Tank (2,500 gal)	UR
	Fuel Oil Vents	UR
Auxillary Cooling Water Syste		
•	Auxiliary Cooling Water Exp Tank (1,657 gal)	UR
	Aux Cooling Water Pumps (2)	UR
	Cooling Water Surge Tank (100 gal)	UR

Note: ER= Exempt by Rule 62-210.300(3)(a); TR= Trivial; UR= Unregulated.

Florida Department of P f
Environmental Protection

TO:

Bill Thomas, SWD

FROM:

Bruce Mitchell

DATE:

December 18, 1996

SUBJECT:

Completeness Review of an Application Package for a Title V Operation Permit

Polk Power Partners, L.P., Mulberry Cogeneration: 1050217-001-AV

The Title V operating permit application package for the referenced facility is being processed in Tallahassee. The application was previously forwarded to your office for your files and future reference. Please have someone review the package for completeness and respond in writing by January 20, 1997, if you have any comments. Otherwise, no response is required. If there are any questions, please call the project engineer, Lennon Anderson, at 904/488-1344 or SC:278-1344. It is very important to verify the compliance statement regarding the facility. Since we do not have a readily effective means of determining compliance at the time the application was submitted, please advise if you know of any emissions unit(s) that were not in compliance at that time and provide supporting information. Also, do not write on the documents.

If there are any questions regarding this request, please call me or Scott Sheplak at the above number(s).

RBM/bm

cc: Jerry Kissel

Lorence anderson

Appendix H-1, Permit History/ID Number Changes

Polk Power Partners,
Mulberry Cogeneration Project

Facility ID No.: 1050217

Permit History (for tracking purposes):

E.U.

<u>ID No</u> -001	<u>Description</u> Combustion Turbine (CT) with	Permit No. AC53-211670/	<u>Issue Date</u> 11/24/92	Expiration Date 12/31/95	Extended Date 11/1/96	Revised Date(s) 8/3/94
	HRSG	PSD-FL-187				
-002	Secondary Boiler	AC53-211670/ PSD-FL-187	11/24/92	12/31/95	11/1/96	8/3/94

(if applicable) ID Number Changes (for tracking purposes):

From: Facility ID No.: 40TPA530217

To: Facility ID No.: 1050217

Notes:

1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.

2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}



Department of Environmental Protection

Lawton Chiles Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Virginia B. Wetherell Secretary

January 24, 1997

CERTIFIED MAIL - Return Receipt Requested

Mr. Allan Wade Smith General Manager Polk Power G.P., Inc 1125 U.S. 98 South, Suite 100 Lakeland, FL 33801

RE:

Request for Additional Information Regarding Initial Title V Permit Application

File No. 1050217-001-AV

Mulberry Cogeneration Facility, Polk County

Dear Mr. Smith:

Your initial Title V permit application for the Mulberry Cogeneration Facility was "timely and complete" for purposes of the initial Title V application submission (see Rules 62-213.420(1)(a)1. and (b)2., F.A.C.).

However, in order to continue processing your permit application, the Department will need the additional information below pursuant to Rule 62-213 420(1)(b)3., F.A.C. and Rule 62-4.070(1), F.A.C. The additional information requested is organized by topic. Should your response to any of the items below require new calculations, please submit the new calculation, assumptions, reference material and appropriate revised pages of the application form.

Combustion Turbine (Emissions Unit 1)

- 1. Please explain how 946 MMBtu per SCC Unit was obtained for field 9 under Segment (Process/Fuel) Information.
- 2. Under Section G, Emissions Unit Pollutants, the only control device listed is "024", burner design. According to the BACT determination, duct burner and water injection

Mr. Allan Wade Smith January 24, 1997 Page 2

would be the methods used to control NOx. Please explain why water injection (code 028) was not included and submit the appropriate information.

- 3. For carbon monoxide (CO) under Section H, Emissions Unit Pollutant Detail Information, the emission factor listed in field 6 is 35 ppmvd. However, permit Nos. PSD-FL-187/AC53-211670 lists 25 ppmvd as the limitation through 12/31/97 (see Specific Condition No. 2, Note (a)). Please explain how 35 ppmvd was obtained. If this is an error, please submit the revised appropriate application pages.
- 4. Please provide SO₂ calculations for field 3 (Potential Emissions) under Section H, and field 4 (Equivalent Allowable Emissions) for sections A and B under Allowable Emissions.
- 5. According to Specific Condition 6 of permits PSD-FL-187/AC53-211670, the flow rates of natural gas, fuel oil and water injection to the cogeneration turbine along with the power output of the generators are required to be metered and continuously recorded. Nothing under Section J (Continuous Monitor Information) indicates that the flows for natural gas, fuel oil, water injection and power output from the generators are continuously metered and recorded. Please submit the appropriate information.

Secondary Boiler (Emissions Unit 2)

6. Please provide SO₂ calculations for field 3 (Potential Emissions) under Section H, and field 4 (Equivalent Allowable Emissions) for sections A and B under Allowable Emissions.

Exempt, Unregulated, and Trivial Emissions Units and/or Activities

7. Currently, in order for an emissions unit and/activity to be 'exempt' in the Title V permit, the emissions unit and/or activity cannot exceed one or more of the emissions thresholds or have a unit-specific requirement (see Rule 62-213.430(6), F.A.C.). Also, the Department has issued guidance on emissions units and/or activities that are considered 'trivial' (see enclosed DARM-PER/V-15, revised March 15, 1996). These emissions units and/or activities no longer need to be included in Title V permit applications. Many of the emissions units and/or activities included in your attachment (MB-E03-B6) fall into this category. 'Trivial' emissions units and/or activities will not be included in the Title V permit. Please update your attachment (MB-E03-B6) and provide sufficient information to classify the emissions units and/or activities into two new categories - those that are 'exempt' and those that are 'unregulated.'

Mr. Allan Wade Smith January 24, 1997 Page 3

To properly update the attachment (MB-E03-B6) you need to consider the requirements of Rule 62-213.430(6), F.A.C. If the answer to any of these questions is yes, an emissions unit and/or activity cannot be 'exempt.'

- (1) Do any of the units or activities have a unit-specific applicable requirement?
- (2) Does each unit emit or have the potential to emit equal to or greater than:
 - 1,000 pounds/year of any hazardous air pollutant (HAP);
 - 2,500 pounds/year of total HAPs; and/or
 - 5 TPY if any other regulated air pollutant, i.e., volatile organic compound (VOC)?

Miscellaneous

- 8. What is the annual amount of solvents (in gallons) used in the cleaners/degreasers?
- 9. For the distillate fuel oil tank with storage capacity of 700,000 gallons, what kind of storage tank is it (i.e., internal floating roof, external floating roof, etc.)? When was the tank constructed?

Responsible Official (R.O.) Certification Statement: Rule 62-213.420, F.A.C., requires that all Title V permit applications must be certified by a responsible official. Due to the nature of the information requested above, your response should be certified by the responsible official. Please compete and submit a new R.O. certification statement page from the new long application form DEP form No. 62-210.900, effective March 21,1996 (enclosed).

Professional Engineer (P.E.) Certification Statement: Rule 62-4.050(3), F.A.C., requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. As a result, your response above should be certified by a professional engineer registered in the State of Florida. Please complete and submit a new P.E. certification statement page from the new long application form, DEP Form No. 62-210.900, effective March 21, 1996 (enclosed).

The Department must receive a response from you within 90 (ninety) days of receipt of this letter, unless you (the applicant) request additional time under Rule 62-213.420(1)(b)6., F.A.C. A copy of your response should be sent to Mr. Bill Thomas at the FDEP Southwest District Office, 3804 Coconut Palm Drive, Tampa, FL 33619-8218.

Mr. Allan Wade Smith January 24, 1997 Page 4

If you should have any questions, please call Lennon Anderson or me at (904) 488-1344.

Sincerely,

John C. Brown, Jr., P.E

Administrator Title V Section

JCB/la/ss

Enclosures

cc: Kennard F. Kosky, P.E., KBN Bill Thomas, SWD John Paul Jones, CSW Energy

SENDER: • Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • Print your name and address on the reverse of this for return this card to you. • Attach this form to the front of the mailpiece, or on the does not permit. • Write "Return Receipt Requested" on the mailpiece beloe. • The Return Receipt will show to whom the article was delivered.	he back if space 1. Addressee's Address w the article number. elivered and the date Consult postmaster for fee.
3. Article Addressed to: Mr. Allan Wade Smith General Manager Polk Power G.P., Inc. 1125 U.S. 98 So., Suite 100 Lakeland, Florida 33801	4a. Article Number Z 392 940 901 4b. Service Type Registered Insured COD Express Mail Return Receipt for Merchandise
5. Signature (Addressee) 6. Signature (Agent) PS Form 3811 , December 1991	7. Date of Delivery 8. Addressee's Address (Only if requested and fee is paid) 1992–323-323 S DOMESTIC RETURN RECEIPT

Z 392 940 901

~ -	No Insurance Con See Reverse) Sent to Undo Smith Street and No. 20 5 44	verage Provided sternational Mail
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}	Return Receipt Showing to Whom & Date Delivered Return Receipt Showing to Whom, Date, and Addressee's Address	
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Owner/Authorized Representative or Responsible Official

 Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Street Address:		1. Name and Title of Owner/Authorized Representative or Responsible Official:
Street Address: City: State: Zip Code: 3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: () - Fax: () - 4. Owner/Authorized Representative or Responsible Official Statement: I, the undersigned, am the owner or authorized representative* of the non-Title V so addressed in this Application for Air Permit or the responsible official, as defined in 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete that, to the best of my knowledge, any estimates of emissions reported in this applicate are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application with operated and maintained so as to comply with all applicable standards for control of pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the statutes of t		2. Owner/Authorized Representative or Responsible Official Mailing Address:
Street Address: City: State: Zip Code: 3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: () - Fax: () - 4. Owner/Authorized Representative or Responsible Official Statement: I, the undersigned, am the owner or authorized representative* of the non-Title V so addressed in this Application for Air Permit or the responsible official, as defined in 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete that, to the best of my knowledge, any estimates of emissions reported in this applicate are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application with operated and maintained so as to comply with all applicable standards for control of pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the statutes of t		
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Signature Date	Rule e and tion l be f.air	addressed in this Application for Air Permit or the responsible official, as defined in 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete that, to the best of my knowledge, any estimates of emissions reported in this applicate are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application with operated and maintained so as to comply with all applicable standards for control of pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granied by the Department, cannot be transferred without authorization fr Department, and I will promptly notify the Department upon sale or legal transfer of permitted emissions unit.

DEP Form No. 62-210.900(1) - Form

Effective: 3-21-96

^{*} Attach letter of authorization if not currently on file.

1.	Professional Engineer Statement:
	I, the undersigned, hereby certify, except as particularly noted herein*, that:
	(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
	(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.
	If the purpose of this application is to obtain a Title V source air operation permit (check here $[\]$ if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.
	If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.
	If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

* Attach any exception to certification statement.

Date

Signature

(seal)

DARM-PER/V-15 REVISED

TO:

District Air Program Administrators County Air Program Administrators Bureau of Air Regulation Engineers

FROM:

Howard L. Rhodes, Director

Division of Air Resources Management

DATE:

March 15, 1996

SUBJECT:

Revision to Trivial List of Activities at a

Title V Facility

This guidance replaces the February 12, 1996 Guidance, DARM-PER/V-15. The only change is the rule siting in text of document.

Attachment A of a July 3, 1995 Environmental Protection Agency (EPA) memorandum, "Initial Operating Permit Application Compliance Certification Policy," commonly called the White Paper, attached, comprises a listing of trivial activities.

With one exception, Title V permits will not require that these activities be listed in the Title V permit applications or the Title V permits. These activities are treated as if they emit no air pollutants.

The EPA listing conditionally includes painting under the category of plant maintenance and upkeep activities (page 1) as a trivial activity. If painting activities at a Title V source in Florida result in emissions that are below the thresholds for exemption in Rule 62-213.430(6)(b), F.A.C., they may be included in the application as exemptible activities. Otherwise, they should be listed, but not quantified, as unregulated activities, provided the painting activities are not subject to an applicable requirement. If the painting activities result in emissions that trigger applicable requirements, they must be reported and quantified.

HLR/jb/k

Attachment

ws or has reason to believe would be emitted in an unt equal to or greater than:

- a. 5.0 tons per year for carbon monoxide, nitrogen les, particulate matter, sulfur dioxide, and volatile mic compounds; or
- b. 500 pounds per year for lead and lead compounds ressed as lead.
- 4. Each Title V source that emits or has the intial to emit any hazardous air pollutant or total irdous air pollutants in a major amount as set forth Rule 62-213.(3)(c)1., F.A.C., shall identify, for each siens unit, each such pollutant which the applicant is or has reason to believe would be emitted in an int equal to or greater than:
- a. 1,000 pounds per year for each hazardous air utant.
- b. 2,500 pounds per year for total hazardous air utants.
- 5. Title V sources which are also subject to the ral Acid Rain Program shall report all emissions of ur dioxide and nitrogen oxides from any acid rain in accordance with this subsection or the reporting irements of the Federal Acid Rain Program, whichever more stringent.
 - (d) Process and operating information;
 - (e) Control equipment information;
 - (f) Calculations;
- (g) Identification of all applicable requirements test methods;
- (h) Limitations on source operation affecting sions:
 - (i) Proposed alternate methods of operation;
 - (j) Compliance statement;
- (k) Compliance schedule and methodology, if icable;
 - (1) Reporting and recordkeeping requirements;
- (m) A list of emissions units or activities for the exemption is requested because of size or fuction rate and any information needed to demonstrate

that the units or activities qualify for exemption under the provisions of Rule 62-213.430(6), F.A.C.

(4) Certification by Responsible Official. In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to this chapter shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Specific Authority: 403.061, 403.0872, F.S. Law Implemented: 403.061, 403.0872, F.S. History: New 11-28-93; Amended 4-17-94; Formerly 17-213.420; Amended 11-23-94, 4-2-95, 10-11-95, 3-13-96, 3-20-96.

62-213.430 Permit Issuance, Renewal, and Revision.

- (1) Action on Application. Except for those applications submitted pursuant to Rule 62-213.420(1)(a)1., F.A.C., the Department shall issue a draft permit or a determination that the requested permit be denied within 90 days after receipt of the latest of: the application; the last item of information requested pursuant to Rule 62-213.420(1)(b), F.A.C.; or, a written request to process the application without the requested information. The Department shall issue a permit, permit revision or renewal only after all of the following conditions have been met:
- (a) The applicant has submitted a complete application, properly certified by a responsible official as required by Rule 62-213.420(4), F.Λ.C., and either all corrected and supplemental information requested or a written request to process the application without such information pursuant to Rule 62-213.420(1)(b) 3. and 4., F.Λ.C.;

- (b) The Department and the applicant have complied with the requirements for notice and public participation described in Rules 62-103.150 and 62-210.350, F.A.C.;
- (c) The Department has complied with the requirements for notifying and responding to affected states and approved local air programs pursuant to Rule 62-213.450(2) and (3), F.A.C.;
- (d) The Department has provided EPA with a copy of the draft permit, proposed permit and any notices required under Rule 62-213.450(1) and (2), F.A.C., and has not received written EPA objection to issuance of the permit within the time period specified in Rule 62-213.450(4). If the Department receives timely EPA objection, the Department shall not take final action until the Department receives written notice that the objection is resolved or withdrawn;
- (c) The Department has provided a statement to EPA setting fouth the basis for the draft permit conditions, including references to the applicable statutory or regulatory provisions.
- (2) Permit Denial. If the Department proposes to deny the permit application, the Department shall provide the applicant an explanation of the denial in accordance with Rule 62-4.070(6), F.A.C.
- (3) Permit Renewal and Expiration. Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) and 62-213.420(3), F.A.C. Unless a Title V source submits a timely application for permit renewal in accordance with the requirements of Rule 62-4.090(1), F.A.C., the existing permit shall expire and the source's right to operate shall terminate. .
- (4) Permit Revision Procedures. Permit revisions shall meet all requirements of this chapter, including those for content of applications, public participation, review by approved local air programs and affected States, and review by EPA, as they apply to permit

- issuance and permit renewal, except that permit revisions for those activities implemented pursuant to Rule 62-213.412, F.A.C., need not meet the requirements of Rule 62-213.430(1)(b), F.A.C. The Department shall require permit revision in accordance with the provisions of Rule 62-4.080, F.A.C., and 40 CFR 70.7(f), whenever any source becomes subject to any condition listed at 40 CFR 70.7(f)(1), hereby adopted and incorporated by reference.
- (5) EPA Recommended Actions. Within 90 days after receipt of notification from EPA that cause exists to modify, suspend, or revoke a permit, the Department shall investigate and determine whether cause exists pursuant to 40 CFR 70.7(f)(1), hereby adopted and incorporated by reference, and shall forward the determination to EPA. If cause exists, the Department shall proceed according to the requirements of Rule 62-4.080 or 62-4.100, F.A.C., and 40 CFR 70.7([) to modify, suspend, or revoke the permit.
- (6) Exemption of Emissions Units or Pollutant-Emitting Activities.
- (a) All requests for exemption of emissions units or activities made pursuant to Rule 62-213.420(3)(m), F.A.C., shall be processed in conjunction with the permit, permit renewal or permit revision application submitted pursuant to this chapter. Exemptions shall be approved by the Department consistent with the provisions of Rule 62-4.040(1)(b), F.A.C. Emissions units or activities which are added to a Title V source after issuance of a permit under this chapter shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify for exemption from permitting pursuant to this rule.
- (b) No exemption shall be granted to any emissions unit or activity if:
- 1. Such unit or activity would be subject to any unit-specific applicable requirement;

- 2. Such unit or activity, in combination with other and activities proposed for exemption, would cause acility to exceed any major source threshold(s) as ed in Rule 62-213.420(3)(c)1., F.A.C., unless it is wledged in the permit application that such units or ities would cause the facility to exceed such hold(s); or
- 3. Such unit or activity would emit or have the tial to emit:
- a. 500 pounds per year or more of lead and lead ands expressed as lead;
- b. 1,000 pounds per year or more of any hazardous ollutant:
- c. 2,500 pounds per year or more of total hazardous -ollutants; or
- d. 5.0 tons per year or more of any other regulated mant.

fic Authority: 403.061, 403.087, E.S. mplemented: 403.031, 403.061, 403.087, 403.0872,

ory: New 11-28-93, Formerly 17-213.430; Amended 1-94, 3-13-96, 3-20-96.

62-213.440 Paymit Content.

(1) Standard Permit Requirements. Each permit ed under this chapter shall incorporate all icable requirements for the Title V source and for method of operation proposed by the applicant and oved by the Department. Each such permit shall ide all emission limitations and standards, including coperational requirements and limitations that re compliance with all applicable requirements, with tion to the Department's rule authority for each term ondition, and identification of any difference in from the applicable requirement upon which the term undition is based. Emissions units or pollutantting activities within a Title V source exempted by 62-210,300(3), F.A.C., or by specific exemption

- granted by the Department consistent with Rule 62-4.040(1)(b), F.A.C., shall be identified.
- (a) Permit Duration. Permits for sources subject to the Federal Acid Rain Program shall be issued for terms of five years. Operation permits for Title V sources may not be extended as provided in Rule 62-4.000(3), F.A.C., if such extension will result in a permit term greater than five years.
- (b) Monitoring and Related Recordkeeping and Reporting Requirements.
- 1. Each permit shall specify the following requirements with respect to monitoring:
- a. Emissions monitoring and analysis procedures or test methods specified by applicable requirements;
- b. Where the applicable requirement does not specify a method for periodic testing or instrumental or noninstrumental monitoring, periodic monitoring sufficient to yield reliable data and demonstrate compliance with the permit. Such monitoring requirements shall assure use of recordkeeping terms, test methods. units, averaging periods, and other statistical conventions consistent with the applicable requirement; and
- c. Requirements concerning the use, maintenance, and installation of monitoring equipment or methods.
- 2. The permit shall incorporate all applicable recordkeeping requirements including:
- a. Records of monitoring information that specify the date, place, and time of sampling or measurement and the operating conditions at the time of sampling or measurement, the date(s) analyses were performed, the ... company or entity that performed the analyses, the analytical techniques or methods used, and the results of such analyses;
- b. Retention of records of all monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original

ATTACHMENT A

LIST OF ACTIVITIES THAT MAY BE TREATED AS "TRIVIAL"

The following types of activities and emissions units may be presumptively omitted from part 70 permit applications. Certain of these listed activities include qualifying statements intended to exclude many similar activities.

Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.

Air-conditioning units used for human comfort that do not have applicable requirements under title VI of the Act.

Ventilating units used for human comfort that do not exhaust air poliutants into the ambient air from any manufacturing/industrial or commercial process.

Non-commercial food preparation.

Consumer use of office equipment and products, not including printers or businesses primarily involved in photographic reproduction.

Janitonal services and consumer use of janitonal products.

Internal combustion engines used for landscaping purposes.

Laundry activities, except for dry-cleaning and steam boilers.

Bathroom/toilet vent emissions.

Emergency (packup) electrical generators at residential locations.

Tobacco smolting rooms and areas.

Blacksmith forges.

Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as pair of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification.

Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if

Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.

Portable electrical generators that can be moved by hand from one location to another.

Hand-held equipment for buffing, polishing, curting, drilling, sawing, grinding, turning or machining wood, metal or plastic.

Brazing, soldering and welding equipment, and cutting torches related to manufacturing and construction activities that do not result in emission of HAP metals.

Air compressors and pneumatically operated equipment, including hand tools.

Batteries and battery charging stations, except at battery manufacturing plants.

Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP.7

Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.

Equipment used to mix and package, soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.

Drop hammers or invarable presses for forging or metalworking.

Equipment used exclusively to sizughter animals, but not including other equipment at sizughterhouses, such as rendering cookers, bollers, heating plants, incluerators, and electrical power generating equipment.

Vents from continuous emissions monitors and other analyzers.

otherwise required.

[&]quot;Moved by hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.

Brazing, soldering and welding equipment, and outling torones related to manufacturing and construction activities that emit HAP metals are more appropriate for treatment as insignificant activities based on size or production level thresholds. Brazing; soldering, welding and outling torones directly related to plant maintenance and upkeep and repair or maintenance shop activities that emit HAP metals are treated as trivial and listed separately in this appendix.

Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.

Natural-gas pressure regulator vents, excluding venting at oil and gas production facilities.

人名巴西格兰克姓氏 网络人名英格克

Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.

Equipment used for surface coating, painting, dipping or spraying operations, except those that will emit VOC or HAP.

CO, lasers, used only on metals and other materials which do not emit HAP in the process.

Consumer use of paper trimmers/binders.

Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.

Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants.

Laser trimmers using dust collection to prevent fugitive emissions.

Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents.

Routine calibration and maintenance of laboratory equipment or other analytical instruments.

Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.

Hydrzulic and hydrostatic testing equipment

Environmental chambers not using hazzardous air pollutant (FLAP) gasses.

Shock chambers

Humidity chambers.

Solar simulators.

Fugitive emission related to movement of passenger vehicles, provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.

Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.

Process water filtration systems and demineralizes.

Demineralized water tanks and demineralizer vents.

Boiler water treatment operations, not including cooling towers.

Gaygen scavenging (de-zeration) of water.

Ozone generators.

Fire suppression systems.

Emergency road flares.

Steam vents and safety relief valves.

Steam leaks.

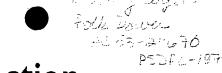
Steam cleaning operations.

Steam sterilizers.

191917-01 / 0025001



Department of Environmental Protection



Lawton Chiles Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

BEST AVAILABLE COPY

Virginia B. Wetherell Secretary

August 3, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. William R. Malenius Polk Power Partners 23293 South Pointe Drive Laguna Hills, CA 92653

Dear Mr. Malenius:

Re: Amendment to Construction Permit
AC53-211670 (PSD-FL-187)
Custom Fuel Monitoring Schedule
Mulberry Cogeneration Project

This is in response to your March 7, 1994, letter, requesting a Custom Fuel Monitoring Schedule for sulfur at the subject facility. The permit amendment fee was received on June 28, 1994. The facility is required to comply with Section 60.334(b) of Subpart GG of the New Source Performance Standards, which states that sources may apply for a custom fuel monitoring schedule. Therefore, the permit specific conditions are amended as follows:

New Specific Condition No. 10

A custom fuel monitoring schedule shall be followed for natural gas fired at this facility, as follows:

Custom Fuel Monitoring Schedule for Natural Gas

- 1. Monitoring of fuel nitrogen content shall not be required since natural gas is the only fuel being fired in the gas turbines.
- Sulfur Monitoring
 - a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are ASTM D1072-80, ASTM D3031-81, ASTM D3246-81, and ASTM D4084-82 as referenced in 40 CFR 60.335(b)(2).
 - b. This custom fuel monitoring schedule shall become effective on the date this permit becomes valid. Effective the date of this custom schedule, sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Mr. William R. Malenius Polk Power Partners Page Two

indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters. If monitoring data is provided by the applicant which demonstrates consistent compliance with the requirements herein, the applicant may begin monitoring as per the requirements of 2(c).

- c. If after the monitoring required in item 2(b) above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample analysis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.
- d. Should any sulfur analysis as required in items 2(b) or 2(c) above indicate noncompliance with 40 CFR 60.333, the owner or operator shall notify the Department of such excess emissions and the custom schedule shall be re-examined. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
- 3. If there is a change in fuel supply, the owner or operator must notify the Department of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
- 4. Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of three years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

Attachments to be Incorporated

KBN letter received March 9, 1994. (Permit Amendment Fee Received June 28, 1994)

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF PERMIT

In the matter of an Application for Permit by:

DEP File No. AC53-211670 PSD-FL-187 Polk County

Mr. William R. Malenius Polk Power Partners 23293 South Pointe Drive Laguna Hills, CA 92653

Enclosed is Permit Number AC53-211670 to construct a cogeneration facility at County Road 555 approximately 3.7 miles southwest of Bartow, Polk County, Florida, issued pursuant to Section (s) 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

C. H. Fancy, P.E., Chief Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, FL 32399-2400 904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on felt 2/ 1994 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to \$120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Copies furnished to:

W. Thomas, SWD D. Martin, Polk Co. J. Harper, EPA

J. Bunyak, NPS K. Kosky, KBN D. Roberts, HBGS

Final Determination

Polk Power Partners Mulberry Cogeneration Project Polk County, Florida

> Permit No. AC 53-211670 PSD-FL-187

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Department of Environmental Protection Division of Air Resources Management Bureau of Air Regulation

February 9, 1994

Final Determination

The Revised Technical Evaluation and Preliminary Determination for the permit to construct a cogeneration facility approximately 3.7 miles southwest of Bartow in Polk County, Florida, was distributed on December 29, 1994. The Notice of Intent to Issue was published in the Polk County Democrat on January 5, 1994. Copies of the evaluation were available for public inspection at the Department's Tallahassee and Tampa offices.

Comments were received from the applicant on January 28, 1994 requesting minor modifications of certain specific conditions. The Department made the following changes to the permit:

Specific Condition No. 2 - A statement was added clarifying that if the NO $_{\rm X}$ limit of 15 ppmvd is achieved prior to 12/31/97, the CO emission limit prior to 12/31/97 will be based on 25 ppmvd.

<u>Specific Condition No. 4</u> - A statement was added to emphasize a rule requirement that sampling ports and access platforms be provided.

<u>BACT Determination</u> - Minor revisions were made to the last paragraph of the NO_X section to clarify that SCR or another technology may be required if the emission limits are not achieved.

The final action of the Department will be to issue construction permit AC53-211670 (PSD-FL-187) as modified.



Florida Department of **Environmental Protection**

Twin Towers Office Building 2600 Blair Stone Road Lawton Chiles Tallahassee, Florida 32399-2400 Governor

Virginia B. Wetherell Secretary

PERMITTEE: Polk Power Partners, L.P. 23293 South Pointe Drive

Laguna Hills, CA 92653

Permit Number: AC 53-211670 PSD-FL-187

Expiration Date: December 31, 1995

County: Polk

Latitude/Longitude: 27°50'56"N

81°52'39"W

Project: Mulberry Cogeneration

Project

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-212 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and specifically described as follows:

For the construction of a 126 Megawatt cogeneration unit. facility will be located off County Road 555 approximately 3.7 miles southwest of Bartow in Polk County, Florida. UTM coordinates of the site are: Zone 17, 413.6 km E and 3080.6 km N.

Particulate emissions shall be controlled by using clean fuels and good combustion practices. CO emissions shall be controlled by proper combustion techniques. NO_X emissions shall be initially controlled by water injection and Low NOX Burners. Future control technology for NOx will depend on whether the Low NOx Burners can achieve the levels specified by this permit.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

- DER letter dated May 5, 1992.
- KBN letter dated April 15, 1992.
- KBN letter dated June 2, 1992. EPA letter dated July 1, 1992.
- KBN submittal dated July 8, 1992.
- KBN letter dated July 29, 1992.
- KBN letter dated August 12, 1992.
- DER letter dated August 13, 1992. 8.
- KBN letter dated August 26, 1992. 9.
- KBN letter dated October 12, 1992.
- KBN letter dated November 2, 1992.

Page 1 of 8

Permit Number: AC 53-211670

PSD-FL-187

Expiration Date: December 31, 1995

Attachments are listed below: (Cont'd)

- 12. EPA letter dated December 16, 1992.
 13. KBN letter dated February 19, 1993.
- 14. DER letter dated March 19, 1993.
- 15. KBN letter dated August 17, 1993.
- 16. DER letter dated August 19, 1993.
- 17. KBN letter dated August 27, 1993.
- 18. HBG&S letter dated November 16, 1993.
- DEP letter dated November 18, 1993. 19.
- 20. HBG&S letter dated December 20, 1993.
- 21. PPP letter dated December 17, 1993.
- 22. GECC letter dated December 16, 1993.
- 23. HBG&S letter dated December 22, 1993.
- 24. KBN letter dated January 28, 1994.

GENERAL CONDITIONS:

- terms, conditions, requirements, limitations, restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

Permit Number: AC 53-211670

PSD-FL-187

Expiration Date: December 31, 1995

GENERAL CONDITIONS:

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - a. Have access to and copy any records that must be kept under the conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of non-compliance; and

Permit Number: AC 53-211670

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Expiration Date: December 31, 1995

GENERAL CONDITIONS:

b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

- 9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- 10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- 11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:

 - (x) Determination of Prevention of Significant Deterioration (PSD)
 - (x) Compliance with New Source Performance Standards (NSPS)

Permit Number: AC 53-211670

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Expiration Date: December 31, 1995

GENERAL CONDITIONS:

The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- c. Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the dates analyses were performed;
 - the person responsible for performing the analyses;
 the analytical techniques or methods used; and

 - the results of such analyses.
- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

1. This permit supersedes the initial permit issued on November 24, 1992. Unless otherwise indicated, the construction and operation of the subject facilities shall be in accordance with the capacities and specifications stated in the application and subsequent submittals by the permittee.

PERMITTEE:

Polk Power Partners, L.P.

Permit Number: AC 53

AC 53-211670

PSD-FL-187

Expiration Date: December 31, 1995

SPECIFIC CONDITIONS:

2. Emissions from the facility shall not exceed the limits listed below based on operation at 59°F and 60% relative humidity (ISO conditions):

Pollu-					Throug	gh 12/31/97	After 12	/31/97 (See notes)
tant	Sou	urce		Fuel	lbs/h:	r tons/yr	lbs/hr	tons/yr
NOx	HRSG	Stack	1	Gas	87.8	384.5	52.7	230.7
	HRSG	Stack	2	Gas	19.9	87.1	18.3	80.0
	HRSG	Stack	1	Oil	164.0	718.2	164.0	59.0
	HRSG	Stack	2	Oil	23.4	102.4	23.4	8.4
so2	HRSG	Stack	1	Oil	0.1%	Sulfur Max.	0.1%	Sulfur Max.
~	HRSG	Stack	2	Oil	0.1%	Sulfur Max.	0.1%	Sulfur Max.
VE	HRSG	Stack	1	Gas	10%	Opacity	10%	Opacity
	HRSG	Stack	2	Gas		Opacity		Opacity
	HRSG	Stack	1	Oil		Opacity	. 20%	Opacity
	HRSG	Stack	2	Oil	20%	Opacity		Opacity
voc	HRSG	Stack	1	Oil	9.2	40.4		
. CO	HRSG	Stack	1	Gas	42.9	187.8	53.0	232.0
	HRSG	Stack	2	Gas	11.9	52.0	12.6	55.2
	HRSG	Stack	1	Oil	75.3	329.9	75.3	27.1
	HRSG	Stack	2	Oil	13.4	58.5	13.4	4.8

Notes: (1) NO_X limits for turbine after 12/31/97 based on 15 ppmvd (gas firing) achievable by 4/30/97 but not effective until after 12/31/97.

- (2) CO limits for turbine after 12/31/97 based on 25 ppmvd (gas firing). Should the NO $_{\rm X}$ emission limit for the turbine based on 15 ppmvd (gas firing) be achieved prior to 12/31/97, the CO emission limit prior to 12/31/97 will be based on 25 ppmvd.
- (3) Opacity limit will allow one 6-minute period per hour of not more than 27% opacity.
- (4) HRSG Stack 1 = primary; HRSG Stack 2 = secondary (portion of exhaust from combustion turbine is vented through secondary stack along with exhaust from gas-fired duct burner).
- 3. The cogeneration facility shall be permitted to fire natural gas and No. 2 fuel oil until December 31, 1997, after which the primary fuel will be natural gas. Fuel consumption rates (based on operation at 20°F) and hours of operation for the turbine and duct burner shall not exceed those listed below:

	1	Natural Gas		_	No. 2 Fuel Oil			
	M ft3/hr	MM ft3/yr	hrs/yr	M lb/hr	MM lb/yr	hrs/yr		
Turbine	1013.4	8877.4	8760	55.6	379.9	6833(1)		
Duct Burner	104.2	450.2(2)	8760	0	. 0	0		

Permit Number: AC 53-211670

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Expiration Date: December 31, 1995

SPECIFIC CONDITIONS:

(1) After December 31, 1997, fuel oil can be used permanently as backup fuel for no more than 720 hours per year.

(2) Based on maximum firing rate for 4,320 hours per year.

4. Before this construction permit expires, the cogeneration facility stack and secondary HRSG stack shall be sampled or tested as applicable according to the emission limits in Specific Condition No. 2. Annual compliance tests shall be conducted each year thereafter. Compliance tests shall be run at 95% to 100% of the maximum capacity achievable for the average ambient temperature during the compliance tests. The turbine manufacturer's capacity vs. temperature (ambient) curve shall be included with the compliance test results. Tests shall be conducted using the following reference methods:

NOx: EPA Method 20

SO2: Fuel supplier's sulfur analysis

VE: EPA Method 9 CO: EPA Method 10 VOC: EPA Method 25A

The Permittee shall provide sampling ports in the air pollution control equipment outlet duct or stack and shall provide access to the sampling ports in accordance with Rule 17-297, F.A.C. Detailed drawings of the stacks showing testing facilities and sampling port locations as required by Rule 17-297.345 shall be submitted to the Southwest District Office for approval at least 60 days prior to construction of the duct and stack.

- 5. The Southwest District office shall be notified at least 30 days prior to the compliance tests. Compliance test results shall be submitted to the Southwest District office in Tampa and the Bureau of Air Regulation office in Tallahassee (third annual compliance test only) within 45 days after completion of the tests. Sampling facilities, methods, and reporting shall be in accordance with F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A.
- 6. A continuous operations monitoring system shall be installed, operated, and maintained in accordance with 40 CFR 60.334. The natural gas, fuel oil and water injection flows to the cogeneration turbine along with the power output of the generators shall be metered and continuously recorded. The data shall be logged daily and maintained so that it can be provided to DEP upon request.
- 7. The permittee shall have the option of including, in the initial construction, adequate modules and other provisions necessary for future installation of state-of-the-art catalytic abatement or equivalent NOx control systems. The Bureau of Air Regulation shall, if NO_X emission limits are not met, review the

PERMITTEE:

Polk Power Partners, L.P.

Permit Number: AC 53-211670

PSD-FL-187

Expiration Date: December 31, 1995

SPECIFIC CONDITIONS:

need for making a revised determination of Best Available Control Technology. If test results show that it is unlikely that NO_{X} limits can be met, a revised BACT determination shall be made. The Department may revise the BACT determination to require installation of such technology if so indicated by the revised BACT cost/benefit analysis. The retrofit costs associated with not making provisions for such technology initially shall not be considered by the Department in the retrofit cost analysis.

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- 8. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
- 9. An application for an operation permit must be submitted to the Southwest District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

Issued this 21st day of February , 1994

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Virginia B. Wetherell, Secretary

POLK POWER PARTNERS

1125 US HIGHWAY 98 SOUTH SUITE 100 LAKELAND, FLORIDA 33801 813-682-6338

RECEIVED

June 23, 1994

JUN 2 4 1994 .

Mr. Clair H. Fancy, P.E., Chief Bureau of Air Regulation Florida Department of Environmental Protection Twin Towers Office Building 2600 Blair Stone Road Tallahassee, FL 32399-2400 Bureau of Air Regulation

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RE:

Mulberry Cogeneration Project, PSD-FL-187 (AC53-211670).

New Source Performance Standards (NSPS) - Initial Facility Startup

Dear Mr. Fancy:

This correspondence is submitted on behalf of the Polk Power Partners to serve as notification that the Mulberry Cogeneration Facility's initial startup is scheduled to occur on July 14, 1994. This notification is given as required per 40 Code of Federal Regulations Part 60, Section 60.7(a) regarding New Source Performance Standards.

If you have any questions, please feel free to contact me at (813) 682-6338.

Sincerely,

Nancy H. Jones

Mancy N. Jones / pow

cc: Ms. Jewell A. Harper, Chief Air Enforcement Branch Mr. William Malenius, P.E., Ark Energy

Copy H: SWDshit

MULBERRY COGENERATION FACILITY POLK POWERS PARTNERS, L.P.

1125 US HIGHWAY 98 SOUTH, SUITE 100 LAKELAND, FLORIDA 33801

> Telephone: (813) 682-6338 Fax: (813) 683-8257

RECEIVED

JUL 2 9 1994

Bureau of ogAhaRegulation

July 20, 1994

Florida Department of Environmental Regulation Twin Towers Office Building 2600 Blair Stone Road Tallahassee, FL 32399-2400 Attn: Bureau of Air Regulation

Re:

Prevention of Significant Deterioration Construction Permit for Mulberry

Cogeneration/CO₂ Facility Letter

Dated: November 20, 1992

DER File No./Permit No.: AC53-211670

Issue Date: November 20, 1992

POLK POWER PARTNERS, L.P. Qualified to do business in Florida as Polk Power Partners, L.P., Ltd. NOTICE OF CHANGE OF ADDRESS

Please change the address and telephone number of the above-referenced Notice of Permit letter AIROZI UDLALA as noted below: YOTOAS30217

_%.

NEW ADDRESS

Polk Power Partners, L.P. (dba Polk Power Partners, L.P., Ltd.) c/o Polk Power GP, Inc. 1125 US Highway 98 South, Suite 100 Lakeland, FL 33801

Attention: Vice President, General Manager

Telephone: (813) 682-6338 Fax: (813) 683-8257

Please contact us should you have any questions regarding this change. Thank you in advance

Vice President, General Manager

for your cooperation.

Copy to: Swashed

7/14/44 scheduled stritup



July 25, 1997

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AUG 04 1997

BUREAU OF AIR REGULATION

Mr. Scott M. Sheplak, P.E. Bureau of Air Regulation Florida Department of Environmental Protection Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Re:

DRAFT Title V Permit No.: 1050217-001-AV

Mulberry Cogeneration Facility

Dear Mr. Sheplak:

I am writing as a follow-up to a conversation I had with Mr. Lennon Anderson of your office earlier this week. Mr. Anderson and I discussed several errors in Table 1-1 of the Draft Title V Air Operating Permit for the Mulberry Cogeneration Facility. I have listed the comments that I provided to Mr. Anderson, as well as some additional comments, below:

- 1. Section III.C.12 should include "VOC: EPA Method 25A."
- 2. Table 1-1, page 2 of 2 has some typographical errors. In the column titled "Standrad(s)" the standards for NOx, VOC and CO should be "@ 15% O₂," the table currently reads "@ 15." In addition, the limit for NOx while firing natural gas should be 15 ppmvd @ 15 % O₂, and while firing No. 2 Oil should be 42 ppmvd @ 15 % O₂. The limit for VOC should be 10 ppmvd @ 15 % O₂. It appears that a number of the errors listed above could be due to the column width being to narrow to accommodate all of the text.
- 3. Table 1-1, page 2 of 2 cites the incorrect permit condition in the "See permit condition(s)" column. Theses citations appear to be numbered incorrectly. For example, the reference to Section III.A.5. should be to A.6.
- 4. Table 2-1 in the "Testing Time Frequency" column for SO₂ while firing natural gas references the No. 2 Oil schedule. It should reference the custom fuel monitoring plan or state twice per year, which is the current testing frequency. Also, under the "See permit condition(s)" column, the reference should be to III.A.18 and 25, not III.A.13.
- 5. Table 2-1 references III.A.13., in the "See permit condition(s)" column for SO₂ when firing No. 2 Oil. The reference should be to III.A.19.
- 6. Table 2-1 references III.A.16. in the "See permit condition(s)" column for VOC. The reference should be to III.A.21.
- 7. Table 2-1 references III.C.13 in the "See permit condition(s)" column for all but one row. The reference should be to III.C.12.
- 8. Table 2-1 indicates page 1 of 2. There was not a page 2 of 2 included in the packet I received.
- 9. All of the permit limits appear to be consistent with the limits which are scheduled to take effect in 1998 under the construction air permit. If this Draft Title V air permit becomes effective prior to 1998 the 1997 emissions limits should be included.

Mr. Scott Sheplak July 25, 1997 Page Two

I hope these comments will help you in drafting the Final Title V Air Operating Permit for the Mulberry Cogeneration Facility. Please call me at 941-682-6338 with any questions or if you want to discuss these comments.

Sincerely,

Polk Power Partners, L.P.

by Polk Power GP, Inc./

its general partner

Allan Wade Smith

General Manager

Dennis Oehring - CSWE Operations

8/5/97 8

