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BUREAU OF AIR REGULATION

Tom G. Smith Municipal Power Plant

&

Lake Worth Water Treatment Plant

Title V Permit Application



CITY OF

LAKE WORTH

1900 2ND AVENUE NORTH LAKE WORTH, FLORIDA 33461

UTILITIES
DEPARTMENT

(561) 586-1666 FAX (561) 586-1702

July 30, 1997

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

Subject: Title V Air Permit Application Request for Additional Information

File No. 0990045-002-AV

Tom G. Smith Municipal Power Plant & Lake Worth Water Treatment Plant

Dear Mr. Sheplak:

The City of Lake Worth Utilities submits for your review, in hard copy format, our response to your request for additional information regarding the initial Title V Permit Application for the Tom G. Smith Municipal Power Plant and Lake Worth Water Treatment Plant, Lake Worth, Florida. The responses to your comments are listed in the order they were presented in your May 5, 1997 letter. Revised permit application pages are included only where additional information is needed.

If you have any questions, please direct them to Margaret Johnstone at (561) 533-7384 or William Michael at (561) 586-1703 of this office.

Sincerely,

CITY OF LAKE WORTH UTILITIES

Harvey F. Wildschuetz, Utilities Director

Designated Representative

Attachments

cc: Mr. James Stormer, Palm Beach County Health Department

Kevin D. McGee, Raytheon Environmental Services

Margaret Johnstone, Environmental Compliance Officer

William Michael, Mechanical Systems Engineer

Shannon Bates, Power Resources Superintendent

RESPONSE TO FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION COMMENTS

FACILITY INFORMATION

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1. Rule 62-275.410, F.A.C., "Air Quality Areas - Ozone Nonattainment", is listed as one of the applicable regulations throughout the permit application. Please note that this rule is not applicable, since Palm Beach County is now classified as an attainment area (maintenance area) for ozone. (This rule was also appealed on March 13, 1996.) Please confirm this rule is not applicable to your facility.

RESPONSE: With the change in classification to ozone attainment, this rule is not applicable to our facility. Therefore, please remove 62-275.410, F.A.C. from our application as an applicable regulation

In Section C, page 13, Facility Pollutants, VOCs and HAPs are identified as regulated pollutants, but do not appear to be regulated by rule or previous permits. Note that unregulated pollutants that are not major should not be identified here. Please clarify.

RESPONSE: These pollutants are not regulated by permit or rule and should not have been included. Please disregard the VOC, Pb and HAP listing in this table.

3. In Section E, page 15, Facility Supplemental Information, "not applicable" is marked in number 4. Please provide precautions to prevent emissions of unconfined particulate matter. Some, such as paving and maintenance of roads, parking areas and yards, should be applicable to your facility. Please review the list in Rule 62-296.320(4)(c)3, F.A.C., for suggestions of applicable precautions.

RESPONSE: All roads within the facility are paved and they are routinely swept with a wet vacuum truck. One area behind the water treatment plant is used as a lime backwash residue holding area. In the event this area becomes dusty, it will be watered to minimize unconfined particulate matter generation.

EMISSIONS UNIT INFORMATION

Diesel Generators

1. Please provide the manufacturer and model number for the diesel generators, if available.

RESPONSE: The manufacturer of the diesel generator is the Electric Motor Division (EMD) of General Motors (GM). The model number of each engine is 567D4. The five engines together are called an MP36 power pack.

2. Are the potential to emit and fuel usage information for the diesel generators units 1-5 reported for each unit or for all of the units combined? In Section B, page 18, information is listed for each unit, and in Section F, page 25, the information appears to be for each unit. However, since all of the diesel generators were listed together in Emission Unit Information Section 1 of 9, we expected emission calculations to be for all. Please verify that emission calculations submitted are for each unit.

RESPONSE: The potential to emit and fuel usage information for the diesel generator units reflect one unit. The emissions for all five units is five times each emission level presented in the calculations.

Boilers

3. The application, in Section F, pages 55, 84 and 117, identifies that number 5 fuel oil is used in the boilers, while the fuel analyses provided are for number 6 fuel oil. Please clarify that number 6 fuel oil is used.

RESPONSE: The fuel used in the boilers is number 6 fuel oil. The Number 5 on pages 55, 84 and 117 should be changed to Number 6.

4. Is soot blowing conducted on units S-3 and S-4? If so, please describe the typical frequency.

RESPONSE: Soot blowing is conducted on unit S-3 but not S-4 since it is not in service at this time. Soot blowing is conducted once a day and only when burning fuel oil. The typical frequency of soot blowing is less than three hours within a 24 hour period.

5. Please provide more information on unit S-4 about the temporary shutdown (refer to Section B, page 109). Please clarify the length of time and dates this unit will be shut down. When are the continuous monitors planned for installation?

RESPONSE: Unit S-4 has been in shutdown status since 1989. It will be shut down until generation requirements of our system dictates its need. The continuous emission monitors installation will precede startup and normal operation of unit S-4.

6. In Section L, page 138, number 14 indicates for unit S-4, "unit is temporarily shutdown; form to follow after restart of unit". The Acid Rain Application, Phase II is included in Attachment N and does have information for unit S-4. Please clarify.

RESPONSE: Section L, page 138, number 14 should be revised to include Attachment N and disregard the "unit is temporarily shutdown; form to follow after restart of unit" statement.

Combined Cycle Turbine/Steam Unit

7. Please identify when the EU-006, CC-1 (GT-2/S-5) commenced construction. Depending on the date construction commenced, 40 CFR 60, Subpart GG may be applicable to this unit. Please review this rule and determine if this rule is applicable.

RESPONSE: 40 CFR 60, Subpart GG specifies a construction commencement date of October 3, 1977. GT-2/S-5 unit started <u>operation</u> in April 1978. The exact date of commencement of construction is unknown. We have record that the foundation for GT-2 was poured prior to February of 1977, hence commencement of construction started prior to February of 1977. Since the commencement of construction date precedes October 3, 1977, Subpart GG does not apply.

Fuel Oil Tanks

8. Based on the information provided for tank 12, it appears the tank is subject to the record keeping provisions of 40 CFR 60 Subpart Kb. Please review and revise the list of applicable regulations (page 228) for Section D, Emissions Unit Information Section 9 of 9, or provide additional information to clarify why Subpart Kb does not apply.

RESPONSE: Subpart Kb does apply to tank 12. Tank 12 has been included in emission unit 8 (section 8 of 9) that includes Tanks 10 and 11. Emission unit 9 (section 9 of 9) includes Tank 8 only. The pages affected by the revision are included (pages 3, 213, 217, 218, 219, 224, 225, 229, 230, and 231).

ATTACHMENTS

1. Most of the activities listed in Attachment G proposed for exemption appear to be trivial activities; some, such as those associated with the lime system at the water plant, may be unregulated emission units. Please review these activities and propose for exemption only those activities that are stationary sources of air pollution that qualify for exemption under the provisions of Rule 62-213.430(6), F.A.C., pursuant to Rule 62-213.420(3)(m), F.A.C. Please identify unregulated emission units and indicate any that emit pollutants with potential emissions greater than the threshold levels specified in Rule 62-213.420(3)(c)3 and 4, F.A.C. Please revise and resubmit Attachment G and list only unregulated emission units and exempt activities. Please do not list trivial activities at all on this revised list.

RESPONSE: Attachment G was revised and all activities allowed presumptively omitted from part 70 permit applications, were deleted. The remaining activities were segregated into those activities that are either exempt or nonregulated.

2. Please note that Attachment H, Alternate Modes of Operation, does not list all of the information required by Rule 62-213.415, F.A.C. If trading of emissions is requested, then please submit all of the information required by rule: the emission cap requested, specific modes of operation and emissions plan per the requirements of Rule 62-213.415(1) & (2)b & c, F.A.C.

Note that flexible use of your acid rain allowances does not need to be requested as an alternate mode of operation. If that is the only purpose of this attachment, it may be omitted from the application and the preceding information need not be submitted. Please advise if this is the case.

RESPONSE: The purpose of Attachment H was to make use of acid rain allowances. Since this is not the appropriate avenue for their use, Attachment H and any mention of alternate mode of operation is withdrawn.

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ATTACHMENT G UNREGULATED EMISSION UNITS AND EXEMPT ACTIVITIES (REVISED 7/97)

1. Dust Collector Hopper Discharge Valve

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Exemption Basis: This unit should be exempt based on the minimal amount of material passing through the valve, the small frequency of usage, and work practices that precludes the generation of fugitive emissions.

This valve is used to remove ash from Unit S-3 following the use of oil. Oil has historically been used very sparingly in the S-3 unit (i.e. <1% oil use annually), therefore, very little ash is generated. The hopper is emptied on an as needed basis. Historically, when emptied, the ash fills on average, four 55 gallon drums/year. To minimize fugitive emissions generation, prior to opening the valve, the outlet is connected to a hose which is inserted into a fabricated hood connected to the 55 gallon drum. This design precludes the generation of fugitive emissions.

2. Liquid Propane Gas Emergency Generator

Exemption Basis Rule 62-210.300(3)(a)(20) F.A.C. This unit has historically burned much less than 4.4 million scf/yr and will continue to do so in the future.

ATTACHMENT H ALTERNATE MODES OF OPERATION (REVISED 7/97) DELETED

30

Owner/Authorized Representative or Responsible Official

	Name and Title of Owner/Authorized R	Representative or Res	sponsible Official:
Н	arvey F. Wildschuetz/ Utilities Director		
2.	Owner/Authorized Representative or Re	esponsible Official N	Mailing Address:
	Organization/Firm: City of Lake Worth		
	Street Address: 1900 2nd Avenue Nort		711 0 1 22461
	City:Lake Worth	State: Florida	Zip Code:33461
_		11 000 115	F 1 1 N 1
٤.	Owner/Authorized Representative or Ro	-	-
	Telephone: (561)586-1665	Fax: (561)586 1702
1	Owner/Authorized Representative or Ro	eenaneible Official (Statement:
┱.	Owner/Aumorized Representative of Re	esponsible Official k	statement.
	I, the undersigned, am the owner or aut	thorized representat	ive* of the non-Title V source
	addressed in this Application for Air Pe	-	
	62-210.200, F.A.C., of the Title V source	-	
	applicable. I hereby certify, based on it		± •
	inquiry, that the statements made in this	•	
	that, to the best of my knowledge, any e	* *	
	are based upon reasonable techniques j	•	
	emissions units and air pollution control		
	operated and maintained so as to comp	ly with all applicabl	le standards for control of air
	pollutant emissions found in the statute.	s of the State of Flor	rida and rules of the
	Department of Environmental Protection	on and revisions ther	reof. I understand that a
	permit, if granted by the Department, co	annot be transferrea	l without authorization from the
	Department, and I will promptly notify	the Department upo	n sale or legal transfer of any
	permitted emissions unit.		
	11 . 1 .		
	HWildschuet.		
	Muldschuet	7	120 107
	Signatura		/30/97
	Signature	Dat	ie

* Attach letter of authorization if not currently on file.

2

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

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
1	MU-1 through MU-5; 5- 2000 kW Diesel Generators (001-005)	
2	S-1; Fossil Fuel Steam Generating Unit #1 (007)	
3	S-3; Fossil Fuel Steam Generating Unit #3 (009)	
4	S-4; Fossil Fuel Steam Generating Unit #4 (010)	
5	GT-1; Gas Turbine #1 (006)	
6	CC1 (GT-2/S-5); Combined Cycle Combustion Turbine 2/Steam Unit 5 (011)	
7	T-3, T-4, T-5, T-6 fuel Oil Storage Tanks; 5000 gallon and 950 gallon Lube Oil Storage Tanks and Fuel Oil Fittings and Pumps	
8	T-10, T-11, and T-12 Fuel Oil Storage Tanks	
9	T-8 Fuel Oil Storage Tanks	

3

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

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Fuel Oil Storage Tanks 10, 11 and 12 Tank 10 is fixed roof 20,134 gallons capacity, constructed in 05/92 Tank 11 is fixed roof 20,134 gallons capacity, constructed in 05/92 Tank 12 is fixed roof 140,798 gallons capacity, constructed in 05/92 2. Emissions Unit Identification Number: [] No Corresponding ID [] Unknown 3. Emissions Unit Status				
6. Emissions Unit Comment (limit to 500 above etc			
Emissions Unit Control Equipment A.				
	naracters):			
1. Description (limit to 200 characters):				
2. Control Device or Method	Code:			

213

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

E. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

Emission Point Description and Type

	Identification of P		lan or Flow Diagra	ım: T-10, T-11, and	1 T-12
2.	Emission Point T	ype Code:			
	[] 1] 2	[X] 3	ſ 14	
	r 1 ,	() ~	[21] 3	L J '	
3.	Descriptions of E	missions Point	ts Comprising this	Emissions Unit for	VE Tracking (limit
	to 100 characters	per point):			
	·	/			
1	ID Numbers or De	ecorintians of	Emission Units wit	th this Emission Do	int in Common:
₩.	ID Nullioets of De	escriptions of	Ellitssion Ollits wi	iii tiiis Eiiiissioii i t	int in Common.
	D: 1	1 1			
٥.	Discharge Type C				
	[] D	[] F	[] H	[X] P	
	[] R	[] V	[] W		
6	Stook Height:				feet
6.	Stack Height:				ICCL
7.	Exit Diameter:				feet
İ					
8.	Exit Temperature:	.77			°F
ο.	Exit Temperature:	. / /			Ī
1					

Emissions Unit Information Section __8__ of __9__

9. Actual Volumetric Flow Rate:	acfm
10. Percent Water Vapor :	%
11. Maximum Dry Standard Flow Rate:	dscfm
12. Nonstack Emission Point Height: 31	feet
13. Emission Point UTM Coordinates:	•
Zone:17 East (km):592.8	North (km): 2943.7
14. Emission Point Comment (limit to 200 characters): tanks 10 and 11 are 63 lb/yr each. Tanks 10 and 11 are emissions from tank 12 are 392 lb/yr.	

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

Segment Description and Rate: Segment ____ of ____

1 G (D 'C' (D (C 1T) 14 '(10 (' M(1 1M 1)		
1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode)		
(limit to 500 characters):		
Working loss and breathing loss from fixed roo	f storage tanks.	
2. Source Classification Code (SCC):		
3. SCC Units: 1000 gallons throughput		
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	
6. Estimated Annual Activity Factor: See Seg	ment Comment Section	
6. Estimated Mindai Metivity 1 detoi. See Seg	ment comment section	
5 M : D : C 16	0 14 1	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:	
9. Million Btu per SCC Unit:		
10. Segment Comment (limit to 200 characters)		
40301021 Distillate Fuel #2 Fixed Roof Working		
40301019 Distillate Fuel #2 Fixed Roof Breath	-	
40301019 Distillate Fuel #2 Fixed Roof Bleath	ing Loss	
m	1	
Tanks 10 and 11 Capacity = 20,134 gallons eac	n	
Tank 12 Capacity = 140,785 gallons		

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Type of Emissions Unit Addressed in This Section

1.	Regulated or Unregulated Emissions Unit? Check one:
[] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
[X	[The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.
2.	Single Process, Group of Processes, or Fugitive Only? Check one:
[X	[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
[] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
[] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

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

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): Fuel Oil Storage Tank 8 Tank 8 is fixed roof 387,580 gallons capacity, constructed in 01/67 				
2. Emissions Unit Identi	fication Number: [] No Corres	ponding ID [] Unknown		
3. Emissions Unit Status Code:	4. Acid Rain Unit? [] Yes [] No	5. Emissions Unit Major Group SIC Code:		
6. Emissions Unit Comn Emissions Unit Control	ent (limit to 500 characters): Equipment			
A.1. Description (limit to 2)	00 characters):			
2. Control Device or Me	thod Code:			

225

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

E. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

Emission Point Description and Type

1	Identification of Point on Plot Plan	n or Flow Diagra	m: Τ-8	
1.	identification of Form on Flot Flat	ir of Piow Diagra	m. 1-0	
2	Emission Point Type Code:			
۷.		[V] 2	r 1.4	
	[] 1 [] 2	[X] 3	[
_	D CD D	0 11 11	m · · · · · · · · · · · · · · · · · · ·	1 . /1:
3.	Descriptions of Emissions Points	Comprising this	Emissions Unit for VE Tra	cking (limit
	to 100 characters per point):			
4.	ID Numbers or Descriptions of En	nission Units wit	th this Emission Point in Co	ommon:
5.	Discharge Type Code:			
	[] D [] F	[] H	[X] P	
	[] R [] V	[] W		
6.	Stack Height:		feet	
	Č			
7.	Exit Diameter:		feet	
•				
8	Exit Temperature:77		°F	<u>.</u>
υ,	DAIL Temperature.		1	

Emissions Unit Information Section __9__ of __9__

9. Actual Volumetric Flow	Rate:	acfm
10. Percent Water Vapor:		%
11. Maximum Dry Standard	Flow Rate:	dscfm
12. Nonstack Emission Poin	-	feet
13. Emission Point UTM Co	ordinates:	
Zone:17	East (km):592.8	North (km): 2943.7
14. Emission Point Commen tank 8 are 12 lb/yr.	t (limit to 200 characters	s): The VOC potential emissions from

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

Segment Description and Rate: Segment __1__ of __1__

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode)		
(limit to 500 characters):		
Working loss from fixed roof storage tanks.		
2. Source Classification Code (SCC):		
See Comments Section Below		
3. SCC Units: 1000 gallons throughput		
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	
6. Estimated Annual Activity Factor: See Seg	ment Comment Section	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:	
7. Maximum Percent Sunur:	8. Maximum Percent Asn;	
9. Million Btu per SCC Unit:		
10. Segment Comment (limit to 200 characters)):	
40301075 Residual Oil #6 Fixed Roof Tank Wo		
10301073 Residual Oli #011Red Root Talik W	orking Boos	
Tank 8 Capacity = 387,580 gallons #6 Fuel Oil		
Tank 8 Capacity = 387,580 gallons #6 Fuel 6	Oll	





Department of Environmental Protection

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

Virginia B. Wetherell Secretary

May 5, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Harvey F. Wildschuetz, Utilities Director Lake Worth Utilițies 1900 2nd Avenue North Lake Worth, FL 33461

Re: Request for Additional Information Regarding Initial Title V Permit Application

File No. 0990045-002-AV

Tom G. Smith Power Plant & Lake Worth Water Treatment Plant, Palm Beach County

Dear Mr. Wildschuetz:

Your initial Title V permit application for the Tom G. Smith Power Plant & Lake Worth Water Treatment Plant was "timely and complete" for purposes of the initial Title V application submission (see Rule 62-213.420(1)(a)1. and (b)2., F.A.C.).

However, in order to continue processing your application, the Department will need the below additional information 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 below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

Facility Information

- 1. Rule 62-275.410, F.A.C., "Air Quality Areas Ozone Nonattainment", is listed as one of the applicable regulations throughout the permit application. Please note that this rule is not applicable, since Palm Beach County is now classified as an attainment area (maintenance area) for ozone. (This rule was also repealed on March 13, 1996.) Please confirm this rule is not applicable to your facility.
- 2. In Section C, page 13, Facility Pollutants, VOCs and HAPs are identified as regulated pollutants, but do not appear to be regulated by rule or previous permits. Note that unregulated pollutants that are not major should not be identified here. Please clarify.
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"Protect, Conserve and Manage Florida's Environment and Natural Resources"

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•
I also wish to receive the following services (for an extra fee): 1. Addressee's Address of the following services (for an extra fee): 1. Addressee's Address of the fee fee fee fee fee fee fee fee fee f
4a. Article Number P 26 3 584 963 4b. Service Type Registered Insured Certified COD Express Mail Return Receipt for Merchandise 7. Date of Delivery
8. Addressee's Address (Only if requested and fee is paid) 402 DOMESTIC RETURN RECEIPT

Mr. Harvey F. Wildschuetz May 5, 1997 Page 2 of 4

Some, such as paving and maintenance of roads, parking areas and yards, should be applicable to your facility. Please review the list in Rule 62-296.320(4)(c)3, F.A.C., for suggestions of applicable precautions.

Emissions Unit Information

Diesel Generators

- 1. Please provide the manufacturer and model number for the diesel generators, if available.
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- 4. Is soot blowing conducted on units S-3 and S-4? If so, please describe the typical frequency.
- 5. Please provide more information on unit S-4 about the temporary shutdown (refer to Section B, page 109). Please clarify the length of time and dates this unit will be shut down. When are the continuous monitors planned for installation?
- 6. In Section L, page 138, number 14 indicates for unit S-4, "unit is temporarily shutdown; form to follow after restart of unit". The Acid Rain Application, Phase II is included in Attachment N and does have information for unit S-4. Please clarify.

Combined Cycle Turbine/Steam Unit

7. Please identify when the EU-006, CC-1 (GT-2/S-5), commenced construction. Depending on the date construction commenced, 40 CFR 60, Subpart GG may be applicable to this unit. Please review this rule and determine if this rule is applicable.

Fuel Oil Tanks

8. Based on the information provided for tank 12, it appears the tank is subject to the record keeping provisions of 40 CFR 60 Subpart Kb. Please review and revise the list of applicable regulations (page 228) for Section D, Emissions Unit Information Section 9 of 9, or provide additional information to clarify why Subpart Kb does not apply.

Mr. Harvey F. Wildschuetz May 5, 1997 Page 3 of 4

Attachments

- 1. Most of the activities listed in Attachment G proposed for exemption appear to be trivial activities; some, such as those associated with the lime system at the water plant, may be unregulated emission units. Please review these activities and propose for exemption only those activities that are stationary sources of air pollution that qualify for exemption under the provisions of Rule 62-213.430(6), F.A.C., pursuant to Rule 62-213.420(3)(m), F.A.C. Please identify unregulated emission units and indicate any that emit pollutants with potential emissions greater than the threshold levels specified in Rules 62-213.420(3)(c)3 and 4, F.A.C. Please revise and resubmit Attachment G and list only unregulated emission units and exempt activities. Please do not list trivial activities at all on this revised list.
- 2. Please note that Attachment H, Alternate Modes of Operation, does not list all of the information required by Rule 62-213.415, F.A.C. If trading of emissions is requested, then please submit all of the information required by rule: the emissions cap requested, specific modes of operation and emissions plan per the requirements of Rule 62-213.415(1) & (2)b & c, F.A.C.

Note that flexible use of your acid rain allowances does not need to be requested as an alternate mode of operation. If that is the only purpose of this attachment, it may be omitted from the application and the preceding information need not be submitted. Please advise if this is the case.

<u>Other</u>

1. Note that we may regroup and re-identify emission unit numbers to match their present identification in the Department's data management system. (This note is provided for your information only. No response is required to this item.)

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 complete 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).

<u>Professional Engineer (P.E.) Certification Statement:</u> 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. 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.,

Mr. Harvey F. Wildschuetz May 5, 1997 Page 4 of 4

F.A.C. Please provide the requested information as soon as possible in order for use to meet the December 31, 1997 issuance deadline for Acid Rain sources. A copy of your response should be sent to Mr. James Stormer, Palm Beach County Health Department, PO Box 29, West Palm Beach, FL 33401.

If you should have any questions, please call Joseph Kahn, P.E. or Susan DeVore at 904/488-1344.

Sincerely,

Scott M. Sheplak, P

Administrator, Title V Section

SMS/sd

enclosure

copy to:

Mr. Albert D. Magley, Jr., P.E., Raytheon Engineers & Constructors, Inc.

Mr. William C. Michael, Lake Worth Utilities

Mr. Isidore Goldman, Southeast District Office

Mr. James Stormer, Palm Beach County Health Department

Owner/Authorized Representative or Responsible Official

l .	Name and Title of Owner/Authorized Representative or Responsible Official:			
2.	Owner/Authorized Representative or Responsible Official Mailing Address:			
	Organization/Firm: 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 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.			

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

4	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.

	•	
Signature	Date	3
(seal)	•	

^{*} Attach any exception to certification statement.

Date: From: 4/25/97 9:55:46 AM

From:

Ajaya Satyal WPB

Subject:

Lake Worth Utilities 0990045

I reviewed the compliance file for the referenced facilities and offer my comments:

- 1. All the units are in compliance at this time.
- 2. For Steam Generating Unit 1, 3, and 4, there is a requirement to do a VE during soot blowing (if utilized). I don't remember a soot blowing VE in this facility. Please see if we should make it little clear.

- only FOR 3 \$ 4 AO 50-169444

- 3. For Nox emissions, the compliance method for Steam Generating unit S1 is by method 7E annual test. Steam Generating Unit S3 is an unit subject to acid rain and should show compliance by 30 days rolling average. Unit S4 is also subject to acid rain even though the unit is shut down for repair at this time. Also, allowable sulfur content in the fuel oil for S1 in the existing permit was not specified.
- 4. Diesel generators (5). Just VE requirement and Nox Test requirement. These are 2 MW peaking units (identical) and are required to test for NoX by 7E annually.
- 5. Gas Turbine #1. Nox test and VE okay, sulfur content allowed not clear.
- 6. Gas Turbine combined, CGT-2/S-5. VE okay, Nox test okay.
- 7. Please see that quarterly report for fuel analysis continues. Also, Sulfur content for fuel No.6 and No.2 used be specified for the emission units utilizing the fuel.

These comments are from the existing compliance file review, I have not seen the application package (Jeff is out today). Call me or drop a line, if you need any assistance. Thanks.

Tom G. Smith Power Plant

Facility ID No.: 0990045

Section IV. This section is the Acid Rain Part.

Acid Rain Part, Phase II

Operated by: City of Lake Worth

ORIS code: 673

Effective:

The emissions units listed below are regulated under Acid Rain Part, Phase II.

E.U.

ID No.	Description		
01	Boiler		
02	Boiler		

- 1. The Acid Rain Part application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these acid rain units must comply with the standard requirements and special provisions set forth in the application listed below:
 - a. DEP Form No. 62-210.900(1)(a), dated 07/01/95.

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

2. Sulfur dioxide (SO2) allowance allocations and nitrogen oxide (NOx) requirements for each Acid Rain unit:

	Year	2000	2001	2002	2003
ID No. 01 S3	SO2 allowances, under Table 2, 3, or 4 of 40CFR 73	9*	9*		
	NOx limit	**	**		
ID No. 02 S4	SO2 allowances, under Table 2, 3, or 4 of 40 CFR 73	80*	80*		
	NOx limit	**	**		

^{*}The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2, 3, or 4 of 40 CFR 73.

3. Comments, notes, and justifications: None.

^{**}By January 1, 1999, this Part will be reopened to add Nox requirements in accordance with the regulations implementing section 407 of the Clean Air Act.

Tile

Memorandum

Florida Department of Environmental Protection

TO:

James E. Stormer, Palm Beach

FROM:

Bruce Mitchell

DATE:

April 23, 1997

SUBJECT:

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

City of Lake Worth: 0990045-002-AV

Enclosed is an application package for a Title V operation permit that is being processed in Tallahassee. Please review the package for completeness and respond in writing by May 26 1997, if you have any comments. Otherwise, no response is required.

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. You should have a copy on file of the original initial Title V permit application submittal. Also, please do not write on these documents.

If there are any questions, please call the project engineer, Joe Kahn, at 904/488-1344 or SC: 278-1344.

RBM/bjb

Enclosure

cc: Joe Kahn Dele Reading Dele City of Lake Worth Utilities **DRAFT Permit No.:** 0990045-002-AV Tom G. Smith Power Plant and Lake Worth Water Treatment Plant Page 5 of 22

- 7. Not Federally Enforceable. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:
 - a. When performing sandblasting on fixed plant equipment, the facility shall construct temporary enclosures when practical and necessary, in order to prevent unconfined particulate emissions.

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- b. Maintenance of paved areas as needed.
- c. Regular care of vegetation.
- d. Limiting access to plant property by unnecessary vehicles.
- e. Bagged chemical products shall be stored in buildings until they are used.
- f. Spills of powdered chemical products are cleaned up as soon as practicable.
- g. Sweeping paved roads with a wet vacuum truck.
- h. Watering, if necessary, the lime backwash residue holding area.

[Rule 62-296.320(4)(c)2., F.A.C.; Items 7.g. & h. proposed by applicant in the Additional Information Response received July 31, 1997]

{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4. F.A.C. (condition 57 of Appendix TV-1, dated 8/11/97).}

- 8. When appropriate, any recording, monitoring or reporting requirements that are time-specific shall be in accordance with the effective date of this permit, which define day one. [Rule 62-213.440, F.A.C.]
- 9. Submittals. All reports, tests, notifications or other submittals required by this permit shall be submitted to the Palm Beach County Health Department's Air Section, and copies of those submittals shall be sent to the Department of Environmental Protection, Southeast District Office, Air Section. Addresses and telephone numbers are:

Palm Beach County Health Department Air Section PO Box 29 West Palm Beach, FL 33402-0029

Phone: 561/355-3070

Department of Environmental Protection Southeast District Office, Air Section PO Box 15425 West Palm Beach, FL 33416

Phone: 561/681-6600

Any reports, data, notifications, certifications and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency Region 4 Air, Pesticides & Toxics Management Division **Operating Permits Section** 61 Forsyth Street

City of Lake Worth Utilities DRAFT Permit No.: 0990045-002-AV Tom G. Smith Power Plant and Lake Worth Water Treatment Plant Page 6 of 22

Atlanta, GA 30303 Phone: 404/562-9099 Fax: 404/562-9095

For Acid Rain submittals, submittals should be sent to:

United States Environmental Protection Agency Region 4 Air, Pesticides & Toxics Management Division Acid Rain Section 61 Forsyth Street Atlanta, GA 30303

10. <u>Statement of Compliance</u>. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. {See condition No. 51., Appendix TV-1, Title V Conditions} [Rule 62-214.420(11), F.A.C.]

Date: From: 4/22/97 11:16:50 AM Jeffery Koerner WPB

Subject:

City of Lake Worth Utilities

Joe,

I did a "quicky" review of their Title V application. Here are my comments:

1. EU-001: Diesel Peaking Units

Are the emissions being reported for each unit or for all units combined? {Application states 21 mmBTU/hr EACH, so I get:

(21 mmBTU/hr) (1000 gal/140 mmBTU) = 150 gal/hr (150 gal/hr) (8760 hr/yr) = 1,314,000 gal/yr for a single unit

However, I think they used this figure to calculate the potential emissions foe EU-001 which represents five units.}

2. EU-002: Steam Generating Unit (S-1)

Is this unit really subject to Rule 62-296.406, F.A.C.? {This rule would force a canned BACT determination for PM and SO2 which is currently using a fuel with less than 0.05% sulfur by weight. They use fuel oil with 2.25% sulfur by weight, maximum. The unit was built in 1961.}

PREVIOUS FREMITIOS 406(1) W/0(2),(3)

3. EU-003: Steam Generating Unit (S-3)

Will compliance with the SO2 emission limiting standard (ELS) be by continuous monitor (CM) or fuel analysis or both? {The application states that compliance will be by fuel analysis, but also requests a allowable of 2.475 lb SO2/mmBTU. If this limit is included, will the CM be used to determine compliance?}

Will the opacity monitor be used to determine compliance with the visible emissions standard? Or EPA Method 9? {Acid rain requires the installation of an opacity monitor.}

4. EU-004: Steam Generating Unit #S-4

Same questions apply as for #S-3.

How long has this unit been on "extended forced outage"? Are major modifications (reconstruction) being performed that may subject this unit to NSPS Subpart Da? When is it scheduled to return to service? When are the continuous monitors planned for installation?

5. EU-005: Gas Turbine #GT-1

No comments. {Looks like it was built before the NSPS applicability date for Subpart GG.}

6. EU-006: Combined Cycle Gas Turbine #CC-1 (GT-2/S-5)

Is this unit subject to NSPS Subparts Da or (GG (or both)? {I'm having trouble making up my mind.}

7. EU-007, 008, 009: Fuel Storage Tanks

No comment. {The application states that EU-008 is subject NSPS

Subpart Kb which looks right. The application is silent on EU-007 and 009 which is probably OK also. My only question would be on the EU-009's 140,785 gallon fuel oil tank built in 1992. It doesn't look like any of the Subpart K's apply, but that doesn't seem to make sense to me.}

8. OTHER COMMENTS

I plead ignorance on the Acid Rain requirements - I assume the applicant has correctly determined applicability - #S-3 and S-4 are identified as acid rain units.

It would probably be helpful to have all of the air permits for this facility to write the permit. I didn't see copies of them included with the application. I checked ARMS for old AC permits and only found the power plant siting permit PA-74-05 which was only for S-5, right? The other permits were all AO permits. Here's a list:

099-0045-001-AO: Joe's NOx RACT modification for A-1, S-3, S-4, GT-1, and MU-1 thru MU-5.

A050-091730, A050-169444: S-1, S-3, and S-4

AO50-089334, AO50-172357: MU-1 thru MU-5

AO50-143296, AO50-219177: GT-1

Looks like this one should go pretty quick since there's not a bunch of conflicting AC permit conditions.

Jeff

DISCUSSED WITH SETT, JOE, SUSAND By PHONE 4/20/97, 2:00 pm. Date: 4/21/97 2:34:31 PM
From: Joseph Kahn TAL
Subject: Lake Worth Utilities
To: Ajaya Satyal WPB
CC: Susan DeVore TAL

AJ,

Susan and I are processing the Title V application for Lake Worth Utilities. Jeff should have a copy of the application. Please let me know if you have any comments, particularly regarding the compliance statement. Please advise if any emission units or activities were not in compliance when the application was submitted and provide details. Feel free to call me or Susan at 904-488-1344 (SC 278-1344). Thanks.

-Joe