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AUTH.NAME AUTHOR AFFILIATION
FIELDS,J.S. Pennsylvania Power & Light Co.
RECIP.NAME RECIPIENT AFFILIATION
DILAZARO,T. Pennsylvania, Commonwealth of

SUBJECT: Forwards "Emission Initial Reporting Form," for two permitted sources of air emissions operated at facilities.

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RIDS/ADDS

RIDS/ADDS

PP&L Pennsylvania Power & Light Company
Two North Ninth Street • Allentown, PA 18101-1179 • 215/774-5151

February 22, 1994

Mr. Thomas DiLazaro
Acting Program Manager
Bureau of Air Quality Control
Pennsylvania Department of Environmental Resources
Cross Valley Center
667 N. River Street
Plains, PA 18705-1099

SUSQUEHANNA STEAM ELECTRIC STATION
EMISSION STATEMENT REPORTING FORM - (1993)
PERMIT NOS. 40-306-004 and 40-306-005
CCN 741326 FILE R9-8D
PLE- 17594

Dear Mr. DiLazaro:

In response to emissions reporting requirements of Title 25 Pa. Code Chapter 135, Pennsylvania Power & Light Company is submitting the "Emission Statement Initial Reporting Form," for two permitted sources of air emissions operated at the Susquehanna SES. These permitted sources are the E emergency diesel generator (Permit No. 40-306-004) having a continuous rated capacity of 6,948 horsepower and four emergency diesels A, B, C, and D each rated at 5,580 horsepower (Permit No. 40-306-005).

An emission statement for a third source an air blasting/paint spraying operation, Permit No. 40-399-024 is not included in this letter. We estimate that 500 gallons of paint are used a year and volatile organic carbons' emissions are well below the reporting requirement of 25 tons per year.

If you have any questions, please call me at (215) 774-7889.

Sincerely,

Jerome S. Fields
Sr. Environmental Scientist - Nuclear

Enclosure

Copy to:
NRC Document Control Desk
NRC Region I
Mr. R. J. Clark, NRC Sr. Project Manager
Mr. M. M. Cebula, PaDER

jsf/tb3051a(26)

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bcc:

R. T. Clemmer	TW-8
D. V. Dyckman	Allegheny Electric
T. M. Furler	A9-3
M. M. Heidorn	SSES/S&A
C. D. Markley	SSES/PT
C. H. Saxton	SSES/PT
K. E. Shank	A9-3
R. W. Spong	SSES/SB-2
NR File	A6-2

EMISSION STATEMENT INITIAL REPORTING FORM
FACILITY IDENTIFICATION INFORMATION

1. Full name Pennsylvania Power & Light Company
2. Plant Susquehanna Steam Electric Station
3. Mailing address P.O. Box 467
   Berwick
4. State and Zip PA 18603
5. Township Salem
6. County Luzerne
7. Latitude 41 05 30 Longitude 76 08 55
8. Four-digit SIC code(s) 4911
9. Calendar year for the emissions 1993

For the purposes of completing the following worksheets, the Peak Ozone Season is the period of time between June 1 and August 31 of each year. A Daily Process Rate is an average of the daily rates of fuel usage or product throughput during the Peak Ozone Season.

Worksheets for Permit Nos.

40-306-004
40-306-005

Permit No. 40-306-004

Facility Susquenanna Steam Electric Station. Year 1993

EMISSION STATEMENT INITIAL REPORTING
COMBUSTION UNIT WORKSHEET

If necessary, use extra pages to describe additional units, fuels, control equipment, and stacks. To avoid confusion, a flow diagram should be provided in cases where there are complicated arrangements of control equipment.

A. DESCRIPTION OF UNIT

1. Company's name for the combustion unit E-emergency Diesel Gen
2. Manufacturer Cooper-Bessemer
3. Rated input (BTU/hr) 4.6×10^7
4. Installation date 1984
5. DER permit number, if any 40-306-004

B. FUEL DATA

	FUEL #1	FUEL #2
1. Type(s) of fuel burned	#2 Diesel Fuel	
2. Percent sulfur in fuel (excluding natural gas)	<0.5%	
3. Percent ash in fuel (excluding natural gas)	<0.01%	
4. Maximum amount of fuel that can be fired in any one hour	330 gal	
5. Percentage of combined heat input (on a BTU basis) represented by each fuel being fired simultaneously	--	
6. Operating schedule for each fuel during the audit year:		
a. Hours per year	--	
b. Days per year	--	
c. Hours per year	200	
7. Throughput for each type of fuel during each quarter of the audit year (Please include units):		
a. 1st	16,500 gal	

b. 2nd 16,500 gal

c. 3rd 16,500 gal

d. 4th 16,500 gal

8. Daily throughput for each type of fuel during the peak ozone season (Please include units) monthly test 4 hr/annual test 24 hr 1,320 gal/7,920 gal

9. Uncontrolled emission rates for each fuel (lb/hr):

a. Volatile organic compounds (VOCs) 4.6

b. Nitrogen oxides (NO_x; NO + NO_2) 168

10. Method used to determine uncontrolled emission rates (e.g. stack test, emission factors, etc.) AP-42*

Supporting documentation of the method used to calculate the estimated emissions (e.g. stack test results, mass-balance calculations, etc.) must be attached.

11. Exhaust gas characteristics for each fuel:

a. Flow volume in ACFM 51,000

b. Temperature (°F) 930

c. Percent moisture not available

12. If multiple fuels are used, are they fired simultaneously, alternately, or both? Please explain under COMMENTS if necessary.

C. CONTROL EQUIPMENT (if any) N/A

	UNIT #1	UNIT #2
1. Type of control device (e.g. cyclone, wet scrubber, etc.)		
2. Manufacturer		
3. Installation date		
4. Pressure drop (inches water, if applicable)		
5. Pollutant(s) controlled		
6. Collection efficiency(s)		
7. Is collected material landfilled on site?		

*US Env. Protection Agency, Compilation of Air Pollution & Emission Factors, Supplement A, Table 3.4.1, 1986.

D. STACK INFORMATION

1. Height of stack above grade 85 ft.

2. Height of roof or nearest obstacle 201 ft.

3. Inside diameter (Please include units) 36 inches

	FUEL #1	FUEL #2
4. Exhaust gas characteristics for each fuel:		
a. Flow volume (SCFM)	19,446	
b. Temperature (^{o}F)	70	
c. Percent moisture	not available	
5. Actual emission rates for each fuel (lb/hr):		
a. Volatile organic compounds (VOCs)	4.6	
b. Nitrogen oxides (NO_x; NO + NO_2)	168	
6. Actual emission rates for each fuel (lb/day) during Peak Ozone Season: 4 hr./24 hr.		
a. Volatile organic compounds (VOCs)	18.4/110.4	
b. Nitrogen oxides (NO_x; NO + NO_2)	672/4.032	
7. Method used to determine actual emission rates (e.g. stack test, emission factors, etc.)	AP-42	

Supporting documentation of the method used to calculate the estimated emissions (e.g. stack test results, mass-balance calculations, etc.) must be attached.

E. COMMENTS

Please describe any special characteristics of the combustion unit that you believe are important and may have an effect on the type and/or amount of pollutants discharged.

Permit No. 40-306-005
Facility Susquenanna SES Year 1993

EMISSION STATEMENT INITIAL REPORTING
COMBUSTION UNIT WORKSHEET

If necessary, use extra pages to describe additional units, fuels, control equipment, and stacks. To avoid confusion, a flow diagram should be provided in cases where there are complicated arrangements of control equipment.

A. DESCRIPTION OF UNIT

1. Company's name for the combustion unit A,B,C,D Emergency Diesel Gen*
2. Manufacturer Cooper-Bessemer
3. Rated input (BTU/hr) 3.8×10^7
4. Installation date 1983
5. DER permit number, if any 40-306-005

B. FUEL DATA	FUEL #1	FUEL #2
1. Type(s) of fuel burned	#2 diesel fuel	
2. Percent sulfur in fuel (excluding natural gas)	<0.5%	
3. Percent ash in fuel (excluding natural gas)	<0.01%	
4. Maximum amount of fuel that can be fired in any one hour	273	
5. Percentage of combined heat input (on a BTU basis) represented by each fuel being fired simultaneously	--	
6. Operating schedule for each fuel during the audit year:		
a. Hours per year	--	
b. Days per year	--	
c. Hours per year	200	
7. Throughput for each type of fuel during each quarter of the audit year (Please include units):		
a. 1st	13,650 gal	

*Providing information for only 1 diesel since they are all the same size and only one operates at a time.

b. 2nd	13,650 gal	
c. 3rd	13,650 gal	
d. 4th	13,650 gal	

8. Daily throughput for each type of fuel during the peak ozone season (Please include units) monthly test 4 hr/annual test 24 hr: 1,092 gal/6,552 gal

9. Uncontrolled emission rates for each fuel (lb/hr):

a. Volatile organic compounds (VOCs)	3.7	
b. Nitrogen oxides (NO_x; NO + NO_2)	135	

10. Method used to determine uncontrolled emission rates (e.g. stack test, emission factors, etc.): AP-42

Supporting documentation of the method used to calculate the estimated emissions (e.g. stack test results, mass-balance calculations, etc.) must be attached.

11. Exhaust gas characteristics for each fuel:

a. Flow volume in ACFM	40,800	
b. Temperature (°F)	930	
c. Percent moisture	not available	

12. If multiple fuels are used, are they fired simultaneously, alternately, or both? Please explain under COMMENTS if necessary. --

C. CONTROL EQUIPMENT (if any) N/A

	UNIT #1	UNIT #2
1. Type of control device (e.g. cyclone, wet scrubber, etc.)		
2. Manufacturer		
3. Installation date		
4. Pressure drop (inches water, if applicable)		
5. Pollutant(s) controlled		
6. Collection efficiency(s)		
7. Is collected material landfilled on site?		

D. STACK INFORMATION

1. Height of stack above grade 53 ft

2. Height of roof or nearest obstacle 201 ft

3. Inside diameter (Please include units) 36 inches

	FUEL #1	FUEL #2
4. Exhaust gas characteristics for each fuel:		
a. Flow volume (SCFM)	15,557	
b. Temperature (°F)	70	
c. Percent moisture	not available	
5. Actual emission rates for each fuel (lb/hr):		
a. Volatile organic compounds (VOCs)	3.7	
b. Nitrogen oxides (NO_x; NO + NO_2)	135	
6. Actual emission rates for each fuel (lb/day) during Peak Ozone Season: 4 hr/24 hr		
a. Volatile organic compounds (VOCs)	14.8/88.8	
b. Nitrogen oxides (NO_x; NO + NO_2)	540/3,240	
7. Method used to determine actual emission rates (e.g. stack test, emission factors, etc.)	AP-42	

Supporting documentation of the method used to calculate the estimated emissions (e.g. stack test results, mass-balance calculations, etc.) must be attached.

E. COMMENTS

Please describe any special characteristics of the combustion unit that you believe are important and may have an effect on the type and/or amount of pollutants discharged.

SUMMARY

Througput	A	B	C	D	Total
gal/yr	54,600	54,600	54,600	54,600	218,400
Hours/yr	200	200	200	200	800

Permit Nos. 40-306-004
40-306-005

AIR POLLUTION CONTROL ACT
CERTIFICATION OF DATA ACCURACY

Company Name: Pennsylvania Power & Light Company

Address: Two North Ninth Street

Allentown, PA 18101

Attn: J. S. Fields (A9-3)

I, H. G. Stanley, being duly sworn according to law, depose and state, under penalty of law as provided in 18 Pa. C.S. §4944 and Section 9(b)(2) of the Air Pollution Control Act, 35 P.S. §4009(b)(2), that I am a company officer or plant manager of the facility identified above, authorized to make this affidavit. I further state that the information provided by this form is true and correct.

(Signature)

Name: H. G. Stanley
(Print or Type Name)

Title: V.P. Nuclear Operations
(Print or Type Title)

Social Security No: 236-64-5285

Notarial Seal
Lisa M. Yupco, Notary Public
Salem Twp., Luzerne County
My Commission Expires March 11, 1995
Member, Pennsylvania Association of Notaries

Sworn to and subscribed before me this
23RD day of FEBRUARY, 1994.

Notary Public

DER Form Date: January 7, 1993