

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

December 23, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Fred Dougherty, P.E.
2939 Huntington Drive
Tallahassee, Florida 32312

Dear Mr. Dougherty:

Re: Florida State Hospital Facility ID #390004--PSD Applicability to Fuel Specification Change

The Department has reviewed your request to determine whether Prevention of Significant Deterioration (PSD) requirements, including a Best Available Control Technology (BACT) determination, would apply to a change in sulfur content of fuel oil burned in Florida State Hospital's Boilers 6, 7, and 8. Based on our review of your proposed request, we have determined that, according to Rule 62-212.400(2)(a)1. of the Florida Administrative Code (F.A.C.), Florida State Hospital can be exempted from PSD requirements because it is a Nonprofit Health Facility. However, the change in fuel sulfur content would be subject to the permit revision requirement in Rule 62-210.300(2), F.A.C.

An air quality dispersion modeling analysis was performed by the Department to determine whether this request for returning to the operational use of 2 percent sulfur fuel oil would result in predicted ambient air quality impacts greater than any sulfur dioxide (SO₂) ambient air quality standards (AAQS) or PSD increments. Predicted violations of these standards or increments is not allowed by Rule 62-212.300, F.A.C. This modeling analysis was done by using the Department and EPA-approved ISCST3 model and the updated emission rate and stack inputs submitted by you on December 5 and December 13, 1996, as part of this request. Based on this analysis, there are no predicted ambient air quality violations of any standard or increment as long as Boilers 6, 7, and 8 or Boilers 7 and 8 are not operated simultaneously.

The maximum predicted ambient air quality impact for simultaneous operation of Boilers 6, 7 and 8 or Boilers 7 and 8 is 290 ug/m³ based on a 24-hour averaging time. This value is greater than the 24-hour AAQS of 260 ug/m³. There are no predicted violations of the 3-hour and annual AAQS for SO₂ or any PSD increment for SO₂ with the use of any combination of boilers. The maximum predicted ambient air quality impact for simultaneous operation of either Boilers 6 and 7 or 6 and 8 is 150 ug/m³, which is less than the 24-hr AAQS of 260 ug/m³.

Mr. Fred Dougherty, P.E.
 Page 2
 12/23/96

You have indicated to Cleve Holladay in your conversations with him about this request that Florida State Hospital would be willing to agree to a permit condition limiting simultaneous use of its boilers to only a Boiler 6 and 7 or Boiler 6 and 8 combination. Based on the modeling results, this proposed permit condition would be acceptable.

If you have any questions about this request, please contact Cleve Holladay at 904-488-1344.

Sincerely,



C.H. Fancy, P.E., Chief
 Bureau of Air Regulation

CHF/ch

cc: Armando Sarasua, NWD

P 265 659 116

US Postal Service
Receipt for Certified Mail
 No Insurance Coverage Provided.
 Do not use for International Mail (See reverse)

Sent to <i>Fred Dougherty</i>	
Street & Number <i>Fla. State Hosp.</i>	
Post Office, State, & ZIP Code <i>Tallah. Fla.</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	<i>12-23-96</i>
<i>Fla. State Hosp.</i>	

PS Form 3800, April 1995

Is your RETURN ADDRESS completed on the reverse side?

5. Received By: (Print Name) <i>Fred W. Dougherty</i>	3. Article Addressed to: <i>Fred Dougherty, P.E. 939 Huntington Tallahassee, FL 32312</i>
6. Signature: (Addresser's or Agent's) <i>[Signature]</i> PS Form 3811, December 1994	4a. Article Number <i>P 265 659 116</i>
8. Addressee's Address (Only if requested and fee is paid)	4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Insured
7. Date of Delivery <i>1-8-97</i>	1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.

Domestic Return Receipt

SENDER:
 Complete items 1 and/or 2 for additional services.
 Complete items 3, 4a, and 4b.
 Print your name and address on the reverse of this form so that we can return this card to you.
 Attach this form to the front of the mailpiece, or on the back if space does not permit.
 Write "Return Receipt Requested" on the mailpiece below the article number.
 The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
 1. Addressee's Address
 2. Restricted Delivery
 Consult postmaster for fee.

Fold at line over top of envelope

Thank you for using Return Receipt Service.

Fred W. Dougherty, P.E.
2939 Huntington Drive
Tallahassee, Florida 32312
(904) 488-7337
(904) 488-3807 Fax

September 30, 1996

Florida Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
2600 Blair Stone Road. MS #5506
Tallahassee, Florida 32399

RECEIVED

DEC 5 1996

**BUREAU OF
AIR REGULATION**

Attn: Cleve Holiday

Subject: Florida State Hospital, Chattahoochee
Facility ID #0390004

Dear Mr Holiday:

Enclosed are the revisions to the subject facility Title V application which correct the incorrect data on the Emission Point Information sheets. I have also included a copy of the 1987 Op permit application for units #7 and #8, which was the original source of the emission point information. The stack height shown on that report for those units was in error, which was corrected on the records I gave you earlier by notation. I have now corrected them on the form itself, using the new height which was measured by hospital staff personal in October. The stack flow (ACFM) from the 1987 report was slightly in error, but then was transcribed by me incorrectly to a factor of 10 downward error. I have recalculated the stack ACFM for all three units and the new values, which are within 20% of the 1987 values, are also shown on the Emission Point Information sheets. A copy of my calculations is included.

We are deeply appreciative of your cooperation and assistance in reviewing our request for determination, and I understand that the errors in the Title V report have caused you extra work. I hope that re-modeling the ambient air concentration of SO₂ will simply be a matter of plugging the new numbers into the model you have already run.

Thank you again for your assistance.

Sincerely,


Fred W. Dougherty

copy: Richard Frey, Florida State Hospital

V. Diesel Generator, continued

Formula: $w' = w/2000$

$$W = w' * \text{GAL}/1000$$

Diesel Firing Rate, full power = 200 gph (nameplate)

IV. POTENTIAL EMISSIONS ESTIMATES - SPREADSHEET

See attached page 5

V. STACK GAS FLOW RATE

Assumptions:

flue gas density @ 520° R \approx .076 #/ft³

excess air = 60%

firing rate = 575 gph #6 fuel (unit #6)

theoretical air = 14.2 lbs/lb fuel

specific gravity of #6 fuel = .95

f = fuel flow rate, lbs/min

$$f = 575 \text{ gal/hr} * 1/60 \text{ hr/min} * 1/7.5 \text{ ft}^3/\text{hr} * .95 * 62.4 \text{ lbs/ft}^3 = 75.7 \text{ lbs/min}$$

w = total stack mass flow rate

$$w = f * 14.2 * 1.6 = 1,720 \text{ lbs/min}$$

$$\text{SCFM} \approx 1720 / .076 = 22,630$$

$$\text{ACFM} = \text{SCFM} * T/T_0 \quad \begin{array}{l} T = \text{stack temperature} = 900^\circ \text{R} (380^\circ \text{F}) \\ T_0 = 520^\circ \text{R} (380^\circ \text{F}) \end{array}$$

$$\text{ACFM} = 22630 * (900/520) = 39,167$$

Unit #7, firing rate 523 gal/hr #6 fuel

$$\text{ACFM} = 39167 * (523/575) = 35,625$$

Unit #8, firing rate 544 gal/hr #6 fuel

$$\text{ACFM} = 39167 * (544/575) = 37,055$$

C. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section

2

Boiler #6

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Boiler #6
2. Emission Point Type Code :	1
3. Descriptions of Emission Points Comprising this Emissions Unit :	Rotary valves at the bottoms of the air preheater and cyclone, and one stack. Particulate matter is removed at the rotary valves and transported to landfill
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :	none
5. Discharge Type Code :	V
6. Stack Height :	95 feet
7. Exit Diameter :	3.7 feet
8. Exit Temperature :	380 °F
9. Actual Volumetric Flow Rate :	39167 acfm
10. Percent Water Vapor :	%
11. Maximum Dry Standard Flow Rate :	dscfm
12. Nonstack Emission Point Height :	feet
13. Emission Point UTM Coordinates :	
Zone :	17
East (km) :	707.400
North (km) :	3398.500
14. Emission Point Comment :	Powerplant Building Height is 40', so stack projects 55' above the flat roof.

$$L^3 T^{-1} = L^2 \left[\frac{L T^{-1}}{A V} \right]$$

$$Q = A V$$

$$L^2 = \pi r^2$$

C. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 3

Boiler #7

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Boiler #7		
2. Emission Point Type Code :	1		
3. Descriptions of Emission Points Comprising this Emissions Unit :	one flue gas stack and rotary valves for particulates captured in the control devices		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :	none		
5. Discharge Type Code :	V		
6. Stack Height :	70	feet	
7. Exit Diameter :	4.0	feet	
8. Exit Temperature :	380	°F	
9. Actual Volumetric Flow Rate :	35625	acfm	
10. Percent Water Vapor :	%		
11. Maximum Dry Standard Flow Rate :	dscfm		
12. Nonstack Emission Point Height :	feet		
13. Emission Point UTM Coordinates :			
Zone :	17	East (km) :	707.400
		North (km) :	3398.500
14. Emission Point Comment :			
	Power plant building height is 90', so stack projects 30' above the flat roof		
	This sheet revised December 4, 1996		

C. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section

4

Boiler #8

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Boiler #8		
2. Emission Point Type Code :	1		
3. Descriptions of Emission Points Comprising this Emissions Unit :	a flue gas stack and rotary valves at the base of the particulate control devices to remove captured particulates.		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :	none		
5. Discharge Type Code :	V		
6. Stack Height :	70	feet	
7. Exit Diameter :	4.0	feet	
8. Exit Temperature :	380	°F	
9. Actual Volumetric Flow Rate :	37055	acfm	
10. Percent Water Vapor :	%		
11. Maximum Dry Standard Flow Rate :	dscfm		
12. Nonstack Emission Point Height :	feet		
13. Emission Point UTM Coordinates :			
Zone :	17	East (km) :	707.400
		North (km) :	3398.500
14. Emission Point Comment :	Power plant flat roof is 40' high, so stack projects 30' above the roof. This sheel revised December 4, 1996		



Department of Environmental Protection

Lawton Chiles
Governor

Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

Virginia B. Wetherell
Secretary

June 9, 1998

RECEIVED

JUN 10 1998

**BUREAU OF
AIR REGULATION**

Richard T. Frey
Director, Operations & Facilities
Florida State Hospital
Post Office Box 1000
Chattahoochee FL 32324-1000

Dear Mr. Frey:

This letter concerns Air Construction Permit 0390004-003-AC, for Florida State Hospital (FSH) to install three new boilers at your facility, your telephone conversation with Armando Sarasua of our office on May 27, 1998, and the meeting at your facility on May 28, 1998, attended by Ralph Staplin of the Tallahassee Branch Office.

We are concerned that your contractor may be contemplating construction changes outside the scope of your construction permit, as represented in your construction permit application. It is a violation of Department rules to construct a source of pollution in a manner inconsistent with the representation in the permit application. [Rule 62-4.030, F.A.C., General Prohibitions] Your construction permit was issued after the Department received reasonable assurance, based on your application, that the installation will not cause pollution in violation of any of the provisions of Chapter 403, F.S., or the rules promulgated thereunder. The contemplated changes in stack configuration may alter pollutant dispersion patterns and raise ambient air quality concentrations above levels allowed by law.

The three new boilers fall under New Source Performance Standards (NSPS), which limits their SO₂ emissions to 0.5 lb SO₂/MMBtu heat input, or, as an alternative, limits them to burning 0.5% Sulfur content oil.

We were informed that at the meeting FSH, the boiler vendor and your consultant discussed plans to burn 2% Sulfur oil and use the existing old boiler stack for the new boilers instead of the smaller individual stacks represented in the AC permit application. To do this would be a violation of the rules and the construction permit.

The NSPS regulations would allow FSH to burn 2% Sulfur oil, if FSH would obtain a construction permit modification and install appropriate sulfur control equipment to meet the 0.5 lb SO₂/MMBtu heat input limit. FSH would also need to comply with Continuous Emission Monitoring (CEM) requirements for SO₂ and Opacity. This will involve the installation, calibration, operation, maintenance and recordkeeping of the CEM units. There also will be additional NSPS requirements of annual testing, reporting and recordkeeping which are waived for sources burning 0.5% Sulfur oil.

If you have any questions or comments, please contact Armando Sarasua at (850) 595-8364.

Sincerely,

Ed K. Middleswart, P.E.
Air Program Administrator

EKM:asc

cc: G. Preston Lewis, P.E., Watkins Engineers & Contractors
A. Linero/C. Holliday, DEP Division of Air Resources Management
DEP Northwest District Branch Office, Tallahassee

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

Fred W. Dougherty, P.E.
2939 Huntington Drive
Tallahassee, Florida 32312
(904) 488-7337
(904) 488-3807 Fax
October 10, 1996

Florida Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399

RECEIVED

OCT 18 1996

**BUREAU OF
AIR REGULATION**

Attn: A.A. Linero, P.E.

Subject: Florida State Hospital, Chattahoochee
Facility ID#0390004

Dear Mr. Linero:

I am writing on behalf of the Florida State Hospital in Chattahoochee, which I serve as engineer certified to prepare Annual Emissions Operating Reports and Fee Forms.

Executive Summary

Florida State Hospital (FSH) is requesting that operating permits for its emissions group (described below) be allowed to return to #6 oil with sulfur content not to exceed 2%. As recently as 1992, FSH maintained permits for its entire emissions group to operate on #6/2% oil. In 1993, the Hospital was unable to contract with a reliable supplier of #6 oil and was consequently forced to substitute with more expensive #5 oil. Over the next two years the emissions operating permit applications were submitted reflecting the unplanned, yet necessary change of operating fuel.

Presently, the State of Florida has a contract with a reliable supplier of #6 oil that FSH would like to utilize. By returning to #6 oil, FSH and Florida Taxpayers will realize a savings of approximately \$200,000 annually. While this may appear to be a financial windfall to the Hospital, recent annual operating budgets have been reduced to a point where these savings will represent an offset to a budgeted operating shortfall.

Since July of 1993, FSH has been operating an aggressive energy management program that has received National recognition and reduced fossil fuel consumption by approximately 30% compared to fiscal 1992/1993 levels. In returning to the combustion of #6 oil at current consumption levels, FSH would be operating with only 45% of the

sulfur dioxide emissions reported as recently as 1990 and 1991.

While FSH's actual hours of operation, or utilization, is significantly less than the total potential for the entire emissions group, the critical nature of the Hospital's medical mission dictates that the Hospital be self-sustaining in the event of extreme natural disasters or other emergency operating situations. In these extremely rare instances, the Hospital must generate its own electricity from the central plant. The Hospital's need to generate electricity to support its medical programs, when needed, requires the operating permits to allow each member of the emissions group to operate, if ever needed, to its full operating potential. The Hospital Administration has therefore requested that permits for the entire emissions group anticipate this unlikely, but critical requirement to operate to full operating potential.

This letter is an informal request for determination of whether our application to return to the use of 2% sulfur #6 fuel oil will bring us under the requirements of Prevention of Significant Deterioration.

Emissions Group Description:

The three units making up the emissions group are designated #6, #7, and #8. Process flow diagrams for these units are shown on sheets 1, 2, and 3 of the attachment. The Hospital has a pending Title V application. Sheet 4 of the attachment contains a summary of potential emissions as applied for. These are based on a steam production of 60,000 pph for 50 weeks/yr (8400 hrs.) using #5 fuel, 1% sulfur, with a combined plant efficiency of 75%. This efficiency, which is supported in the application, makes the combined heat input to the group 248 million Btu per hour.

Permit History and Potential Emissions:

Sheet 5 of the attachment shows the permit history of the units since 1990, the earliest year for which I have data. The potential emissions of SO₂, based on the permits, are also shown on this sheet. The fuel sulfur content permitted was 2% for all units until mid-1992, when units #7 and #8 were renewed at 1.5%. In 1994, unit #6 was renewed and changed from 2% to 1%, and in 1995 units #7 and #8 were amended to a limit of 1% sulfur. Sheet 6 of the attachment shows these changes graphically, along with the resulting change in potential emissions.

Operating History:

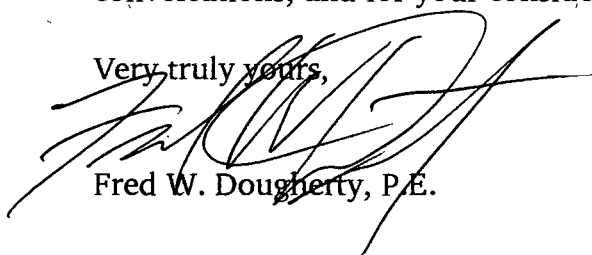
Sheet 7 shows actual SO₂ emissions for the group, beginning in 1990. Also shown on this sheet is plant utilization. It can be seen that 56% of the reduction in actual emissions was the result of fewer operating hours and improved process efficiency. Sheet 8 is a graphic description of the changes in emissions and hours.

It is our position that PSD should not apply to this change because the reduction in permitted sulfur below 1.7% (average) took place less than three years ago, and the reduction to 1% only last year. I understand that DEP is constrained by Federal and State regulations, but would request that you give us the greatest possible latitude in your interpretations. The Hospital administration has consistently acted in the best interests of the taxpayers of Florida, and it appears incongruous that the taxpayers would now be severely penalized because of technical provisions that the administration had no reasonable way of knowing about.

The dramatic reduction in actual SO₂ emissions since 1990 is due as much to reductions in hours of operation as to the changes in fuel composition. Please note that as recently as 1994 our potential emissions were 70% of those in 1990, when all units were fired with 2% sulfur fuel.

Thank you for your assistance in answering my questions during our telephone conversations, and for your consideration of this request.

Very truly yours,



Fred W. Dougherty, P.E.

Attachments:

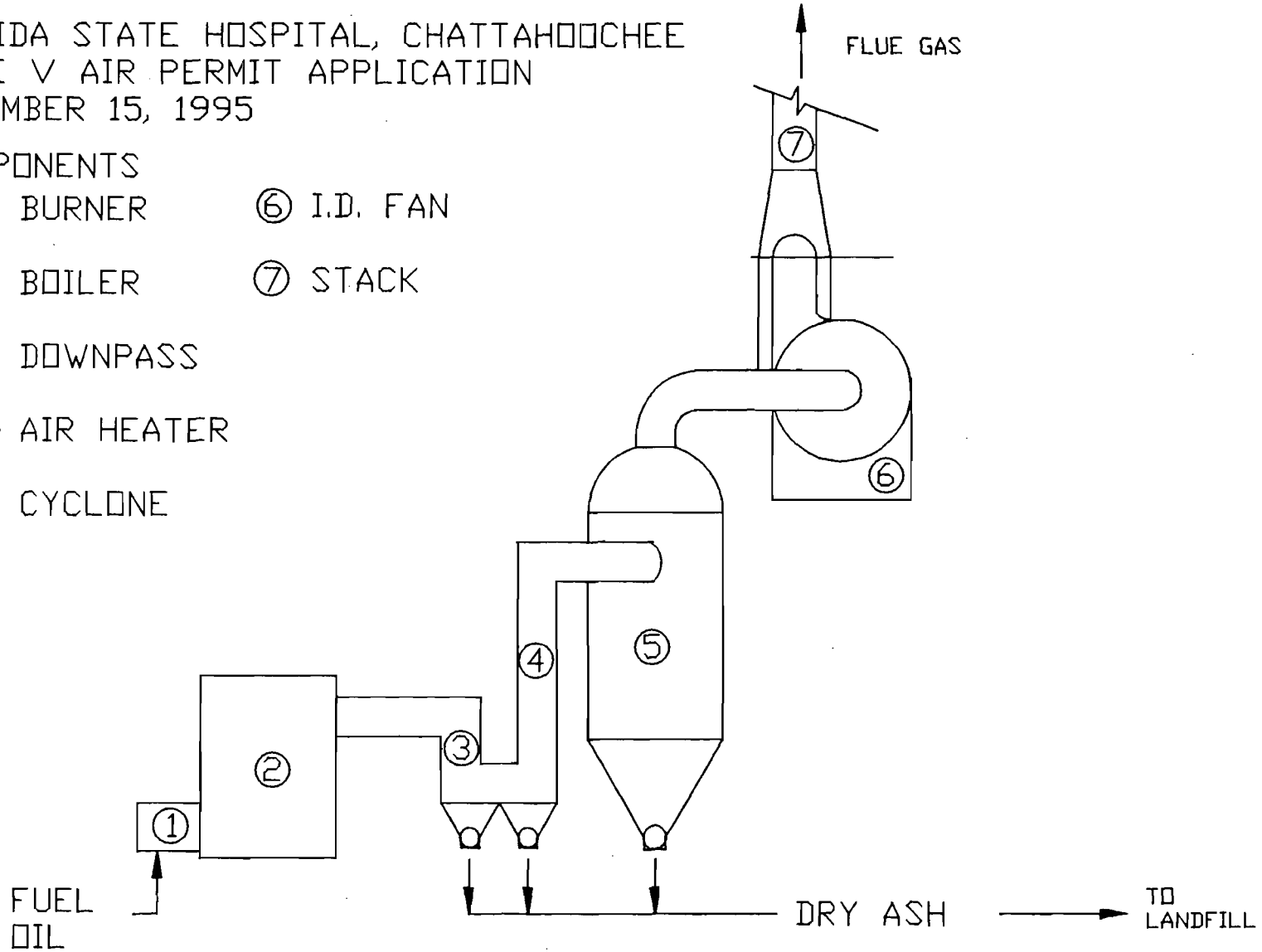
copy: Floyd Smith, Florida State Hospital

CC: EPA
NPS
NWD
Cleve Holladay

FLORIDA STATE HOSPITAL, CHATTAHOOCHEE
TITLE V AIR PERMIT APPLICATION
NOVEMBER 15, 1995

COMPONENTS

- ① BURNER
- ② BOILER
- ③ DOWNPASS
- ④ AIR HEATER
- ⑤ CYCLONE
- ⑥ I.D. FAN
- ⑦ STACK

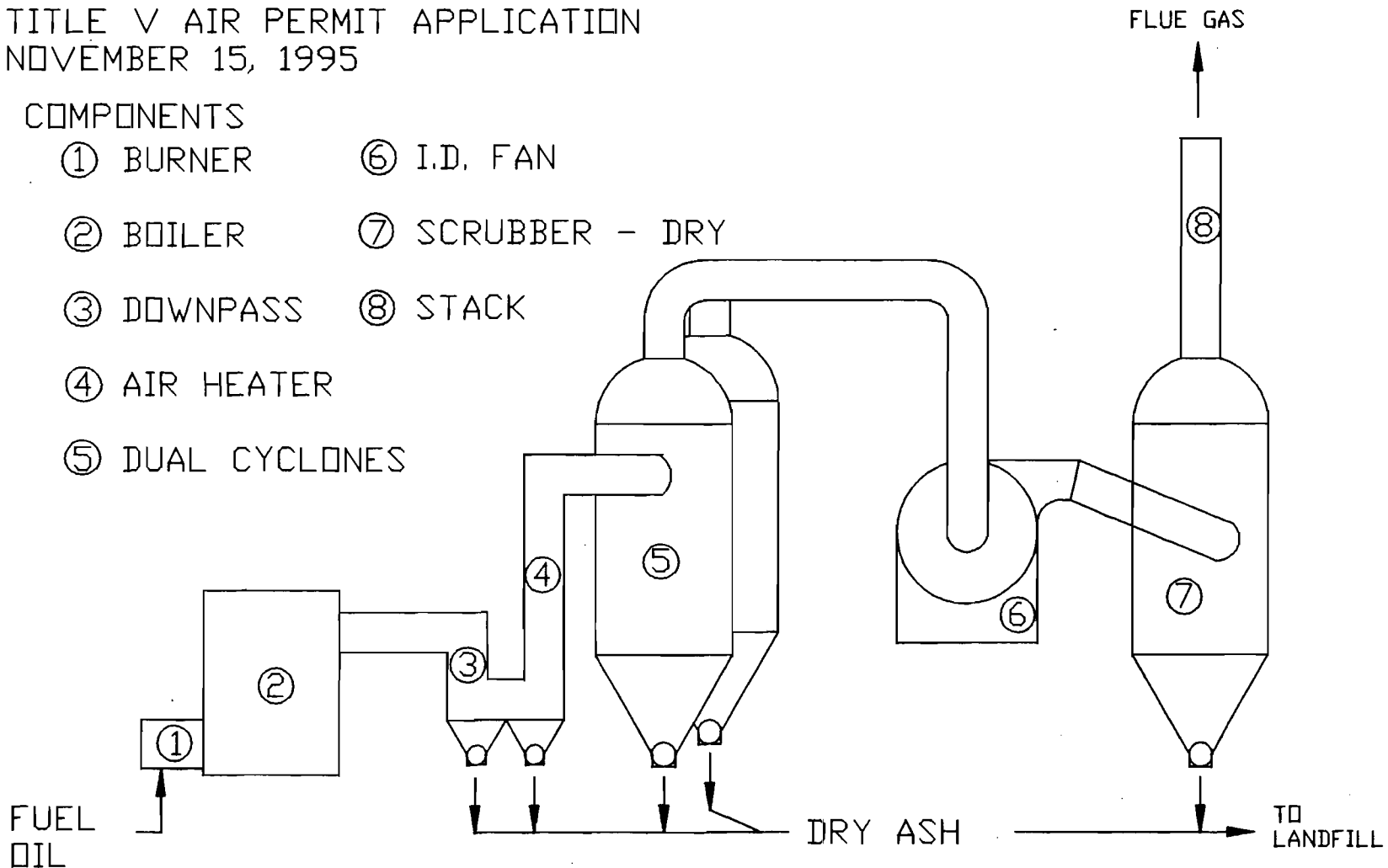


BOILER PROCESS FLOW DIAGRAM
UNIT 10TLH20000402, BOILER #6

FLORIDA STATE HOSPITAL, CHATTAHOOCHEE
TITLE V AIR PERMIT APPLICATION
NOVEMBER 15, 1995

COMPONENTS

- ① BURNER
- ② BOILER
- ③ DOWNPASS
- ④ AIR HEATER
- ⑤ DUAL CYCLONES
- ⑥ I.D. FAN
- ⑦ SCRUBBER - DRY
- ⑧ STACK

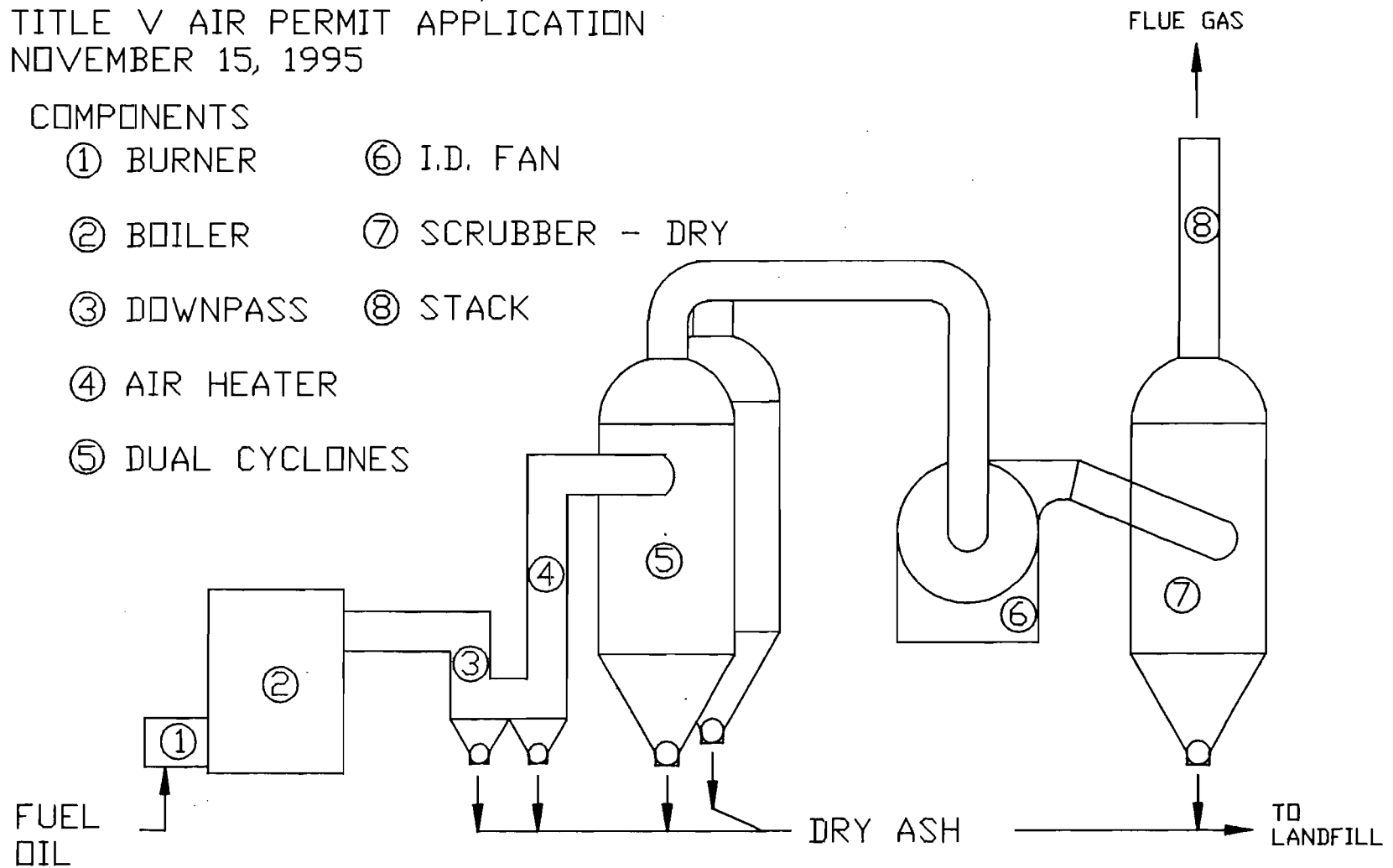


BOILER PROCESS FLOW DIAGRAM
UNIT 10TLH20000405, BOILER #7

FLORIDA STATE HOSPITAL, CHATTAHOOCHEE
TITLE V AIR PERMIT APPLICATION
NOVEMBER 15, 1995

COMPONENTS

- ① BURNER
- ② BOILER
- ③ DOWNPASS
- ④ AIR HEATER
- ⑤ DUAL CYCLONES
- ⑥ I.D. FAN
- ⑦ SCRUBBER - DRY
- ⑧ STACK



BOILER PROCESS FLOW DIAGRAM
UNIT 10TLH20000406, BOILER #8

FSH TITLE V AIR OPERATIONS PERMIT APPLICATION
 DOCUMENT A1
 NOV 15, 1995

POTENTIAL EMISSIONS ESTIMATES - SPREADSHEET

AP 42 EMISSION FACTORS, w (#5 FUEL OIL)

SO2	157 S	Lead Concentration Cpb =	240 ppm
NOX	55	Control Efficiencies (eta):	
P<10	8.96	Particle controls - cyclones, P	0.37
CO	5	P<10	0.31
P	10	Percent Sulfur, S	1.00
VOC	1.28		

ANNUAL POTENTIAL EMISSIONS (8400 hrs):

BOILER (apis no)	#6(02)	#7(05)	#8(06)
Steam Produced, 1000 lbs	504000	504000	504000
Fuel Used, 1000 gallons	4830	4390	4570
Emissions, Tons:			
SO2	379	345	359
NOX	133	121	126
P<10	7	6	6
CO	12	11	11
P	9	8	8
VOC	3.09	2.81	2.92
Pb *	11.59	10.54	10.97

*Lbs per year

DIESEL GENERATOR, w (#2 FUEL OIL)

SO2	150 S	Lead Concentration Cpb =	0 ppm
NOX	500	Control Efficiencies (eta):	
P<10	45	Particle controls - cyclones, P	0.00
CO	130	P<10	0.00
P	50	Percent Sulfur, S	0.05
VOC	12		

ANNUAL POTENTIAL EMISSIONS (8400 hrs):

DEISEL GENERATOR, APIS NO.	01
Megawatt-hours produced	16800
Fuel Used, 1000 gallons	1680
Emissions, Tons:	
SO2	6
NOX	420
P<10	38
CO	109
P	42
VOC	10.08
Pb	0.00

FLORIDA STATE HOSPITAL, CHATTAHOOCHEE

Permit History

	#6	#7	#8
<u>Steam Output, pph</u>			
1990 - present	58,000	60,000	60,000
<u>Annual hours</u>			
1990 - present	8760	8760	8760
<u>Fuel Grade</u>			
1/90 - 3/94	#6	#6	#6
4/94 - 2/95	#5	#6	#6
3/95 - present	#5	#5	#5
<u>Sulfur Content</u>			
1/90 - 5/92	2%	2%	2%
5/92 - 3/94	2%	1.5%	1.5%
3/94 - 2/95	1%	1.5%	1.5%
2/95 - present	1%	1%	1%
<u>Visual Emissions</u>			
(opacity)	<20%	<20%	<20%

Potential SO₂ Emissions based on Permit

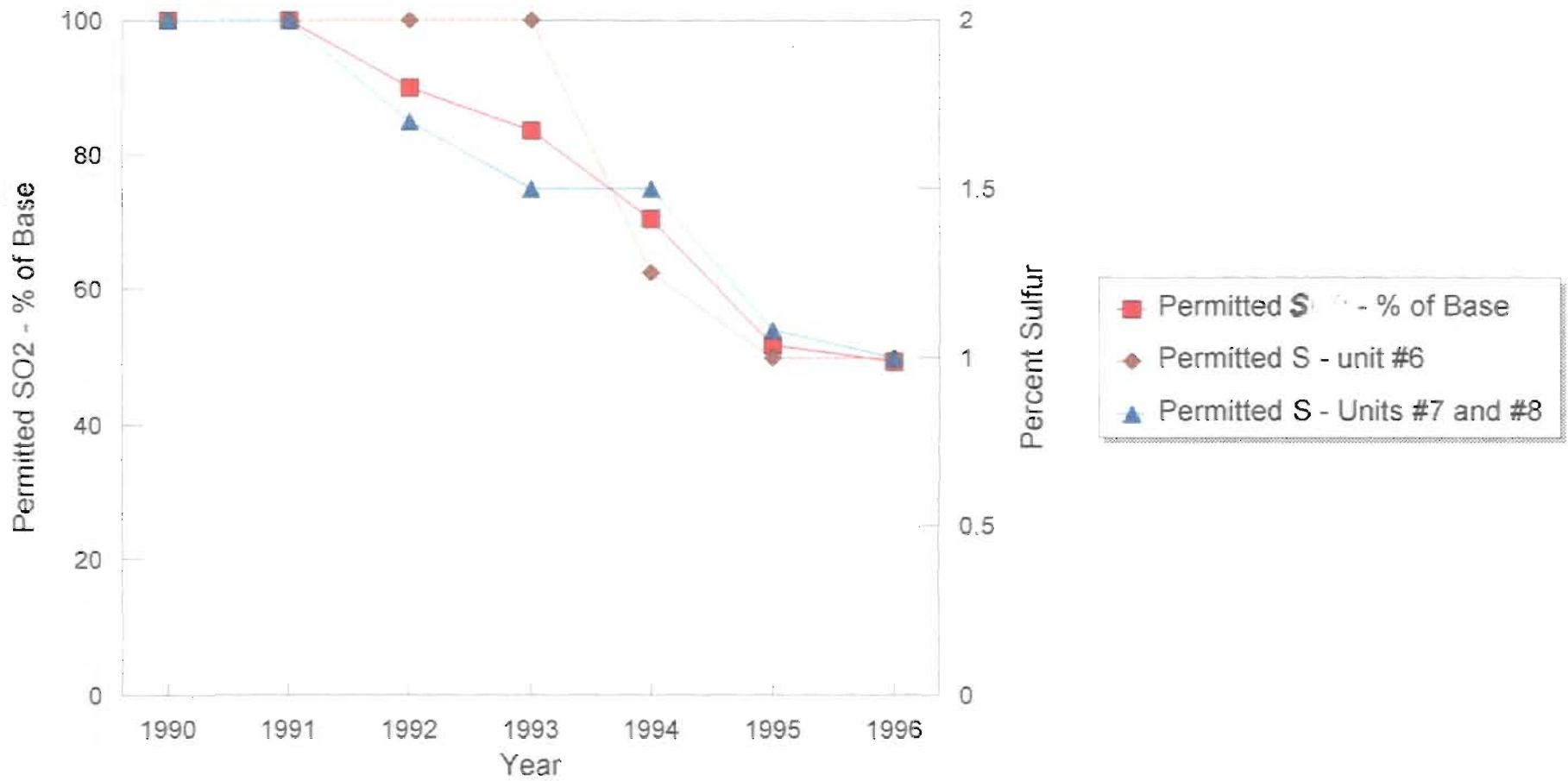
	#6	#7	#8	total	% base
1990	779	732	762	2273	100.0
1991	779	732	762	2273	100.0
1992	779	625	650	2054	90.0
1993	779	550	572	1901	83.6
1994	481	550	572	1603	70.5
1995	382	391	407	1180	51.9
1996	394	359	373	1126	49.5

Adjustments from potential Emissions Shown in Title V application

- 1) operation 52 weeks/year, factor = 1.04
- 2) where #6 fuel used, LHV factor = 1.02
- 3) factor for 1.5% sulfur = 1.5
- 4) factor for 2% sulfur = 2.0
- 5) factor for unit #6, 60,000 pph/58,000 pph = 1.03

Florida State Hospital, Chattahoochee

Permitted SO2 and Sulfur



FLORIDA STATE HOSPITAL, CHATTAHOOCHEE
ANNUAL OPERATING REPORTS

Utilization

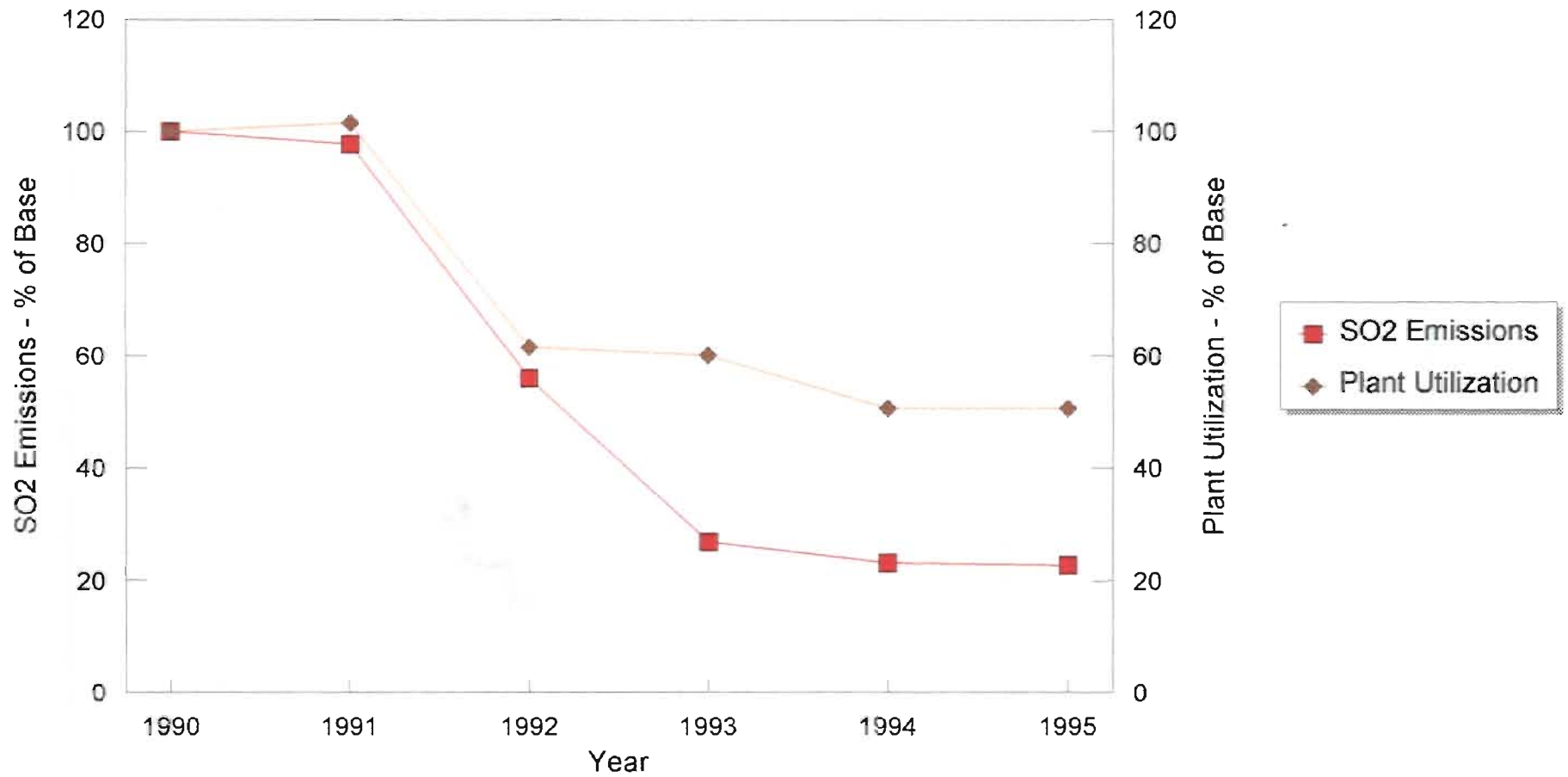
	#6	#7	#8	total	% base
1990	5919	7287	3978	.65	100.0
1991	6280	5997	4702	.66	101.5
1992	2996	5673	1966	.40	61.5
1993	5282	4317	653	.39	60.0
1994	5571	874	2346	.33	50.7
1995	5639	2823	373	.33	50.7

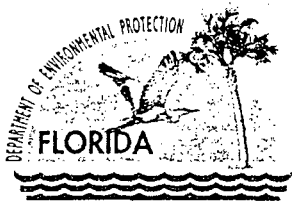
SO₂ Emissions, tons/year

	#6	#7	#8	total	% base
1990	279	263	140	682	100.0
1991	309	220	138	667	97.8
1992	93	256	33	382	56.0
1993	84	89	10	183	26.8
1994	98	22	38	158	23.2
1995	99	48	8	155	22.7

Florida State Hospital, Chattahoochee

Reported SO2 Emissions and Plant Utilization





Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

October 21, 1996

Mr. John Bunyak, Chief
Policy, Planning & Permit Review Branch
NPS-Air Quality Division
Post Office Box 25287
Denver, Colorado 80225

Re: Florida State Hospital
Fuel Permit Determination

Dear Mr. Bunyak:

Enclosed for your review and comment is the above referenced request. Please forward your comments to my attention at the letterhead address as soon as possible. The Bureau's Fax number is (904)922-6979.

If you have any questions, please contact Cleve Holladay at (904)488-1344.

Sincerely,

A. A. Linero, P.E.
Administrator
New Source Review Section

AAL/kt

Enclosures

cc: C. Holladay



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

October 21, 1996

Mr. Brian Beals, Section Chief
Air & Radiation Technology Branch
Preconstruction/HAP Section
U.S. EPA- Region IV
100 Alabama Street, SW
Atlanta, Georgia 30303

Re: Florida State Hospital
Fuel Permit Determination

Dear Mr. Beals:

Enclosed for your review and comment is the above referenced request. Please forward your comments to my attention at the letterhead address as soon as possible. The Bureau's Fax number is (904)922-6979.

If you have any questions, please contact Cleve Holladay at (904)488-1344.

Sincerely,

A. A. Linero, P.E.
Administrator
New Source Review Section

AAL/kt

Enclosures

cc: C. Holladay

FLORIDA STATE HOSPITAL MODELING ANALYSIS

Table 1. Modeling Input Parameters

Unit No.	X-Coord (m)	Y-Coord (m)	Emission Rate (g/s)	Stack Height (m)	Stack Temp(K)	Stack Vel(m/s)	Stack Dia(m)
6	0.0	0.0	22.75	28.95	466.3	18.5	1.13
7	15.4	-21.3	20.66	21.34	466.3	14.4	1.22
8	15.4	-24.7	21.44	21.34	466.3	14.98	1.22

Table 2 Modeling Results for Three Groups 24 hour SO2 Impacts

Group No.	Units in Group	Date of Max Conc	Max Predicted Conc. (ug/m3)
1	6-7	850201	136.6
1	6-7	861101	123.8
1	6-7	870307	151.0
1	6-7	880206	129.3
1	6-7	890614	120.8
2	6,8	850201	149.6
2	6,8	860204	121.9
2	6,8	870113	144.6
2	6,8	880206	124.4
2	6,8	890614	121.6
3	7-8	850201	286.2
3	7-8	860204	243.5
3	7-8	870307	290.4
3	7-8	880206	253.7
3	7-8	890305	190.5