

DRAFT

Site Certification Conditions
for the

Orlando Utilities Commission
Stanton Energy Center Unit I

FILE

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prepared for
Orange County Pollution Control Department

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1.0 INTRODUCTION

Cross/Tessitore & Associates, P.A. (C/TA) was directed by the Orange County Pollution Control Department (OCPCD) to evaluate the State of Florida, Department of Environmental Regulation Conditions of Certification (DER) for the Orlando Utilities Commission Curtis H. Stanton Energy Center Unit 1 (PA81-14). The purpose of this evaluation was to determine the impact of the site certification requirements on the OCPCD ambient air monitoring program and future air quality compliance testing requirements.

Included in the above evaluation was a comparison of the site certification requirements for Stanton Unit I and a similar plant, Creston I, located in the State of Washington. Both plants were evaluated by the U. S. Environmental Protection Administration (EPA) for Prevention of Significant Deterioration (PSD) and also reviewed by State agencies to establish site certification conditions.

2.0 CONDITIONS OF CERTIFICATION - AIR

The Conditions of Certification for the Unit I at Orlando Utilities Commission, Curtis H. Stanton Energy Center are presented in Appendix A. A review of these conditions indicates that the following items are most critical to the OCPCD monitoring program and air quality compliance requirements:

Condition

B.1 Continuous monitors will be required for sulfur dioxide, nitrogen dioxide, and opacity for each main boiler exhaust, and an opacity monitor for the exhaust duct between the electrostatic precipitator and flue gas desulfurization (FGD) scrubber. This continuous monitoring data should be made available to OCPCD so that plant emissions can be correlated with meteorological events and/or the results of local air quality monitoring stations.

B.2 &

B.5 Two continuous ambient monitoring devices for sulfur dioxide, two ambient monitoring devices for particulates, and one continuous ambient monitoring device for nitrogen dioxide are required. The monitoring is to begin at least one year before initial plant start-up with the results to be reviewed on an annual basis by DER. The locations of these monitors are to be approved by DER.

The OCPCD should be a party to the selection of locations for the above ambient monitoring sites.

The sites should be integrated into the Orange County monitoring network, and all data from these ambient monitoring sites should be made available to OCPCD for review and analysis.

C.1 Performance stack tests for sulfur dioxide, nitrogen oxides, particulates, and visible emissions are required no later than 180 operating days after initial start-up.

C.5 Stack tests for particulates, nitrogen dioxide, sulfur dioxide, and visible emissions shall be performed annually.

OCPCD should become a party to the witnessing of the above required test, and all test data and reports should be made available to OCPCD for review.

3.0 COMPARISON BETWEEN STANTON ENERGY CENTER UNIT 1 AND CRESTON GENERATING STATION UNIT 1

A comparison was made between the air quality site certification of Stanton Energy Center Unit 1 of Orlando Utilities Commission and Creston Generating Station Unit 1 of Washington Water and Power Company of Spokane, Washington. Both of the above power plants were evaluated by the EPA for PSD and reviewed by State agencies for site certification conditions.

Tables 3-1 and 3-2 show a comparison between general plant characteristics and possible fuel types respectively. In general, the Creston Unit 1 is approximately 24% larger in generating capacity than Stanton Unit 1; however, the coal consumption may be considerably higher because of the use of a low BTU,

Table 3-1

COMPARISON OF PLANT GENERAL CHARACTERISTICS

STATION NAME	LOCATION	TOTAL CAPACITY (MW)	ANTICIPATED UNITS	CAPACITY 1ST UNIT--- (MW)	DATE OF SITE CERTIFICATION
Creston Generating Station	Lincoln County, Washington	2,280 gross 2,032 net	4	570 gross 508 net	13 Dec 1982
Stanton Energy Center	Orange County, Florida	1,840 gross 1,660 net	4	460 gross 415 net	12 May 1982

Table 3-2

COMPARISON OF PROPOSED FUEL CONSUMPTION AND CHARACTERISTICS

STATION NAME	Fuel Consumption ¹ (tons/hr)	Fuel Analysis		
		BTU (BTU/#)	Ash (%)	Sulfur (%)
Creston Generating Station	301/181	8,501 to 9,029	8.17 to 11.80	0.60 to 0.89
Stanton Energy Center	190/106	10,900 to 12,900	6.0 to 9.0	0.82 to 4.00

¹ Maximum/Minimum considering all coals

low sulfur coal. Both plants anticipate the installation of four (4) generating units during the life of the project.

3.1 Comparison of Site Certification Air Emission Limitations

Table 3-3a provides a comparison between Stanton Unit 1 and Creston Unit 1 boiler exhaust gas emission limitations. The major differences between the State imposed limitations are as follows:

1. Sulfur dioxide emission limitations are substantially lower for the Creston Plant than the Stanton Plant. This is due primarily to the fact that the Creston Plant emissions are based on a Best Available Control Technology (BACT) analysis of current FGD efficiencies while the Stanton Plant emissions are based on New Source Performance Standards (NSPS).
2. The Creston Plant emission limitations are defined for such parameters as fluorides, sulfuric acid mist, carbon monoxide (CO), volatile organic compounds (VOC), lead (Pb), beryllium (Be), and mercury (Hg) while the Stanton emission limitations do not include these parameters. Fluorides, lead, beryllium, and mercury emissions are dependent on the

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Tables 3-3a
SITE CERTIFICATION EMISSION LIMITATIONS FOR BOILER EXHAUST GASES

Pollutant	Creston Generation Station Unit 1		Stanton Energy Center Unit 1	
	Emission Limitation	Averaging Criterion	Emission Limitation	Averaging Criterion
Sulfur Dioxide SO ₂	Maximum of 1140 lb SO ₂ /hr per unit	24-hour rolling average		
	4560 lb SO ₂ /hr (plant wide)			
	Maximum of 0.220 lb SO ₂ /10 ⁶ BTU	30-day rolling average	Maximum of 1.20 lb SO ₂ /10 ⁶ BTU Maximum of 1.14 lb SO ₂ /10 ⁶ BTU	2-hour average 3-hour average
	40 CFR 60.43a(a)(2) NSPS requires a minimum of 70% SO ₂ removal	30-day rolling average		
Oxides of Nitrogen (NO _x)	0.50 lb/10 ⁶ BTU (for sub-bituminous coal)	30-day rolling average	0.6 lb/10 ⁶ BTU for all coals	30-day rolling average
	0.60 lb/10 ⁶ BTU (for bituminous coal)	30-day rolling average		
Fluorides	1.15 lb/hr (per unit)	Calendar year average	No limitations	
Sulfuric Acid Mist	80.9 lb/hr (per unit)	Calendar year average	No limitations	

Site Certification Emission Limitations for Boiler Exhaust Gases
(continued)

Pollutant	Creston Generation Station Unit 1		Stanton Energy Center Unit 1	
	Emission Limitation	Averaging Criterion	Emission Limitation	Averaging Criterion
Particulate Matter (PM) from Main Stacks	99% or greater PM removal	During performance test		
	0.030 lb/10 ⁶ BTU (per unit)	During performance test	0.030 lb/10 ⁶ BTU 124.1 lb/hour	
	Opacity value to be determined from performance test data. Maximum not to exceed 20% opacity b/	6 minute average	Opacity not to exceed 20% except for one 6-minute period per hour of not more than 27% opacity	6-minute average
Carbon Monoxide (CO)	332 lb/hr (per unit)	During performance test	No limitations	
Volatile Organic Compounds (VOC)	3.32 lb/hr (per unit)	During performance test	No limitations	
Lead (Pb)	0.27 lb/hr (per unit)	Calendar year average	No limitations	
Beryllium (Be)	0.02 lb/hr (per unit)	Calendar year average	No limitations	
Mercury (Hg)	0.03 lb/hr (per unit)	Calendar year average	No limitations	

nature of the coal burned and therefore may vary depending upon the fuel supply for each plant. However, sulfuric acid mist is a product of combustion with high sulfur coal and scrubbed exhaust gases. This pollutant may be more critical for the Stanton Plant because of its potentially higher sulfur coal supply and also the relatively high humidity conditions of Central Florida.

Table 3-3b shows a comparison between the Stanton and Creston fugitive or non-stack particulate limitations. In general, the Creston limitations are more definitive in defining the type of control system and performance, and also the emission levels of 0.01 gr/sdcf are more stringent than the Stanton requirements of 0.02 gr/acf.

3.2 Comparison of Site Certification Air Monitoring Requirements

Both the Stanton Plant and Creston Plant require monitoring of stack emissions and ambient air quality.

Table 3-4 presents a comparison of stack gas monitoring requirements while Table 3-5 presents a comparison of ambient air monitoring requirements.

Creston Generating Station Unit No. 1					Stanton Energy Center Unit No. 1
Source	Control Method	Design Efficiency	Operating Limit ¹ (gr/sdcf)	Opacity Limit ²	<p>Water sprays or chemical wetting agents and stabilizers will be applied to storage piles, handling equipment, etc. during dry periods and as necessary to all facilities to maintain an opacity of less than or equal to 5 percent, except when adding, moving or removing coal from the coal pile, which would be allowed no more than 20%.</p> <p>Particulate emissions from bag filter exhausts from the following facilities shall be limited to 0.02 gr/acf: coal, lime, limestone and fly ash handling systems excluding those facilities covered by 3.c above. A visible emission reading of 5% opacity or less may be used to establish compliance with this emission limit. A visible emission reading greater than 5% opacity will not create a presumption that the 0.02 gr/acf emission limit is being violated. However, a visible emission reading greater than 5% opacity will require the permittee to perform a stacktest, as set forth in Condition I.C.</p>
Rotary Car Dumper (coal/limestone)	Baghouse	99%	0.01	5	
Conveyors	Baghouse	99%	0.01	5	
Coal Conveyor Discharge	Telescopic Chute or Lowering Well			20	
Coal Conveyor Trippers	Baghouse	99%	0.01	5	
Transfer Houses	Baghouse	99%	0.01	5	
Coal Supply Systems (conveyor to plant and in-plant distribution bin)	Baghouse	99%	0.01	5	
Coal Silos	Baghouse	99%	0.01	5	
Limestone Silos	Baghouse	99%	0.01	5	
Bottom Ash Disposal	Fixation with Scrubber Sludge	100%	0.01		
Fly Ash Handling and Silos	Baghouse	99%	0.01	5	

Table 3-3b

Site Certification Emission Limitations for Nonstack Sources
(continued)

Creston Generating Station Unit No. 1					Stanton Energy Center Unit No. 1				
Source	Control Method	Design Efficiency	Operating Limit ¹ (gr/sdcf)	Opacity Limit ²					
Waste Treatment Building	Baghouse	99%	0.01	5					
Road Dust	Paving/Chemical Stabilization/eng. fabric								
10 Dead Storage	Surface stabilization/treatment with binding & crusting agent			20					
Emergency coal/limestone transfer points				20					

Table 3-4

Comparison of Stack Emission Monitoring Requirements

Pollutant	Stack Emission Monitoring Requirements	
	Creston Generating Station	Stanton Energy Center
Sulfur Dioxide (SO ₂)	CEM (Continuous Emission Monitor) before and after scrubber	CEM and pH Performance test
Oxides of Nitrogen (NO _x)	CEM	CEM Performance test
Particulate Matter (PM) from Main Stacks	CEM, Certified Observer and Performance test	CEM, Certified Observer and Performance test
Fluorides	Performance test	Not required
Sulfuric Acid Mist	Performance test	Not required
Carbon Monoxide (CO)	Performance test	Not required
Volatile Organic Compounds (VOC)	Performance test	
Lead (Pb)	Performance test and coal trace element analysis	Not required
Beryllium (Be)	Performance test and coal trace element analysis	Not required
Mercury (hg)	Performance test and coal trace element analysis	Not required

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ty Monitoring Requirements

Stanton Energy Center Unit I

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nd pH, alkalinity
water bodies.

The permittee shall operate two continuous ambient monitoring devices for sulfur dioxide in accordance with DER quality control procedures and EPA reference methods in 40 CFR, Part 53, and two ambient monitoring devices for suspended particulates, and one continuous NO_x monitor. The monitoring devices shall be specifically located at a location approved by the Department. The frequency of operation of the particulate monitors shall be every six days commencing as specified by the Department. During construction and operation the existing meteorological station will be operated and data reported with the ambient data.

The emission stack testing requirements for both facilities are similar except that

- (1) Creston requires the installation of a continuous emission monitor (CEM) for sulfur dioxide before and after the FGD while Stanton requires a CEM after the FGD and pH measurements in the FGD.

- (2) Creston requires performance testing for fluorides, sulfuric acid mist, CO, VOC, Be, Pb, and Hg which are not required in the Stanton Energy Center Unit 1 permit.

A comparison of the ambient air quality monitoring requirements for both stations is presented in Table 3-5. In general, Stanton is required to monitor at two sites of sulfur dioxide (SO₂), one site for Oxides of Nitrogen (NO_x), and two sites for total suspended particulates (TSP).

The Creston Station is required to monitor at a minimum of three sites as presented in the application and may be expanded to other sites as the data from the vegetative monitoring sites is collected. The Creston ambient monitoring sites also require the measurement of more parameters than the Stanton requirements. The Creston requirements include the following parameters at each site:

Wind Speed

Wind Direction

Sigma Theta (Dispersion Parameter)

Temperature

Dew Point

Rainfall pH and Salinity

Wet and Dry Deposition

SO₂

NO₂

TSP

Trace Metals of TSP.

3.3 Comparison of Site Certification Vegetative Monitoring Requirements

Table 3-6 shows the Creston Station requirements for vegetative monitoring. No such monitoring is required in the Stanton Plant site certification. The Creston vegetative monitoring program is based on the concern of the local agricultural and environmental interests due to the possible impacts of acid rain or sulfuric acid mist on local vegetation, soils, and water bodies.

4.0 CONCLUSIONS

The Creston Generating Station Unit I Site Certification Agreement is more stringent in the areas of stack and non-stack pollutant limitations, stack

Table 3-6

Site Certification Requirements for
Vegetative Monitoring for Creston Generating Station Unit I

- A. TWWPCo shall submit to EFSEC for approval a program to document the effects on vegetation of exposure to various air contaminants associated with CGS emissions, including, but not limited to, the stacks, fugitive dust and cooling towers. Expertise and input from the agricultural community could provide a valuable aid to the applicant in designing monitoring programs. The vegetation program shall be operating and obtaining valid data at least 18 months prior to the beginning of operation of the first CGS unit.
- B. The vegetation monitoring program should include, as a minimum, testing of the most sensitive plant indicators of air pollution, followed, as necessary, by testing of more resistant economically important vegetation to vegetation having known sensitivities to air pollutants.
- C. The vegetation monitoring program plan shall be submitted to EFSEC for approval six months prior to its implementation.
- D. TWWPCo shall provide annual summaries of the vegetation monitoring program results, unless significant effects are found or expected, in which case more frequent reporting to EFSEC will be required.

monitoring requirements, and ambient air monitoring requirements. The Creston agreement also includes provisions for vegetative monitoring which was not considered in the Stanton Energy Center Unit 1 Site Certification Agreement.

The Creston agreement is especially more stringent in the areas of controlling sulfur dioxide and sulfuric acid mist. This is due to (1) The large agricultural interest in the Creston area due to farming and forest products industries, and (2) The environmental posture of local residents and Indian Tribes because of the proximity of wildlife/wilderness areas, and productive hunting and fishing areas.

Sulfur dioxide and sulfuric acid mist emissions are also a concern of the Stanton Energy Center Unit 1. Sulfuric acid mist may be especially critical since it is a product of FGD systems and may be strongly affected by the high humidity conditions of Central Florida. Sulfuric acid mist also provides the highest possibility of vegetative surface water, and soils impact.

The potential impact of sulfuric acid mist was also a strong consideration in establishing a vegetative monitoring program for the Creston Station. The vegetative monitoring program is directed toward measuring impacts in immediate areas around the plant where maximum acid mist deposition is predicted.

RECOMMENDATIONS

Considering the Stanton Energy Center Unit 1 Site Certification Agreement, it is recommended that:

- (1) OCPCD become an active party to all stack and ambient monitoring requirements.
- (2) OCPCD study the possibility of requiring that Stanton conduct performance tests for sulfuric acid mist, Pb, Be, Hg, and fluorides.
- (3) OCPCD make provisions to include sulfuric acid mist as a parameter in the ambient air monitoring program; and,
- (4) OCPCD study the possibility of establishing a vegetative monitoring program to measure local and short term impact of sulfuric acid mist.

Appendix A

Conditions of Certification -
Air Stanton Energy Center Unit 1

State of Florida Department of Environmental Regulation
Orlando Utilities Commission
Curtis H. Stanton Energy Center Unit 1
PA 81-14

CONDITIONS OF CERTIFICATION

I. Air

The construction and operation of Unit 1 at Orlando Utilities Commission, Curtis H. Stanton Energy Center (CHSEC) steam electric power plant site shall be in accordance with all applicable provisions of Chapters 17-2, 17-4, and 17-5, Florida Administrative Code. In addition to the foregoing, the permittee shall comply with the following conditions of certification:

A. Emission Limitations

1. The proposed steam generating station shall be constructed and operated in accordance with the capabilities and specifications of the application including the proposed 460 (gross) megawatt generating capacity and the 4136 MMBtu/hr heat input rate for each steam generator. Based on a maximum heat input of 4136 million BTU per hour, stack emissions from CHSEC Unit 1 shall not exceed the following when burning coal:
 - a. SO₂ - 1.2 lb. per million BTU heat input, maximum two hour average, and 1.14 lb/MMBtu maximum three hour average.
 - b. NO_x - 0.60 lb. per million BTU heat input, 30 day rolling average.
 - c. Particulates - 0.03 lb. per million BTU heat input, 124.1 lb. per hour
 - d. Visible emissions - 20% (6-minute average), except one 6-minute period per hour of not more than 27% opacity
2. The height of the boiler exhaust stack for CHSEC Unit 1 shall not be less than 550 ft. above grade.
3. Particulate emissions from the coal, lime and limestone handling facilities:
 - a. All conveyors and conveyor transfer

points will be enclosed to preclude PM emissions (except those directly associated with the coal stacker/reclaimer or emergency stockout, and the limestone stockout for which enclosure is operationally infeasible).

- b. Inactive coal storage piles will be shaped, compacted and oriented to minimize wind erosion.
- c. Water sprays or chemical wetting agents and stabilizers will be applied to storage piles, handling equipment, etc. during dry periods and as necessary to all facilities to maintain an opacity of less than or equal to 5 percent, except when adding, moving or removing coal from the coal pile, which would be allowed no more than 20%.
- d. The limestone handling receiving hopper, transfer conveyors and day silos and the lime silos will be maintained at negative pressures while operating with the exhaust vented to a control system.
- e. The fly ash handling system (including transfer and silo storage) will be totally enclosed and vented (including pneumatic system exhaust) through fabric filters; and
- f. The permittee must submit to the Department within thirty (30) days after it becomes available, copies of technical data pertaining to the selected particulate emissions control for the coal, lime and limestone handling facilities. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters such as air/ cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of any such device if the Department determines the selected control device to be inadequate to meet the emission limits specified in 4 below. Such disapproval shall be issued within 30 days of receipt of the technical data.

4. Particulate emissions from bag filter exhausts from the following facilities shall be limited to 0.02 gr/acf: coal, lime, limestone and fly ash handling systems excluding those facilities covered by 3.c above. A visible emission reading of 5% opacity or less may be used to establish compliance with this emission limit. A visible emission reading greater than 5% opacity will not create a presumption that the 0.02 gr/acf emission limit is being violated. However, a visible emission reading greater than 5% opacity will require the permittee to perform a stacktest, as set forth in Condition I.C.
5. Compliance with opacity limits of the facilities listed in Condition I.A. will be determined by EPA reference method 9 (Appendix A, 40 CFR 60).
6. Construction shall reasonably conform to the plans and schedule given in the application.
7. The permittee shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the Department's St. Johns River District Office in Orlando.
8. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating of roads and construction sites used by contractors, regrassing or watering areas of disturbed soils, will be taken by the permittee.
9. Coal shall not be burned in the unit unless both electrostatic precipitator and limestone scrubber are operating properly except as provided under 40 CFR Part 60 Subpart Da.
10. The fuel oil to be fired in Unit No. 1 and the auxiliary boiler shall be "new oil", which means an oil which has been refined from crude oil and has not been used. The quality of the No. 2 fuel oil used by the auxiliary boiler shall not cause the allowable emission limits listed in the following table to be exceeded. Such emissions may be calculated in accordance with AP-42.

Allowable Emission Limits

<u>Pollutant</u>	<u>lb/MMBtu</u>
PM	0.015
SO ₂	0.51
NO _x	0.16
Visible emissions	Maximum 20% Opacity

11. The flue gas scrubber shall be put into service during normal operational startup, and shut down when No. 6 fuel oil is being burned. The emission limits when burning No. 6 fuel oil shall be 0.80 lb/MMBTU for SO₂ and 0.03 lb/MMBTU for particulate matter, except during normal startup and shut down and malfunctions as provided in 40 CFR 60.46a.
12. No fraction of flue gas shall be allowed to bypass the FGD system to reheat the gases exiting from the FGD system, if the bypass will cause overall SO₂ removal efficiency less than 90 percent (or 70% for mass SO₂ emission rates less than or equal to 0.6 lb/MMBTU 30 day rolling average). The percentage and amount of flue gas bypassing the FGD system shall be documented and records kept for a minimum of two years available for FDER's inspection.
13. Samples of all fuel oil and coal fired in the boilers shall be taken and analyzed for sulfur content, ash content, and heating value. Accordingly, samples shall be taken of each fuel oil shipment received. Coal sulfur content shall be determined and recorded on a daily basis. When determining coal sulfur content for the purpose of establishing the percentage reduction in potential sulfur emissions, such determination shall be in accordance with EPA Reference Method 19. Records of all the analyses shall be kept for public inspection for a minimum of two years after the data is recorded.
14. Within 90 days of commencement of operations, the applicant will determine and submit to EPA and FDER the pH level in the scrubber effluent that correlates with 90% removal of the SO₂ in the flue gas (or 70% for mass SO₂ emission rates less than or equal to 0.6 lb/MMBtu). Moreover, the applicant is required to operate a continuous pH meter equipped with an upset alarm to ensure that the

operator becomes aware when the pH level of the scrubber effluent fall belows this level. The pH monitor can also act as a backup in the event of malfunction of the continuous SO₂ monitor. The value of the scrubber pH may be revised at a later date provided notification to EPA and FDER is made demonstrating the minimum percent removal will be achieved on a continuous basis. Further, if compliance data show that higher FGD performance is necessary to maintain the minimum removal efficiency limit, a different pH value will be determined and maintained.

15. The applicant will comply with all requirements and provisions of the New Source Performance Standard for electric utility steam generating units (40 CFR 60 Part Da).
16. As a requirement of this specific condition, the applicant will comply with all emissions limits and enforceable restrictions required by the State of Florida Department of Environmental Regulation which may be adopted by regulation and which are more restrictive, that is lower emissions limits or more strict operating requirements and equipment specifications, than the requirements of specific conditions I.A. 1-16 of these conditions.

B. Air Monitoring Program

1. A flue gas oxygen meter shall be installed for each unit to continuously monitor a representative sample of the flue gas. The oxygen monitor shall be used with automatic feedback or manual controls to continuously maintain air/fuel ratio parameters at an optimum. Performance tests shall be conducted and operating procedures established. The document "Use of Flue Gas Oxygen Meter as BACT for Combustion Controls" may be used as a guide. The permittee shall install and operate continuously monitoring devices for each main boiler exhaust for sulfur dioxide, nitrogen dioxide, and opacity. The monitoring devices shall meet the applicable requirements of Section 17-2.710, FAC, and 40 CFR 60.47a. The opacity monitor may be placed in the duct work between the electrostatic precipitator and the FGD scrubber.

2. The permittee shall operate two continuous ambient monitoring devices for sulfur dioxide in accordance with DER quality control procedures and EPA reference methods in 40 CFR, Part 53, and two ambient monitoring devices for suspended particulates, and one continuous NO_x monitor. The monitoring devices shall be specifically located at a location approved by the Department. The frequency of operation of the particulate monitors shall be every six days commencing as specified by the Department. During construction and operation the existing meteorological station will be operated and data reported with the ambient data.
3. The permittee shall maintain a daily log of the amounts and types of fuel used and copies of fuel analyses containing information on sulfur content, ash content and heating values. These logs shall be kept for at least two years.
4. The permittee shall provide stack sampling facilities as required by Rule 17-2.700(4) FAC.
5. The ambient monitoring program shall begin at least one year prior to initial start up of Unit 1 and shall continue for at least one year of commercial operation. The Department and the permittee shall review the results of the monitoring program annually and determine the necessity for the continuation of or modifications to the monitoring program.
6. Prior to operation of the source, the permittee shall submit to the Department a plan or procedure that will allow the permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

C. Stack Testing

1. Within 60 calendar days after achieving the maximum capacity at which each unit will be operated, but no later than 180 operating days after initial startup, the permittee shall conduct performance tests for particulates SO₂, NO_x, and visible emissions during

normal operations near (+10%) 4136 MMBtu/hr heat input and furnish the Department a written report of the results of such performance tests within 45 days of completion of the tests. The performance tests will be conducted in accordance with the provisions of 40 CFR 60.46a and 48a.

2. Performance tests shall be conducted and data reduced in accordance with methods and procedures outlined in Section 17-2.700 FAC.
3. Performance tests shall be conducted under such conditions as the Department shall specify based on representative performance of the facility. The permittee shall make available to the Department such records as may be necessary to determine the conditions of the performance tests.
4. The permittee shall provide 30 days notice of the performance tests or 10 working days for stack tests in order to afford the Department the opportunity to have an observer present.
5. Stack tests for particulates NO_x and SO₂ and visible emissions shall be performed annually in accordance with Conditions C.2, 3, and 4 above.

D. Reporting

1. For CHSEC, stack monitoring, fuel usage and fuel analysis data shall be reported to the Department's St. Johns River District Office and to the Orange County Pollution Control Department on a quarterly basis commencing with the start of commercial operation in accordance with 40 CFR, Part 60, Section 60.7, and 60.49a and in accordance with Section 17-2.08, FAC.
2. Utilizing the SAROAD or other format approved in writing by the Department, ambient air monitoring data shall be reported to the Bureau of Air Quality Management of the Department quarterly. Commencing on the date of certification, such reports shall be due within 45 days following the quarterly reporting period. Reporting and monitoring shall be in conformance with 40 CFR Parts 53 and 58.
3. Beginning one month after certification, the

permittee shall submit to the Department a monthly status report briefly outlining progress made on engineering design and purchase of major pieces of air pollution control equipment. All reports and information required to be submitted under this condition shall be submitted to the Administrator of Power Plant Siting, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida, 32301.

II. Cooling Tower

A. Makeup Water Constituency

The CHSEC shall utilize only treated sewage effluent, or stormwater runoff to the makeup water supply storage pond, as cooling tower makeup water. The effluent shall have received prior to use in the tower sufficient treatment from the source of cooling water, "a sewage treatment plant", but as a minimum, secondary treatment, as well as treatment described in Condition II.B. below. Use of waters other than treated sewage effluent or site storm water, i.e., higher quality potable waters, or lower quality less-than-secondarily-treated sewage effluent, will require a modification of conditions agreed to by the St. Johns River Water Management District, Orange County and the Department, and must be approved by the Governor and Cabinet.

B. Chlorination

Sewage effluent used as cooling water makeup shall be treated to maintain a 1.0 mg/liter free chlorine residual for a 15 minute contact time, or alternately a demonstration that a viral concentration of less than one PFU per 25 gallons can be achieved at lower levels of chlorination. Chlorine levels shall be monitored continuously at the sewage treatment plants.

C. Special Studies

Upon satisfactory demonstration to the Department that the number of viruses entering the towers in the effluent makeup can be reduced to an undetectable level with the use of a lesser amount of chlorination or alternate treatment, the above requirement may be altered. This demonstration may occur through performance of special studies ap-

Appendix B

Condition of Certification Air Contaminant Permit

Creston Generating Station Unit 1
Lincoln County, Washington

ATTACHMENT V

Air Contaminant Permit

State of Washington
Energy Facility Site Evaluation Council
Olympia, Washington 98504

In Compliance with the Provisions of
RCW 80.50.040 and RCW 70.94

THE WASHINGTON WATER POWER COMPANY
SPOKANE, WASHINGTON

Plant Location: Lincoln County, Washington
Industry Type: Coal-fired Electric Generating Station

APPROVED:

Nicholas D. Lewis, Chairman
Energy Facility Site Evaluation Council

Conditions contained in this permit will ensure that all State of Washington and federal air quality standards will be met. Determinations of Best Available Control Technology (BACT) are made in this permit for four 570 MW units, guaranteed nameplate rating, of the four-unit 2280 MW Creston Generating Station. If air pollution control equipment has not been designed or ordered within five years of the issuance of this permit, a new determination may be required for BACT.

TABLE OF CONTENTS - AIR CONTAMINANT PERMIT

I. Submittal of Conceptual Plans and Specifications

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IV. General Permit Conditions

Table I - Summary of CGS Permit Conditions

**Table II - Control Efficiencies and Opacity Limits for Non-Stack
Particulate Emission Sources**

I. SUBMITTAL OF CONCEPTUAL PLANS AND SPECIFICATIONS

- A. Prior to ordering the pertinent equipment, TWWPCo shall submit to EFSEC for approval, conceptual plans and specifications for each item of air pollution control equipment and/or production equipment which will control pollutants.
- B. Criteria for design of particulate control systems shall provide for at least 99 percent particulate removal. Criteria for design of SO₂ removal shall provide 86.5 percent sulfur removal for coal D (worst case coal for sulfur content identified in the Application) on a 30-day rolling average for units 1 and 2, and 90 percent sulfur removal for coal D on a 30-day rolling average for units 3 and 4.
- C. Should the flue gas desulfurization system be substantially different than the wet scrubbing system identified in the Application, TWWPCo shall submit with these plans a feasibility report on equivalent or better control efficiencies.
- D. A plan for the control of fugitive dust which may occur during the construction and operation of the plant shall be submitted to EFSEC for approval.
- E. Prior to initial start-up, TWWPCo shall submit to EFSEC for approval, plans for start-up and shutdown and for emergency operations of coal-fired boilers and control equipment.

II. EMISSION CONTROLS AND LIMITS

- A. Controls on Boiler Emissions (Boiler emissions control requirements for the CGS are detailed below and summarized in Table I.)
 - I. New Source Performance Standard (NSPS) Compliance: Each unit shall comply with the applicable Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced after September 18, 1978 (as set forth in 40 CFR 60,

Subpart Da) and with the applicable Standards of Performance for Coal Preparation Plants (as set forth in 40 CFR, Subpart Y).

2. Control of SO₂ Emissions: SO₂ emissions from each unit shall be controlled through the use of a flue gas desulfurization system, such that an overall sulfur removal efficiency of not less than 70 percent is attained on a 30-day rolling average basis for each unit. Compliance for this condition shall be determined as provided for in Conditions III.A(3), III.B(1), and III.B(2) of this permit.

3. SO₂ Emission Limits: Compliance with the emission limitations of this condition shall be based on data from the Continuous Emission Monitors (CEM) as provided for in Conditions III.A(3), III.B(1), and III.B(2) of this permit. The CGS shall not cause to be discharged into the atmosphere SO₂ at a rate exceeding the following limits:

a. For units 1 and 2:

- 1) 0.22 lb/mmbtu as averaged over any rolling 30-day period.
- 2) 1,250 pounds per hour per unit at maximum load, as averaged over any rolling 24-hour period, not to be exceeded more than once during any calendar month.
- 3) 2,500 pounds per hour per unit at maximum load, as averaged over any one-hour period, not to be exceeded more than once during any calendar month.

b. For units 3 and 4:

- 1) 0.16 lb/mmbtu as averaged over any rolling 30-day period.
- 2) 925 pounds per hour per unit at maximum load, as averaged over any rolling 24-hour period, not to be exceeded more than once during any calendar month.

- 3) 1,850 pounds per hour per unit at maximum load, as averaged over any one-hour period, not to be exceeded more than once during any calendar month.
 - c. 4,000 pounds per hour for four units, as averaged over any rolling 24-hour period.
4. NO_x Emission Limit: Each CGS unit shall not cause to be discharged into the atmosphere NO_x (expressed as NO₂) at a rate exceeding 0.5 lb/mmbtu heat input if a subbituminous coal is fired, or at a rate exceeding 0.6 lb/mmbtu if a bituminous coal is fired, as averaged over any rolling 30-day period. Concentration limits (parts per million) will be set within the first year of operation of each unit. Compliance with this emission limit shall be based on CEM data as provided for in Conditions III.A(2), III.A(3), and III.B(3) of this permit.
5. Limit on Stack Particulate Matter (PM) Emissions: Each CGS unit shall not cause to be discharged into the atmosphere PM from the main boiler stack at a rate exceeding:
 - a. 0.03 lb/mmbtu as demonstrated by performance testing and compliance with a concentration limit of 0.013 grains per standard dry cubic foot (gr/sdcf), corrected to 7% oxygen.
 - b. Opacity limits will be set by EFSEC as a result of performance testing during the first six months of the operation of each unit. Opacity for any unit shall not exceed 27 percent nor shall it exceed 20 percent for more than one six-minute period in any one hour.
 - c. Compliance with part (a) of this condition shall be determined as provided for in 40 CFR 60, Appendix A, Method 5. Compliance with part (b) shall be determined as provided from data from CEM under Condition III.B(4) of this permit.

6. Control of Non-Stack PM Emissions: The Company shall take reasonable precautions to prevent fugitive dust from becoming airborne and shall maintain and operate all equipment properly to minimize emissions. PM emissions activities associated with the operation of the CGS units, other than emissions from the main boiler stacks, shall be controlled by the methods listed in Table II.
7. Limits on Non-Stack PM Emissions: Activities associated with the operation of the CGS units, other than combustion in the boilers, shall not cause to be discharged into the atmosphere PM emissions at rates which would cause the opacity limits in Table II to be exceeded. Compliance with this condition shall be determined as provided for in Condition III.A(5) of this permit.
8. CO Emission Limit: The CGS units shall not cause to be discharged into the atmosphere carbon monoxide (CO) at a rate exceeding 332 pounds per hour per unit as averaged over the period of the performance test. Compliance with this condition shall be determined as provided for in Condition III.A(6) of this permit.
9. Volatile Organic Compound (VOC) Emission Limit: The CGS units shall not cause to be discharged into the atmosphere VOC emissions at a rate exceeding 3.32 pounds per hour per unit as averaged over the period of the performance test. Compliance with this emission limit shall be based on annual performance testing as provided for in Condition III.A(7) of this permit.
10. Lead Emission Limit: The CGS units shall not cause to be discharged into the atmosphere lead at a rate exceeding 0.27 pounds per hour per unit, as averaged over any calendar year period. Compliance with this emission limit shall be based on annual performance testing as provided for in Conditions III.A(8) and III.C(4) of this permit.

11. Beryllium Emission Limit: The CGS units shall not cause to be discharged into the atmosphere beryllium at a rate exceeding 0.02 pounds per hour per unit, as averaged over any calendar year period. Compliance with this emission limit shall be determined as provided for in Conditions III.A(9) and III.C(4) of this permit.
12. Mercury Emission Limit: The CGS units shall not cause to be discharged into the atmosphere mercury at a rate exceeding 0.03 pounds per hour per unit, as averaged over any calendar year period. Compliance with this emission limit shall be determined as provided for in Conditions III.A(9) and III.C(4) of this permit.
13. Fluoride Emission Limit: The CGS units shall not cause to be discharged into the atmosphere fluorides at a rate exceeding 1.15 pounds per hour per unit, as averaged over any calendar year period. Compliance with this emission limit shall be determined as provided for in Conditions III.A(10) and III.C(4) of this permit.
14. Sulfuric Acid Mist Emission Limit: The CGS units shall not cause to be discharged into the atmosphere sulfuric acid mist at a rate exceeding 80.9 pounds per hour per unit, as averaged over the period of the performance test. Compliance with this emission limit shall be based on performance testing as provided for in Condition III.A(1) of this permit.
15. Revision to Conditions 8-14: If the Company selects a coal or coals for the CGS, and demonstrates through calculations acceptable to EPA and EFSEC that the potential plant-wide emission rate for a specific pollutant regulated by this permit is below the significant emission rate in 40 CFR 52.21(b) (2)(i), then the emission limits and compliance testing requirements in this permit shall not apply for that pollutant.
16. Performance Tests: See Section III.A below.

17. Continuous Monitoring: See Section III.B below.
18. Coal Quality Analysis: See Section III.C below.
19. Reporting: See Section III.D below.

B. Fugitive Emission Controls

TWWPCo shall install, continuously operate, and maintain fugitive emission controls to minimize fugitive emissions. Limits specified in Table II shall be met along with conditions outlined herein:

1. Covered storage shall be used for all active coal storage and enclosed storage shall be used for all limestone storage.
2. All coal and lime/limestone handling facilities shall have fabric filter type collectors at all transfer points, silos, bins, and hoppers. Coal and limestone shall be conveyed in a manner which will prevent fugitive emissions from occurring. All emergency coal transfer points shall be equipped with a wet suppression or equivalent system to minimize dust formation.
3. The dead coal storage pile shall be compacted and treated with a binding and crusting agent or the equivalent to minimize and prevent wind-blown dust from the storage pile.
4. The dead coal storage pile shall not be used as a frequent, routine, or continuous coal source for the CGS unless necessary.
5. Fly ash conveyors and storage system exhaust air shall be filtered through a fabric filter. Transport of ash off-site shall be in a closed container. Exhausted air from loading operations shall be filtered through a fabric filter.

6. Bottom and economizer ash shall be conveyed in a manner which will prevent any fugitive emissions from occurring.
7. Disposal areas for bottom and economizer ash, fly ash, and flue gas desulfurization sludge shall be controlled to minimize and prevent the formation of wind-blown dust.
8. On-site plant access roads and other extensively-used permanent roads shall be paved within six months of their construction. Temporary work roads and other roads shall be treated with a dust pallative as necessary. All roads shall be properly maintained and paved roads cleaned as necessary.
9. All vehicles and fuel-burning equipment used during construction and operation of the CGS shall be kept in proper mechanical order. Vehicles hauling materials likely to be blown away when hauled shall be covered.

III. COMPLIANCE DETERMINATIONS AND REPORTING

This section describes the permit conditions for performance tests, continuous monitoring, coal quality analyses, and reporting. The purpose of these Conditions is to comply with the requirements of 40 CFR 60.4 and to demonstrate each unit's compliance with the proposed emission limits in Section II. The tests typically consist of three separate runs using approved reference methods, and compliance is determined by calculating the arithmetic mean of the results. For the purpose of determining compliance with the SO₂ and NO_x emission limits based on a 30-day rolling average, the initial performance test will consist of conducting continuous monitoring during 30 successive boiler operating days and reporting the respective 30-day rolling average using methods and procedures approved in advance by EFSEC.

A. Performance Tests

Within 60 days after achieving the maximum production rate of each unit, but not later than 180 days after initial startup of each unit, TWWPCo shall

conduct performance tests for SO₂, NO_x, PM, CO, VOC, lead, beryllium, mercury, fluorides, and sulfuric acid mist. TWWPCo shall furnish EFSEC with a written report on such tests. All performance test procedures, including reasonable unit operating levels, shall be agreed upon in advance by EFSEC and TWWPCo.

Performance tests for emissions of SO₂, NO_x, PM, CO, VOC, lead, beryllium, mercury, fluorides, and sulfuric acid mist shall be conducted and results reported in accordance with the following test methods:

1. Performance tests for the emissions of SO₂ and sulfuric acid mist shall be conducted using methods and procedures set forth in 40 CFR 60, Appendix A. These test results may be used for CEM performance evaluations under 40 CFR 60.13.
2. Performance tests for the emission of NO_x shall be conducted using methods and procedures set forth in 40 CFR 60, Appendix A. These test results may be used for CEM performance evaluations under 40 CFR 60.13.
3. The performance test for determining compliance with the 30-day rolling average emission limitations for SO₂ and NO_x and the percent reduction requirement for SO₂ shall be conducted using continuous monitoring data and determination of compliance shall be based on methods set forth in 40 CFR 60, Appendix A.
4. Performance tests for stack emissions of PM shall be conducted using methods and procedures set forth in 40 CFR 60, Appendix A. Compliance with the emission limitation (lb/mmbtu) is considered adequate to assure compliance with the percent reduction requirement.
5. Compliance with non-stack PM emission limits shall be based on initial performance testing verified monthly by opacity observations

performed and recorded by a certified visible emissions observer, and additional performance checks when requested.

6. Performance tests for the emission of CO shall be conducted using methods and procedures set forth in 40 CFR 60, Appendix A.
7. Performance tests for the emission of VOC shall be conducted using methods set forth in 40 CFR 60, Appendix A.
8. Performance tests for the emission of lead shall be conducted using methods set forth in 40 CFR 60, Appendix A, and the filter catch shall be analyzed for total lead content with standard analytical methods (e.g., atomic absorption).
9. Performance tests for the emissions of beryllium and mercury shall be conducted using methods set forth in 40 CFR 60, Appendix B, as appropriate.
10. Performance tests for the emission of fluoride shall be conducted using methods set forth in 40 CFR 60, Appendix A.
11. EFSEC shall be notified in writing at least 30 days prior to the performance tests to allow time for approval of a performance test plan and to arrange for an observer to be present at the test. In lieu of the above mentioned test methods, equivalent methods may be used with prior approval from EFSEC.

For emissions of trace elements, which may vary with the coal selected, TWWPCo will conduct trace element analyses of the fuel used during performance testing to estimate the relationship between fuel trace element content and emission rate. This relationship will then be used to "monitor" emissions compliance by conducting trace element analyses on calendar quarter composite coal samples (See Section III.C of this permit.)

B. Continuous Monitoring

TWWPCo shall conduct continuous emission monitoring (CEM) for SO₂, NO_x, opacity, and O₂ or CO₂ in accordance with 40 CFR 60.47a. Those NSPS provisions require SO₂ to be monitored in-stack and at the inlet of the FGD system, with the provision that as-fired fuel monitoring (upstream of the coal pulverizers) may be used in place of an inlet SO₂ monitor. Prior to the date of startup and thereafter, the Company shall install, maintain, and operate the following continuous monitoring systems:

1. A continuous monitoring system to measure and record SO₂ concentrations discharged to the atmosphere from each unit. The system shall meet EPA monitoring performance specifications (40 CFR 60, Appendix B, Performance Specification 2).
2. A system to determine the sulfur dioxide emissions upstream of the FGD system consisting of an as-fired fuel monitoring system meeting the requirements of Method 19 (40 CFR 60, Appendix A).
3. A continuous monitoring system to measure and record NO_x concentrations discharged to the atmosphere from each unit. The system shall meet EPA monitoring performance specifications (40 CFR 60, Appendix B, Performance Specification 2).
4. A transmissometer system for continuous measurement of the opacity of stack emissions. The system shall meet EPA monitoring performance specifications (40 CFR 60.13 and 40 CFR 60, Appendix B, Performance Specification 1).
5. A continuous monitoring system to measure and record O₂ or CO₂ concentrations at each location where SO₂ and NO_x are monitored. The system shall meet EPA monitoring performance specifications (40 CFR 60.13 and 40 CFR 60, Appendix B, Performance Specification 3).

6. TWWPCo shall continuously monitor the hourly fuel firing rate which shall be combined with CEM results for purposes of determining the actual SO₂ emission rates in lb/hr, lb/mmbtu and parts per million (ppm).
7. When emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using other monitoring systems or methods, as approved by EFSEC. The substitute emission data shall cover a minimum of 18 hours in at least 22 out of 30 successive boiler operating days.

C. Coal Quality Analysis

Coal quality analyses will be necessary for determining compliance with many of the emission limits and SO₂ control requirements. For the purpose of determining compliance with certification emission control conditions, TWWPCo shall conduct the following coal sampling and analyses:

1. Coal samples for as-fired coal analyses shall be collected in accordance with the latest procedures specified in (American Standard Test Method) ASTM D 2234 using Type I selection under conditions A, B, or C and systematic spacing. The maximum size of a lot of coal to be represented by one gross sample shall not exceed 10,000 tons.
2. Gross samples shall be prepared for analysis according to ASTM D 2013 and analyzed using the following ASTM methods:

Moisture	ASTM D 3173
Ash	ASTM D 3174
Total Sulfur	ASTM D 3177
Carbon and Hydrogen	ASTM D 3178
Nitrogen	ASTM D 3179
Gross Calorific Value	ASTM D 2015

3. During performance tests specified in Condition III.A, gross samples from Condition III.C shall be analyzed for content of lead, beryllium, mercury, and fluoride. The results of performance tests for trace elements specified in Condition III.A(8, 9 and 10) shall be correlated with the results of the fuel trace element analyses.
4. For purposes of determining compliance with emission limits for trace elements, a calendar quarter composite coal sample made up of a portion from each gross sample specified in Condition III.C(1) shall be collected and analyzed for lead, beryllium, mercury, and fluorides at the end of each quarter. A calendar year analysis of trace elements shall be determined from a weighted average of the four quarterly composite samples. Compliance with the emission limits specified in Conditions II.A(10), II.A(11), II.A(12) and II.A(13) shall be determined by estimating the hourly average emission rate of elements, based on the calendar year composite fuel analysis and the correlation derived from Condition III.C(3).
5. The fuel sampling analysis in Condition III.C(1) and III.C(2) is for determining specific "F factors," which are used in Method 19 (40 CFR 60, Appendix A). The purpose of Conditions III.C(3) and III.C(4) is to provide a means of assessing compliance with the annual average trace element emission limits. It also provides a means for estimating on a quarterly basis whether annual compliance will be achieved.

D. Reporting

TWWPCo shall submit to EFSEC written report(s) of performance tests and evaluations of continuous monitors conducted in accordance with Condition III.A.

TWWPCo shall submit an inventory of emissions from the CGS each year upon a form and according to instructions received from or approved by EFSEC. The inventory shall include stack emissions of SO₂, NO_x, PM, CO,

VOC, lead, beryllium, mercury, and fluorides and non-stack PM emissions, and shall be submitted no later than forty-five days after the end of the calendar year. The inventory shall include total emissions for the year in tons per year and an estimate of the percentage of the total emitted each quarter. An estimate shall be made of the maximum design emission rate for a one hour period and a twenty-four hour period during the year. The report shall include the average sulfur content of the coal. This report may be included in the report for the last quarter of the calendar year.

TWWPCo shall submit a report to EFSEC for each calendar quarter, within 30 days after the end of the quarter, which includes the following information:

1. For sulfur dioxide and nitrogen oxides, the following information shall be reported to EFSEC for each calendar quarter:
 - a. The rolling average sulfur dioxide and oxides of nitrogen emission rates (lb/mmbtu and ppm) for the 30 successive boiler operating days, ending on each calendar day.
 - b. Average SO₂ emission rate (lb/hr) and concentration (ppm and lb/mmbtu) for each hour and each rolling 24-hour period.
 - c. The rolling average percent reduction of the potential combustion concentration of sulfur dioxide for the 30 successive boiler operating days, ending on each calendar day.
 - d. Identification of and reasons for any occurrences of non-compliance with the emission limits and description of corrective actions taken.
 - e. Identification of the boiler operating days for which pollutant monitoring data have not been obtained by an approved method for at least 18 hours of operation of the facility; justification

for not obtaining sufficient data; and description of corrective actions taken.

- f. Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction (NO_x only), emergency conditions (SO₂ only), or other reasons, and justification for excluding data for reasons other than startup, shutdown, malfunction, or emergency conditions.
 - g. Identification of "F" factors used for calculations, the method of determination, and analysis of the fuel combusted (determined from requirements of Condition III.C).
 - h. Identification of times when hourly averages have been obtained based on other monitoring systems described in Condition III.B(7).
 - i. Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system, other than during instrument performance checks.
 - j. Description of any modifications to the continuous monitoring system which could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3 (40 CFR 60, Appendix B).
2. If the minimum quantity of emission data as required in Condition III.B(7) is not obtained for any 30 successive boiler operating days, statistical information shall be submitted in accordance with 40 CFR 60.49a(c).
3. If any SO₂ emission limits under Condition II.A(3) are exceeded during emergency conditions because of control system malfunction,

TWWPCo shall describe the conditions and corrective action taken in accordance with 40 CFR 60.49a(d).

4. For any periods for which opacity, sulfur dioxide, or nitrogen oxides emissions data are not available, TWWPCo shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability.
5. TWWPCo shall submit a signed statement indicating whether:
 - a. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.
 - b. The data used to show compliance were or were not obtained in accordance with approved methods and procedures and are representative of plant performance.
 - c. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.
 - d. Compliance with the emission limits has or has not been achieved during the reporting period.
6. For opacity monitoring required under Condition III.B(4), periods of excess emissions are defined as all six-minute periods during which the average opacity exceeds the limits specified in Condition II.A(5b). Opacity levels in excess of the opacity limit and the date of such excesses are to be submitted in the quarterly report.
7. For trace elements (lead, beryllium, mercury, and fluoride), the results of the trace element analysis of the composite coal sample shall be reported for the current calendar quarter. Results from the

preceding calendar quarters shall be combined with the current quarter to determine a year-to-date trace element analysis. The year-to-date composite trace element analysis for the fourth quarter of each calendar year shall be used to determine compliance as specified in Condition III.C(4).

8. The purpose of Condition III.D is to meet the reporting requirements specified in 40 CFR 60.49a and in EFSEC's regulations (EFSEC, 1979). Condition III.D provides a means for EFSEC to monitor compliance with Conditions in II.A.

IV. GENERAL PERMIT CONDITIONS

- A. TWWPCo is prohibited from conducting open burning except as allowed by EFSEC.
- B. This permit shall be valid only if construction on the first unit commences within five years of the date of certification.
- C. TWWPCo shall notify EFSEC and obtain approval for modification or alteration of installed control equipment which may significantly affect the emission of an air contaminant.
- D. TWWPCo shall notify EFSEC at least 24 hours in advance of any planned shutdown of air pollution control equipment, unless it is a part of normal unit shutdown. TWWPCo shall notify EFSEC as soon as reasonably possible or within one working day, of any malfunction of air pollution control equipment or other upset condition that may cause or has caused a violation of the applicable standards. Such notice shall be followed by a written report on the nature of increase in a contaminant and corrective action taken.
- E. TWWPCo should retain for at least three years all records of monitoring activities and results, including all reports of recordings from continuous monitoring instruments.

- F. The diversion or bypass of any discharge from facilities utilized by the permittee to monitor compliance with the terms and conditions of this permit is prohibited, except when unavoidable to prevent loss of life or property damage.

- G. TWWPCo shall operate and maintain all control equipment and monitoring equipment installed under conditions of this permit in a conscientious manner to ensure efficient performance.

- H. The CGS shall not cause violations of applicable air quality standards and shall continuously comply with all requirements and limitations established by EFSEC regulations.

Table I
Summary of CGS Permit Conditions

Pollutant	Emission Limitation	Averaging Criterion	Compliance Determination
Sulfur dioxide (SO ₂) plant-wide	30% of potential SO ₂ emissions	30-day rolling average	CEM ¹ in stack, plus as-fired coal sampling
	4000 lb/hr.	24-hour rolling average	CEM in stack
Sulfur dioxide (SO ₂) for units 1 and 2	0.22 lb/mmbtu	30-day rolling average	CEM in stack, plus as-fired coal sampling
	1250 lb/hr (per unit)	24-hr rolling average	CEM in stack
	2500 lb/hr (per unit)	1-hr average max.	CEM in stack
Sulfur dioxide (SO ₂) for units 3 and 4	0.16 lb/mmbtu	30-day rolling average	CEM in stack, plus as-fired coal sampling
	925 lb/hr	24-hr rolling average max.	CEM in stack
	1850 lb/hr.	1-hr average max.	CEM in stack
Oxides of Nitrogen (NO _x)	0.5 lb/mmbtu (for sub-bituminous coal)	30-day rolling average	CEM in stack
	0.6 lb/mmbtu (for bituminous coal)	30-day rolling average	CEM in stack
Particulate Matter (PM) from Main Stacks	0.013 gr/sdcf	During performance test	Performance test
	20% opacity ²	6-minute average	CEM in stack

Table I
Summary of CGS Permit Conditions
(Continued)

Pollutant	Emission Limitation	Averaging Criterion	Compliance Determination
Particulate Matter (PM) from Other Activities	Opacity limitations (See Table II-2)	6-minute average	Certified visible emissions observer
Carbon Monoxide (CO)	332 lb/hr (per unit)	During performance test	Performance test
Volatile Organic Compounds (VOC)	3.32 lb/hr (per unit)	During performance test	Performance test
Lead (Pb)	0.27 lb/hr (per unit)	Calendar year average	Performance test and coal trace element analysis
Beryllium (Be)	0.02 lb/hr (per unit)	Calendar year average	Performance test and coal trace element analysis
Mercury (Hg)	0.03 lb/hr (per unit)	Calendar year average	Performance test and coal trace element analysis
Fluoride	1.15 lb/hr (per unit)	Calendar year average	Performance test and coal trace element analysis
Sulfuric Acid Mist	80.9 lb/hr (per unit)	During performance test	Performance test

1. CEM denotes continuous emission monitoring system.
2. Not to be exceeded, except that 27 percent opacity may occur for one six-minute period per hour. Opacity at or below these limits shall be determined by EFSEC for each CGS unit as a result of performance testing.

Table II

CONTROL EFFICIENCIES AND OPACITY LIMITS FOR
NON-STACK PARTICULATE EMISSION SOURCES

Source	Control Method	Design Efficiency	Operating Limit ¹ (gr/sdcf)	Opacity Limit ²
Rotary Car Dumper (coal/limestone)	Baghouse	99%	0.01	5
Conveyors	Baghouse	99%	0.01	5
Coal Conveyor Discharge	Telescopic Chute or Lowering Well			20
Coal Conveyor Trippers	Baghouse	99%	0.01	5
Transfer Houses	Baghouse	99%	0.01	5
Coal Supply Systems (conveyor to plant and in-plant distribution bin)	Baghouse	99%	0.01	5
Coal Silos	Baghouse	99%	0.01	5
Limestone Silos	Baghouse	99%	0.01	5
Bottom Ash Disposal	Fixation with Scrubber Sludge	100%		
Fly Ash Handling and Silos	Baghouse	99%	0.01	5
Waste Treatment Building	Baghouse	99%	0.01	5
Road Dust	Paving/Chemical Stabilization/eng. fabric			
Dead Storage	Surface stabilization/ treatment with binding & crusting agent			20
Emergency coal/limestone transfer points				20

1. Compliance to be determined by initial performance tests and verified by monthly opacity checks.

2. Compliance not to exceed for 3 minutes an hour.

ATTACHMENT VI

Environmental Monitoring Programs

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- I. General Description
- II. Ecological Monitoring Program and Mitigation Plans
 - A. Pre-Construction Ecological Examination
 - B. Construction Monitoring Program
 - C. Construction Mitigation Plan
- III. Vegetation Monitoring
- IV. Air Monitoring Program

I. General Description

The Environmental Monitoring Programs will be established by TWWPCo in response to requirements set forth herein. The objectives of these programs are to determine the effects of the project and project-related activities on the environment and set forth plans for the mitigation of those determined through the programs to be significant and adverse. To this end, the programs to be established will include baseline and operational monitoring of project-related chemical and physical characteristics of representative ecological systems and habitats both on-site, and within the region affected by project activities. These programs will include an ecological monitoring program to assess the physical effects of CGS and associated facilities construction; a vegetation monitoring program to assess the effects of airborne emissions associated with CGS operation; and an air monitoring program to ensure compliance with State and national ambient air quality standards and for use in the vegetation monitoring program.

II. Ecological Monitoring Program and Mitigation Plans

A. Pre-Construction Ecological Examination

1. TWWPCo shall submit to EFSEC for approval a detailed pre-construction ecological examination. This examination shall include provisions for the timely acquisition of baseline data for identifying native plant and animal species of special interest or otherwise of concern in Washington which may be adversely affected as a result of construction and other project-related activities. Assessments shall be made both of their existing local and broader regional status, and of the degree of impact on each native species and habitat of special interest expected as a result of the construction and operation of the CGS.
2. TWWPCo shall submit the results of the ecological examination with a monitoring program to assess the effects of the construction of the CGS and associated facilities on those species identified as being of special concern. The monitoring program shall be developed in consultation with the appropriate representatives of EFSEC and the Washington State Department of Game.

B. Construction Monitoring Program

1. The construction monitoring program plan shall be submitted to EFSEC with the results of the ecological examination. The intent of this program is to ensure that any construction-related adverse effects on wildlife that have not been previously identified will be identified and mitigated, and to ensure that commitments made by TWWPCo through this Agreement and resulting future mitigation plans will be conscientiously carried out by TWWPCo and its contractors.
2. The construction monitoring program shall be implemented at the time the decision is made for commencement of construction. This will allow for approximately 18 to 24 months of baseline data to be collected before on-site construction activities begin.
3. Summary reports on construction monitoring shall be submitted to EFSEC biannually beginning six months after the commencement of construction and continuing throughout the construction of the first generating unit. Should unanticipated adverse effects of significance be found at any time during the construction monitoring, EFSEC shall be notified of the effects and TWWPCo's proposals for their mitigation.

C. Construction Mitigation Plan

1. TWWPCo shall submit to EFSEC for approval a mitigation plan based upon the findings of the construction monitoring program.
2. The mitigation plan shall be submitted to EFSEC no later than 12 months following the completion of unit one and may be submitted at any time if, in EFSEC's judgment, an unanticipated adverse impact identified in the construction monitoring program occurs.

III. Vegetation Monitoring

- A. TWWPCo shall submit to EFSEC for approval a program to document the effects on vegetation of exposure to various air contaminants associated with CGS emissions, including, but not limited to, the stacks, fugitive dust and cooling towers. Expertise and input from the agricultural community could provide a valuable aid to the Applicant in designing monitoring programs. The vegetation program shall be operating and obtaining valid data at least 18 months prior to the beginning of operation of the first CGS unit.
- B. The vegetation monitoring program should include, as a minimum, testing of the most sensitive plant indicators of air pollution, followed, as necessary, by testing of more resistant economically important vegetation. The program may include comparative sensitivity tests of local vegetation to vegetation having known sensitivities to air pollutants.
- C. The vegetation monitoring program plan shall be submitted to EFSEC for approval six months prior to its implementation.
- D. TWWPCo shall provide annual summaries of the vegetation monitoring program results, unless significant effects are found or expected, in which case more frequent reporting to EFSEC will be required.

IV. Air Monitoring Program

Not less than 18 months after certification, TWWPCo shall submit the Air Monitoring Program to EFSEC for approval. The program shall include the following elements:

- A. Air sampling locations will be established in areas where, given meteorological and terrain conditions, highest concentrations of airborne emissions including cooling tower drift, would be expected to occur, as determined by dispersion modeling. The sampling stations at these locations shall serve for determining compliance with state and national ambient air quality standards, and may be used as major elements of the vegetation monitoring

program. The existing sampling locations identified in the Application are adequate for ensuring compliance with the air quality standards. The monitoring network may be expanded as necessary to meet the requirements of the vegetation monitoring program.

- B. The following will be considered for measurement at each location: wind speed, wind direction, sigma theta, temperature, dew point, rainfall pH and salinity, wet/dry deposition, SO₂, NO₂, and particulates including routine trace metal analysis of the particle filters. In addition, at selected locations downwind of the CGS, a program will be established which may include routine measurements of pH, salts, and trace metals content of soils; and pH, alkalinity and conductivity measurements of sensitive surface water bodies.
- C. The air monitoring network will be in place and collecting valid data at least one full year prior to operation of the first CGS unit.
- D. TWWPCo shall maintain a record of concentration measurements which exceed the values predicted by accepted modeling techniques as a means of validating the dispersion modeling predictions. This record shall be summarized in routine reports to EFSEC.
- E. Routine reporting from the air monitoring network will be provided along with reports summarizing results of the vegetation monitoring program.
- F. Should monitoring reveal any violations of state or national ambient air quality standards, those violations shall be reported to EFSEC along with a determination of why the violations occurred and how future violations will be prevented.
- G. Upon determination by EFSEC of any existing or potential significant adverse effect of CGS emissions, TWWPCo shall submit a program to mitigate those effects to EFSEC for approval.

program. The existing sampling locations identified in the Application are adequate for ensuring compliance with the air quality standards. The monitoring network may be expanded as necessary to meet the requirements of the vegetation monitoring program.

- B. The following will be considered for measurement at each location: wind speed, wind direction, sigma theta, temperature, dew point, rainfall pH and salinity, wet/dry deposition, SO₂, NO₂, and particulates including routine trace metal analysis of the particle filters. In addition, at selected locations downwind of the CGS, a program will be established which may include routine measurements of pH, salts, and trace metals content of soils; and pH, alkalinity and conductivity measurements of sensitive surface water bodies.
- C. The air monitoring network will be in place and collecting valid data at least one full year prior to operation of the first CGS unit.
- D. TWWPCo shall maintain a record of concentration measurements which exceed the values predicted by accepted modeling techniques as a means of validating the dispersion modeling predictions. This record shall be summarized in routine reports to EFSEC.
- E. Routine reporting from the air monitoring network will be provided along with reports summarizing results of the vegetation monitoring program.
- F. Should monitoring reveal any violations of state or national ambient air quality standards, those violations shall be reported to EFSEC along with a determination of why the violations occurred and how future violations will be prevented.
- G. Upon determination by EFSEC of any existing or potential significant adverse effect of CGS emissions, TWWPCo shall submit a program to mitigate those effects to EFSEC for approval.

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP

ACTION NO

ACTION OUT DATE

KAHEL		<i>(Signature)</i>		STARNES	
BLOMMEL		THOMAS		MARTY HALL	
BARKER		GEORGE		MARSHALL MOTT-SMITH	
J. ROGERS		PALAGYI			

REMARKS

*Patton - send cc to Chuck Collins + Buck Owen
 Larry
 Bitt
 Bob
 File*

Fed Permit

CAC

6/14 PA

INFORMATION

- REVIEW & RETURN
- REVIEW & FILE
- INITIAL & FORWARD

DISPOSITION

- REVIEW & RESPOND
- PREPARE RESPONSE
- FOR MY SIGNATURE
- FOR YOUR SIGNATURE
- IT'S DISCUSS
- SET UP MEETING
- INVESTIGATE & REPLY
- INITIAL & FORWARD
- DISTRIBUTE
- CONCURRENCE
- JOB PROCESSING
- INITIAL & RETURN

FORM

32200, H.MALLWOOD

DATE

PHONE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

JUN 10 1982

REF: 4AW-AM

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

JUN 14 1982
EAQM

Mr. B. E. Shoup, Director
Environmental Division
Orlando Utilities Commission
P. O. Box 3193
Orlando, Florida 32802

Re: PSD-FL-084

Dear Mr. Shoup:

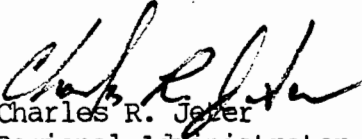
Review of your May 18, 1981, application to construct a new power generating facility in Orlando, Florida, has been completed. The construction is subject to rules for the Prevention of Significant Air Quality Deterioration (PSD) contained in 40 CFR §52.21. The Florida Bureau of Air Quality Management performed the preliminary determination concerning the proposed construction and published a request for public comment on April 15, 1982. The only comments received were submitted by the St. Johns River District Office, DER and the U. S. EPA.

Authority to construct a stationary source is hereby granted for the facility described above, subject to the conditions in the permit to construct (enclosed). This authority to construct is based solely on the requirements of 40 CFR §52.21, the federal regulations governing significant deterioration of air quality. It does not apply to NPDES or other permits issued by this agency or by other agencies. The complete analysis which justifies this approval has been fully documented for future reference, if necessary. Please be advised that a violation of any condition issued as part of this approval, as well as any construction which proceeds in material variance with information submitted in your application, will be subject to enforcement action.

This final permitting decision is subject to appeal under 40 CFR §124.19 by petitioning the Administrator of the U. S. EPA within 30 days after receipt of this letter of approval to construct. The petitioner must submit a statement of reasons for the appeal and the Administrator must decide on the petition within a reasonable time period. If the petition is denied, the permit becomes immediately effective. The petitioner may then seek judicial review.

Any questions concerning this approval may be directed to Richard S. DuBose, Chief, Air Engineering Section, Air and Waste Management Division at (404) 881-4901.

Sincerely yours,


Charles R. Jeter
Regional Administrator

Enclosures



PSD-FL-084

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

PERMIT TO CONSTRUCT UNDER THE RULES FOR THE
PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY

Pursuant to and in accordance with the provisions of Part C, Subpart 1 of the Clean Air Act, as amended, 42 U.S.C. §7470 et seq., and the regulations promulgated thereunder at 40 C.F.R. §52.21, as amended at 45 Fed. Reg. 52676, 52735-41 (August 7, 1980),

Orlando Utilities Commission
P.O. Box 3193
Orlando, Florida 32802

is hereby authorized to construct/modify a stationary source at the following location:

Curtis H. Stanton Energy Center
Orlando, Florida

UTM Coordinates: 484.0 km East, 3150.5 km North

Upon completion of this authorized construction and commencement of operation/production, this stationary source shall be operated in accordance with the emission limitations, sampling requirements, monitoring requirements and other conditions set forth in the attached Specific Conditions (Part I) and General Conditions (Part II).


This permit shall become effective on JUN 10 1982

If construction does not commence within 18 months after the effective date of this permit, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time this permit shall expire and authorization to construct shall become invalid.

This authorization to construct/modify shall not relieve the owner or operator of the responsibility to comply fully with all applicable provisions of Federal, State, and Local law.

JUN 10 1982

Date Signed


Charles R. Jeter
Regional Administrator

Specific Conditions

1. The proposed steam generating station shall be constructed and operated in accordance with the capabilities and specifications of the application including the 4136 MMBtu/hr. heat input rate for each steam generator.

2. Emissions for each unit shall not exceed the allowable emission limits listed in the following Table for SO₂, PM, NO_x and visible emissions. The control technology and allowable emission limits for Unit 2 shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of the unit. At such time, the applicant shall demonstrate the adequacy of this BACT determination or propose a modification to it, taking into account energy, environmental and economic impacts.

Allowable Emission Limits

<u>Pollutant</u>	<u>lb/MMBtu</u>
PM	0.03
SO ₂	1.14 (3 hr. average) and 90 percent reduction (30 day rolling average)
NO _x	0.60 (30-day rolling average)
Visible Emissions	20% (6-minute average), except for one 6-minute period per hour of not more than 27% opacity.

3. The fuel oil to be fired in each unit and the auxiliary boiler shall be "new oil", which means an oil which has been refined from crude oil and has not been used. Emissions from the auxiliary boiler for burning No. 2 fuel oil shall not exceed the allowable emission limits listed in the following table.

Allowable Emission Limits

<u>Pollutant</u>	<u>lb/MMBtu</u>
PM	0.015
SO ₂	0.51
NO _x	0.16
Visible Emissions	20% Opacity

4. The flue gas scrubber shall be put into service during normal operational startup, and shutdown, when No. 6 fuel oil is being burned. The emission limits when burning No. 6 fuel oil shall be 0.80 lb/MMBtu for SO₂ and 0.03 lb/MMBtu for particulate matter, except during normal startup and shutdown and malfunctions as provided in 40 CFR 60.46a.
5. Samples of all fuel oil and coal fired in the boilers shall be taken and analyzed for sulfur content, ash content, and heating value. Accordingly, samples shall be taken of each fuel oil shipment received. Coal sulfur content shall be determined and recorded on a daily basis

in accordance with EPA Reference Method 19. Records of all the analyses shall be kept for public inspection for a minimum of two years.

6. No fraction of the flue gas shall be allowed to bypass the FGD system to reheat the gases exiting from the FGD system, if the bypass will cause overall SO₂ removal efficiency less than 90 percent (or 70% for mass SO₂ emission rates less than or equal to 0.6 lb/MMBtu). The percentage and amount of flue gas bypassing the FGD system shall be documented and records kept for a minimum of two years available for public inspection.

7. A flue gas oxygen meter shall be installed for each unit, to continuously monitor a representative sample of the flue gas. The oxygen monitor shall be used with automatic feedback or manual controls to continuously maintain optimum air/fuel ratio parameters.

The applicant shall install and operate continuously monitoring devices for each main unit exhaust for sulfur dioxide, nitrogen oxide and opacity. The monitoring devices shall meet the applicable requirements of 40 CFR 60.47a.

8. Visible emissions from the following facilities with air pollution control equipment shall be limited to 5%

opacity or 0.02 gr/acf: coal, lime, limestone and flyash handling systems.

9. Coal shall not be burned in the unit unless both the electrostatic precipitator and limestone scrubber are operating properly except as provided under 40 CFR 60.46a.

10. The following requirements shall be met to minimize fugitive dust emissions from the coal storage and handling facilities, the limestone storage and handling facilities, haul roads and general plant operations:
 - a. All conveyors and conveyor transfer points will be enclosed to preclude PM emissions (except those directly associated with the coal stacker/reclaimer and the emergency stockout facilities for which enclosure is operationally infeasible).

 - b. Inactive coal storage piles will be shaped, compacted and oriented to minimize wind erosion.

 - c. Water sprays or chemical wetting agents and stabilizers will be applied to storage piles, handling equipment, etc., during dry periods and as necessary to all facilities to maintain an opacity of less than or equal to 5 percent except when adding,

transferring and/or removing coal from the coal pile during which the opacity allowed shall be 20%. During adding, transferring or removing coal activity, the coal stacking spray should be operating at all times.

- d. The limestone transfer conveyors and day silos will be maintained at negative pressures while operating with the exhaust vented to a control system. Water sprays shall be used to control particulate matter emissions from coal and limestone receiving hoppers.
- e. The fly ash handling system (including transfer and silo storage) will be totally enclosed and vented (including pneumatic system exhaust) through fabric filters.

- 11. Within 90 days of commencement of operations, the applicant will determine and submit to EPA and FDER the pH level in the scrubber effluent that correlates with 90% removal of the SO₂ in the flue gas (or 70% for mass SO₂ emission rates less than or equal to 0.6 lb/MMBtu). Moreover, the applicant is required to operate a continuous pH meter equipped with an upset alarm to ensure that the operator becomes aware when pH value of the scrubber effluent rises above certain limited value. The value of the scrubber pH may be revised at a later

date provided notification to EPA and FDER is made demonstrating that the minimum percent removal will be achieved on a continuous basis. Further, if compliance data show that higher FGD performance is necessary to maintain the minimum removal efficiency limit, a different pH value will be determined and maintained.

12. The applicant will comply with all requirements and provisions of the New Source Performance Standard for electric utility steam generating units (40 CFR 60 Part Da). In addition, the applicant must comply with the provisions and the requirements of the attached General Conditions.

13. As a requirement of this specific condition, the applicant will comply with all emissions limits and enforceable restrictions required by the State of Florida Department of Environmental Regulation which are more restrictive, that is lower emissions limits or stricter operating requirements and equipment specifications, than the requirements of specific conditions 1-12 of this permit.

GENERAL CONDITIONS

1. The permittee shall notify the permitting authority in writing of the beginning of construction of the permitted source within 30 days of such action and the estimated date of start-up of operation.
2. The permittee shall notify the permitting authority in writing of the actual start-up of the permitted source within 30 days of such action and the estimated date of demonstration of compliance as required in the specific conditions.
3. Each emission point for which an emission test method is established in this permit shall be tested in order to determine compliance with the emission limitations contained herein within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source. The permittee shall notify the permitting authority of the scheduled date of compliance testing at least thirty (30) days in advance of such test. Compliance test results shall be submitted to the permitting authority within forty-five (45) days after the complete testing. The permittee shall provide (1) sampling ports adequate for test methods applicable to such facility, (2) safe sampling platforms, (3) safe access to sampling platforms, and (4) utilities for sampling and testing equipment.
4. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of two (2) years from the date of recording.
5. If, for any reason, the permittee does not comply with or will not be able to comply with the emission limitations specified in this permit, the permittee shall immediately notify the State District Manager by telephone and provide the District Office and the permitting authority with the following information in writing within four (4) days of such conditions:
 - (a) description for noncomplying emission(s),
 - (b) cause of noncompliance,
 - (c) anticipated time the noncompliance is expected to continue or, if corrected, the duration of the period of noncompliance,

(d) steps taken by the permittee to reduce and eliminate the noncomplying emission,

and

(e) steps taken by the permittee to prevent recurrence of the noncomplying emission.

Failure to provide the above information when appropriate shall constitute a violation of the terms and conditions of this permit. Submittal of this report does not constitute a waiver of the emission limitations contained within this permit.

6. Any change in the information submitted in the application regarding facility emissions or changes in the quantity or quality of materials processed that will result in new or increased emissions must be reported to the permitting authority. If appropriate, modifications to the permit may then be made by the permitting authority to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause violation of the emission limitations specified herein.
7. In the event of any change in control or ownership of the source described in the permit, the permittee shall notify the succeeding owner of the existence of this permit by letter and forward a copy of such letter to the permitting authority.
8. The permittee shall allow representatives of the State environmental control agency or representatives of the Environmental Protection Agency, upon the presentation of credentials:
 - (a) to enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of the permit;
 - (b) to have access to any copy at reasonable times any records required to be kept under the terms and conditions of this permit, or the Act;
 - (c) to inspect at reasonable times any monitoring equipment or monitoring method required in this permit;

(d) to sample at reasonable times any emission of pollutants;

and

(e) to perform at reasonable times an operation and maintenance inspection of the permitted source.

9. All correspondence required to be submitted to this permit to the permitting agency shall be mailed to:

Mr. James T. Wilburn
Chief, Air Management Branch
Air & Waste Management Division
U.S. EPA, Region IV
345 Courtland Street, NE
Atlanta, GA 30365

10. The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

The emission of any pollutant more frequently or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.