



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

August 18, 1994

Mr. Robert S. Chatham, P.E.  
Destec Energy, Inc.  
P.O. Box 4411  
Houston, Texas 77210-4411

RE: Custom Fuel Monitoring Schedule Request  
Tiger Bay Cogeneration Facility  
AC 53-214903 [PSD-FL-190]

Dear Mr. Chatham:

Thank you for your letter dated August 3, 1994 and the attached documents. Comments concerning the letter and attached documents are as follows:


- 1) Pursuant to Rules 17-4.050(4) and (5), F.A.C., the Department must receive the proper processing fee before action is taken on an applicant's request. The Department will begin processing the subject request once a fee of \$250.00 has been received.
- 2) Please clarify that the data submitted on the sulfur content of the fuel were for the pipeline that supplies the turbine at Tiger Bay, without intermediate bulk storage.
- 3) Please provide the test(s) or analysis method(s) used to determine the sulfur content of the fuel referenced in your letter and in Table 1. Also, provide supporting documentation from the vendor. In addition, please provide any additional sulfur analysis data that is available for the past two years with supporting documentation and method(s) of determining sulfur content.
- 4) EPA has delegated authority for implementation of 40 CFR 60, Subpart GG, to the Department. The Department and EPA agree that all future requests be submitted to the Department and not EPA. The Department will then coordinate with EPA for approval of custom fuel monitoring schedules.
- 5) If available, please provide any information to substantiate that the fuel sampling location for the sulfur

Mr. Robert Chatham  
Permit Amendment Request  
AC 53-214903 [PSD-FL-190]  
August 18, 1994  
Page 2 of 2

content will clearly be representative of the fuel that is delivered to Tiger Bay.

If you have any questions concerning the above, please call Mr. Charles Logan at (904) 488-1344 or write to me at the above address.

Respectfully,

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

CHF/csl/bjb

cc: B. Thomas, SWD  
D. Zell, SWD  
J. Harper, U.S. EPA  
B. Beals, U.S. EPA  
J. Brown, DEP



DESTEC ENERGY, INC.  
2500 CITYWEST BLVD., SUITE 150  
P.O. BOX 4411  
HOUSTON, TEXAS 77210-4411  
(713) 735-4000

August 15, 1994

Mr. Bill Thomas  
Florida Department of Environmental Protection  
Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

RE: CEMS Certification Date  
Permit No. AC53-214903 and PSD-FL-190  
Tiger Bay Limited Partnership  
Tiger Bay Cogeneration Facility

Dear Mr. Thomas,

On behalf of Tiger Bay Limited Partnership, the proposed date for the certification of the NO<sub>x</sub> continuous emission monitoring system is September 4, 1994. The parameters for which sampling is proposed are listed below:

Oxides of Nitrogen (NO<sub>x</sub>) EPA Method 7E;  
Performance Specification 2

Oxygen (O<sub>2</sub>) EPA Methods 3A;  
Performance Specification 3

Should you have any questions, please feel free to contact me at (713) 735-4087.

Sincerely,

*Robert S. Chatham*

Robert S. Chatham, P.E.  
Senior Environmental Engineer

RSC:kro

cc: Chuck Cook  
Vern Staub  
David Zell - FDEP  
File 1253

Post-It™ brand fax transmittal memo 7671		# of pages > 1
To Bill Thomas	From R Chatham	
Co. FDEP	Co. Destec	
Dept. Air	Phone # 713 735 4087	
Fax # 813 744 6083	Fax # 713 735 4571	



August 9, 1993

Mr. Phil McLemore  
Polk County Board County Commissioners  
Director, Division of Development Services  
330 West Church St.  
Bartow, Florida 33830


**RE: Conditional Use Permit CUP-92-17 & Commercial Site Plan Approval SA-92-01  
Tiger Bay cogeneration facility**

Dear Mr. McLemore:

Please be advised that the ownership name for the Tiger Bay cogeneration facility has been changed from Central Florida Power Limited Partnership to Tiger Bay Limited Partnership. The name change has been made to distinguish the project for marketing purposes and has no effect on the ownership structure.

Should you or your department have questions or comments about this letter please contact me at (713) 735-4087.

Sincerely,

  
for RSC

Robert S. Chatham, P.E.  
Senior Environmental Engineer

RSC:tk

cc: Mr. B. Thomas - SW District

RECEIVED  
AUG 23 1993  
Department of Environmental Protection  
BY SOUTHWEST DISTRICT

RECEIVED  
AUG 23 1993  
Department of Environmental Protection  
BY SOUTHWEST DISTRICT

August 9, 1993

Mr. G. Preston Lewis, P.E.  
Bureau of Air Regulation  
Florida Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

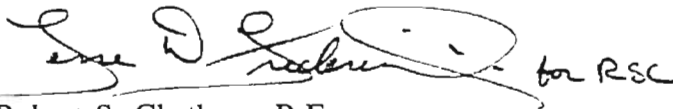
**RE: Tiger Bay Limited Partnership (formerly Central Florida Power Limited Partnership) Tiger Bay cogeneration plant  
PSD-FL-190  
AC 53-214903**

Dear Mr. Lewis:

Please be advised that the ownership name for the Tiger Bay cogeneration facility has been changed from Central Florida Power Limited Partnership to Tiger Bay Limited Partnership. The name change has been made to distinguish the project for marketing purposes and has no effect on the ownership structure.

Should you or your department have questions or comments about this letter please contact me at (713) 735-4087.

Sincerely,

Handwritten signature of Robert S. Chatham, P.E., with the initials "for RSC" written below it.

Robert S. Chatham, P.E.  
Senior Environmental Engineer

RSC:tk

cc: Mr. B. Thomas - SW District

August 9, 1993

Mr. P. Scott Laidlaw, P.G.  
Bartow Permitting Department  
Southwest Florida Water Management District  
170 Century Boulevard  
Bartow, Florida 33830

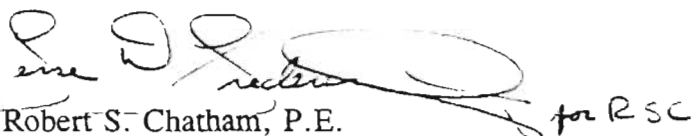
**RE: Individual Water Use Permit 2010840.00  
Tiger Bay cogeneration facility**

Dear Mr. Laidlaw:

Please be advised that the ownership name for the Tiger Bay cogeneration facility has been changed from Central Florida Power Limited Partnership to Tiger Bay Limited Partnership. The name change has been made to distinguish the project for marketing purposes and has no effect on the ownership structure. Please revise your records accordingly.

Should you or your department have questions or comments about this letter please contact me at (713) 735-4087.

Sincerely,

  
Robert S. Chatham, P.E. for RSC

Senior Environmental Engineer

RSC:tk

cc: Mr. B. Thomas - SW District

August 9, 1993

Mr. George W. Sharrock  
Florida Department of Environmental Regulation  
3804 Coconut Palm Drive  
Tampa, Florida 33619

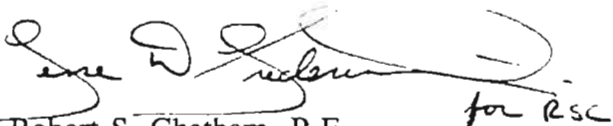
**RE: Permit No. IC53-221795 & RC53-221796  
Tiger Bay cogeneration facility**

Dear Mr. Sharrock:

Please be advised that the ownership name for the Tiger Bay cogeneration facility has been changed from Central Florida Power Limited Partnership to Tiger Bay Limited Partnership. The name change has been made to distinguish the project for marketing purposes and has no effect on the ownership structure. Please revise your records accordingly.

Should you or your department have questions or comments about this letter please contact me at (713) 735-4087.

Sincerely,



Robert S. Chatham, P.E.  
Senior Environmental Engineer

RSC:tk

cc: Mr. B. Thomas - SW District

July 25, 1994

Mr. Bill Thomas  
Florida Department of Environmental Protection  
Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

**RE: Actual Initial Firing Date  
Permit No. AC53-214903, PSD-FL-190 & AC53-230744  
Tiger Bay Limited Partnership  
Tiger Bay Cogeneration Facility**

Dear Mr. Thomas,

On July 20, 1994, the initial firing of the gas turbine/heat recovery boiler occurred. Presently, the initial firing date for the zero liquid discharge system is August 1, 1994.

Should you have any questions, please feel free to contact me at (713) 735-4087.

Sincerely,



Robert S. Chatham, P.E.  
Senior Environmental Engineer

RSC:kro

cc: Chuck Cook  
David Zell  
File 1253





DESTEC ENERGY, INC.  
2500 CITYWEST BLVD., SUITE 150  
P.O. BOX 4411  
HOUSTON, TEXAS 77210-4411  
(713) 735-4000

September 22, 1994

Post-It™ brand fax transmittal memo 7871		# of pages > 4
To	Charles Logan	From
Co.	FDEP	Co.
Dept.	Air	Phone #
Fax #	904 922-6979	713 735 4087

Mr. Charles Logan  
Bureau of Air Regulation  
Florida Department of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

RE: NSPS Custom Fuel Monitoring Schedule  
Tiger Bay Limited Partnership  
Tiger Bay Cogeneration Facility  
AC 53-214903 (PSD-FL-190)

Dear Mr. Logan:

This correspondence is submitted on behalf of Tiger Bay Limited Partnership (TBLP) to request approval of a natural gas custom fuel monitoring schedule and to supplement our September 9, 1994 correspondence. This request is made necessary by TBLP's Specific Permit Condition No. 18 of AC 53-214903 and 40 CFR Part 60.334(b)(2). It is our understanding that this schedule should address sulfur content of the natural gas; the nitrogen content in natural gas is not required. Please amend TBLP's Specific Condition No. 18 as per the attached custom fuel monitoring schedule.

Should you or your department have questions or comments about this letter, please contact me at (713) 735-4087.

Sincerely,

Robert S. Chatham, P.E.  
Senior Environmental Engineer

RSC:kro  
Attachment

cc: Mr. Bill Thomas - FDEP, SW District

# CUSTOM FUEL MONITORING SCHEDULE

## Specific Condition No. 18

### From

Sulfur and nitrogen content and lower heating value of the fuel being fired in the combustion turbines shall be determined as specified in 40 CFR 60.334(b). Any request for a future custom monitoring schedule shall be made in writing and directed to the Southwest District office. Any custom schedule approved by DER pursuant to 40 CFR 60.334(b) will be recognized as enforceable provisions of the permit, provided that the holder of this permit demonstrates that the provisions of the schedule will be adequate to assure continuous compliance. The records of distillate fuel oil usage shall be kept by the company for a two-year period for regulatory agency inspection purposes. For sulfur dioxide, periods of excess emissions shall be reported if the fuel being fired in the gas turbine exceeds 0.05 percent sulfur by weight.

### To

This source shall comply with all requirements of 40 CFR 60, Subparts GG and Dc and F.A.C. Rule 17-296.800(2)(a), Standard of Performance for Stationary Gas Turbines and Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. 40 CFR 60.334(b)(2) requires that a custom fuel monitoring schedule shall be followed for natural gas fired at this facility, as follows:

### Custom Fuel Monitoring Schedule for Natural Gas

1. Monitoring of fuel nitrogen content shall not be required since natural gas is the only fuel being fired in the gas turbine.
2. Sulfur Monitoring
  - a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are ASTM D1072-80, ASTM D3031-81, ASTM D3246-81, and ASTM D4084-82 as referenced in 40 CFR 60.335(b)(2).
  - b. This custom fuel monitoring schedule shall become effective on the date this permit becomes valid. Effective the date of this custom schedule, sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters. If monitoring data is provided by the applicant which demonstrates consistent compliance with the requirements herein, the applicant may begin monitoring as per the requirements of 2(c).

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

The records of distillate fuel oil usage shall be kept by the company for a two-year period for regulatory agency inspection purposes. For sulfur dioxide, periods of excess emissions shall be reported if the distillate fuel oil being fired in the gas turbine exceeds 0.05 percent sulfur by weight.

Mr. Charles Logan  
Bureau of Air Regulation  
Florida Department of Environmental Protection  
September 22, 1994

bcc: S. A. Kicker  
J. D. Sellers  
S. E. Stevens  
File 1253



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

September 21, 1994

Ms. Jewell Harper, Chief  
Air Enforcement Branch  
U.S. EPA., Region IV  
345 Courtland Street, N.E.  
Atlanta, Georgia 30365

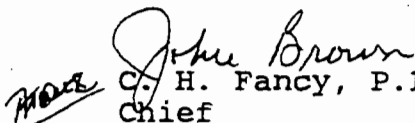
RE: NSPS Custom Fuel Monitoring Schedule  
Tiger Bay Limited Partnership  
Tiger Bay Cogeneration Facility  
AC 53-214903 [PSD-FL-190]

Dear Ms. Harper:

This letter serves to follow up a telephone conversation with Mr. Mirza Baig regarding a request by Tiger Bay Limited Partnership Corporation (JSC) to amend the Tiger Bay Cogeneration Facility construction permit. The amendment is requested pursuant to 40 CFR 60.334(b)(2), which would allow the applicant to use a custom fuel monitoring schedule for determining the sulfur and nitrogen content of natural gas being fired in combustion turbines at the facility.

Pursuant to 40 CFR 60.334(b)(2), the U.S. EPA Administrator must approve the custom fuel monitoring schedule. The supporting data needed for approval of the request has been enclosed for your review. We would appreciate a response as soon as possible. If you have any questions please call Charles Logan at (904)488-1344.

Sincerely,

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

Attachment  
CHF/csl

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.  
ATLANTA, GEORGIA 30365

OCT 06 1994

4APT-AEB

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

RECEIVED  
OCT 12 1994  
Bureau of  
Air Regulation

SUBJ: Approval of NSPS Custom Fuel Monitoring Schedule for  
Tiger Bay Limited Partnership, Gas Turbine Cogeneration  
Facility, Permit Nos. AC53-214903 and PSD-FL-190

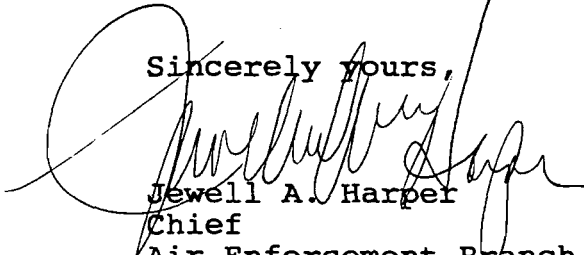
Dear Mr. Fancy:

This is to acknowledge a letter from Mr. Robert S. Chatham of Destec Energy (DE) dated August 3, 1994, requesting approval of a customized fuel monitoring schedule for the above referenced project. This letter was jointly transmitted to the U.S. Environmental Protection Agency (EPA), and to you.

Since the authority for approving a custom fuel monitoring plan under 40 CFR Part 60, Subpart GG has not been delegated to the State of Florida, we have reviewed DE's custom fuel monitoring schedule including the additional information submitted on September 22, 1994. Based on our review, we have determined that the proposed schedule is acceptable, as long as this source complies with all items of the attachment to the custom fuel monitoring guidance memo issued by EPA Headquarters on August 14, 1987. A copy of this memo was included with DE's request as an enclosure.

If you have any questions regarding this letter, please contact Mr. Mirza P. Baig of my staff at (404) 347-3555, voice mail extension 4147.

Sincerely yours,

  
Jewell A. Harper  
Chief  
Air Enforcement Branch  
Air, Pesticides, & Toxics  
Management Division



DESTEC ENERGY, INC.  
2500 CITYWEST BLVD., SUITE 150  
P.O. BOX 4411  
HOUSTON, TEXAS 77210-4411  
(713) 735-4000

September 9, 1994

RECEIVED

SEP 12  
Bureau of  
Air Regulation

Mr. Charles Logan  
Bureau of Air Regulation  
Florida Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

RE: Tiger Bay Limited Partnership  
Tiger Bay Cogeneration Facility  
AC 53-214903 (PSD-FL-190)

Dear Mr. Logan:

The Florida Gas Transmission Company (FGT) is routing the natural gas to the facility's combustion turbine via a recently installed pipe line. The facility has no natural gas bulk storage capability.

On behalf of Tiger Bay Limited Partnership, I have attached the following documents in response to the Florida Department of Environmental Regulation letter dated August 18, 1994.

- Item 1: Enclosed is the \$250 processing fee.
- Item 2: Enclosed are several FGT natural gas analysis reports dated December 1993 to August 1994. According to FGT, the analysis method used to determine total sulfur is ASTM 4468. The natural gas that is fired by the combustion turbine will be sampled on the six-acre Tiger Bay site.

Please note that this is being submitted only to the Florida Department of Environmental Regulation. Should you or your department have questions or comments about this letter, please contact me at (713) 735-4087.

Sincerely,

Robert S. Chatham, P.E.  
Senior Environmental Engineer

RSC:kro  
Attachments (2)

cc: Mr. Bill Thomas - FDEP, SW District (w/o att.)

**TIGER BAY LIMITED PARTNERSHIP**  
**September 8, 1994**

Total Sulfur (GR/CCF) ASTM 4468	Date
0.10	08/17/94
0.08	08/08/94
0.09	08/01/94
0.09	07/26/94
0.06	07/19/94
0.07	07/12/94
0.07	07/06/94
0.08	06/29/94
0.07	06/22/94
0.09	06/14/94
0.05	06/07/94
0.07	05/31/94
0.08	05/24/94
0.08	05/24/94
0.14	05/17/94
0.05	05/11/94
0.03	05/03/94
0.07	04/26/94
0.10	04/19/94
0.05	04/12/94
0.06	04/06/94
0.05	03/29/94
0.08	03/23/94
0.05	03/15/94
0.05	03/08/94



0.07	03/02/94
0.07	02/21/94
0.09	02/15/94
0.04	02/09/94
0.18	01/31/94
0.22	01/26/94
0.28	01/18/94
0.18	01/11/94
0.30	01/05/94
0.18	12/21/93
0.42	12/14/93
0.31	12/07/93
0.48	12/01/93

Source: Florida Gas Transmission Company, Maitland, Florida

05 07-92 11:45AM FROM EPA FPS/SSCD



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

AUG 14 1992

OFFICE OF  
AIR AND SAURATIOMEMORANDUM

SUBJECT: Authority for Approval of Custom Fuel Monitoring  
Schedules Under NSPS Subpart GG

FROM: John B. Rasnic, Chief *John B. Rasnic*  
Compliance Monitoring Branch

TO: Air Compliance Branch Chiefs  
Regions II, III, IV, V, VI and IX

Air Programs Branch Chiefs  
Regions I-X

The NSPS for Stationary Gas Turbines (Subpart GG) at 40 CFR 60.334(b)(2) allows for the development of custom fuel monitoring schedules as an alternative to daily monitoring of the sulfur and nitrogen content of fuel fired in the turbines. Regional Offices have been forwarding custom fuel monitoring schedules to the Stationary Source Compliance Division (SSCD) for consideration since it was understood that authority for approval of these schedules was not delegated to the Regions. However, in consultation with the Emission Standards and Engineering Division, it has been determined that the Regional Offices do have the authority to approve Subpart GG custom fuel monitoring schedules. Therefore it is no longer necessary to forward these requests to Headquarters for approval.

Over the past few years, SSCD has issued over twenty custom schedules for sources using pipeline quality natural gas. In order to maintain national consistency, we recommend that any schedules Regional Offices issue for natural gas be no less stringent than the following: sulfur monitoring should

05 07-92 11:45AM FROM EPA PFS/SSCD

TO 29195413170

PG06/007

2

be bimonthly, followed by quarterly, then semiannual, given at least six months of data demonstrating little variability in sulfur content and compliance with §60.333 at each monitoring frequency; nitrogen monitoring can be waived for pipeline quality natural gas, since there is no fuel-bound nitrogen and since the free nitrogen does not contribute appreciably to NO<sub>x</sub> emissions. Please see the attached sample custom schedule for details. Given the increasing trend in the use of pipeline quality natural gas, we are investigating the possibility of amending Subpart GG to allow for less frequent sulfur monitoring and a waiver of nitrogen monitoring requirements where natural gas is used.

Where sources using oil request custom fuel monitoring schedules, Regional Offices are encouraged to contact SSCD for consultation on the appropriate fuel monitoring schedule. However, Regions are not required to send the request itself to SSCD for approval.

If you have any questions, please contact Sally M. Farsell at FTS 382-2875.

Attachment

cc: John Crankshaw  
George Walsh  
Robert Ajax  
Earl Sale

05-07-92 11:45AM FROM EPA FPS/SSCD

TO B9195413470

P007/007

Enclosure

Conditions for Custom Fuel Sampling Schedule for Stationary Gas Turbines

1. Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbine.
2. Sulfur Monitoring
  - a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are: ASTM D1072-80; ASTM D3031-81; ASTM D3246-81; and ASTM D4084-82 as referenced in 40 CFR 60.335(b)(2).
  - b. Effective the date of this custom schedule, sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters.
  - c. If after the monitoring required in item 2(b) above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample analysis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.
  - d. Should any sulfur analysis as required in items 2(b) or 2(c) above indicate noncompliance with 40 CFR 60.333, the owner or operator shall notify the State Air Control Board of such excess emissions and the custom schedule shall be re-examined by the Environmental Protection Agency. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
3. If there is a change in fuel supply, the owner or operator must notify the State of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
4. Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of three years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

December 2, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Robert S. Chatham  
Senior Environmental Engineer  
Destec Energy, Inc.  
Post Office Box 4411  
Houston, Texas 77210-4411

RE: Amendment to Construction Permit  
NSPS Custom Fuel Monitoring Schedule  
Tiger Bay Limited Partnership  
Tiger Bay Cogeneration Facility  
AC 53-214903 [PSD-FL-190(A)]

Dear Mr. Chatham:

The Department has reviewed your August 3, 1994 request, with supporting data and additional data submitted on September 9 and 22, 1994, for an NSPS Custom Fuel Monitoring Schedule. The schedule would only apply to a monitoring schedule for sulfur dioxide (SO<sub>2</sub>) and nitrogen oxide (NO<sub>x</sub>) when natural gas is being fired at the subject facility (refer to Attachment No. 1). The facility is required by the permit to comply with Subpart GG of the New Source Performance Standards (NSPS), 40 CFR 60. For sources utilizing pipeline quality natural gas, 40 CFR 60.334(b) and 40 CFR 60.334(b)(2) state that a custom fuel monitoring schedule, if supported by data which demonstrates compliance with NSPS emission limits, may be approved by the Administrator of EPA. This authority has been delegated to EPA's regional offices and a copy of the subject request was jointly submitted to EPA Region IV for a determination. The Department received a letter from EPA on October 12, 1994, stating that a custom fuel monitoring schedule for this facility was acceptable, if it complied with all items of the attachment to the custom fuel monitoring guidance memo issued by EPA Headquarters on August 14, 1987 (Refer to Attachment No. 2). The results from a minimum of three sampling events for six consecutive months were provided by the permittee, which demonstrated consistent compliance with the allowable sulfur dioxide emissions limits specified under 40 CFR 60.333 and this permit. Therefore, upon issuance of the amended permit, the permittee shall begin monitoring the sulfur content of natural gas as specified in 2.b. of the Custom Fuel Monitoring Schedule for Natural Gas. In accordance with the EPA determination, the permit Specific Conditions will be amended as follows:



I. Specific Condition Number:

18. From

Sulfur and nitrogen content and lower heating value of the fuel being fired in the combustion turbines shall be determined as specified in 40 CFR 60.334(b). Any request for a future custom monitoring schedule shall be made in writing and directed to the Southwest District office. Any custom schedule approved by DEP pursuant to 40 CFR 60.334(b) will be recognized as enforceable provisions of the permit, provided that the holder of this permit demonstrates that the provisions of the schedule will be adequate to assure continuous compliance. The records of distillate fuel oil usage shall be kept by the company for a two-year period for regulatory agency inspection purposes. For sulfur dioxide, periods of excess emissions shall be reported if the fuel being fired in the gas turbine exceeds 0.05 percent sulfur by weight.

To

This source shall be in compliance with all requirements of 40 CFR 60, Subpart GG (Standards of Performance for Stationary Gas Turbines), 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), and Rule 62-296.800(2)(a), F.A.C. (Standards of Performance for New Stationary Sources (NSPS)).

A. Natural Gas

Pursuant to 40 CFR 60.334(b)(2), a custom fuel monitoring schedule shall be followed for the natural gas fired at this facility and shall be as follows:

Custom Fuel Monitoring Schedule for Natural Gas (NG)

1. Monitoring of fuel nitrogen content shall not be required when NG is the only fuel being fired in the turbines.
2. Sulfur Monitoring
  - a. Analysis for fuel sulfur content of the NG fired at this facility shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are ASTM D1072-80, ASTM D3031-81, ASTM D3246-81, and ASTM D4084-82, as referenced in 40 CFR 60.335(b)(2).

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

B. Distillate Fuel Oil

The records of distillate fuel oil usage shall be kept by the company for a five-year period for regulatory agency inspection purposes. For sulfur dioxide, periods of excess emissions shall be reported if the distillate fuel oil being fired in the gas turbine exceeds 0.05 percent sulfur content, by weight.

Mr. Robert S. Chatham  
AC 53-214903 [PSD-FL-190(A)]  
December 2, 1994  
Page 4 of 5

**II. Attachments to be Incorporated:**

- Destec letter received September 12, 1994.
- FDEP letter dated August 18, 1994.
- U.S. EPA letter received October 12, 1994.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information:

- (a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the amendment request/application have the right to petition to become a party to the proceeding. The petition must conform to the



Mr. Robert S. Chatham  
AC 53-214903 [PSD-FL-190(A)]  
December 2, 1994  
Page 5 of 5

requirements specified above and be filed (received) within 14 days of receipt of this amendment in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

This letter amendment must be attached to Construction Permit, No. AC 53-214903 [PSD-FL-190(A)], and shall become part of the permit.

Sincerely,



Howard L. Rhodes  
Director  
Division of Air Resources  
Management

HLR/cl/b

Attachments

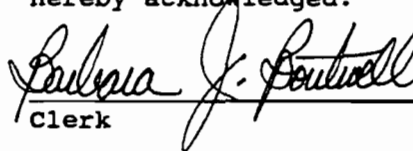
cc: G. Kissel, SWD  
J. Harper, EPA  
J. Bunyak, NPS  
K. Kosky, KBN

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy clerk hereby certifies that this AMENDMENT and all copies were mailed by certified mail before the close of business on 12/6/94 to the listed persons.

Clerk Stamp

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



Clerk

12/6/94  
Date

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 12/13/94

Subject Tiger Bay Compliance Test

Time 4:00

Permit No. PS.D-190

County Polk

Mr. Scott Kicker

Telephone No. \_\_\_\_\_

Representing Tiger Bay Limited Partnership

Telephoned Me     Was Called     Scheduled Meeting     Unscheduled Meeting

Other Individuals Involved in Conversation/Meeting \_\_\_\_\_

Summary of Conversation/Meeting Stated he has changed jobs within the company and because of this the stack test may come to the department slightly later than the 45 day period.

I told him that I would accept the tests.

Signature R. Such  
Eng II

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 12/13/94

Subject Tiger Bay

Time 4:00pm

Permit No. ACS3-214903 BD-190

County Polk

Mr. Scott Kicker

Telephone No. \_\_\_\_\_

Representing Tiger Bay Limited Partnership

Telephoned Me     Was Called     Scheduled Meeting     Unscheduled Meeting

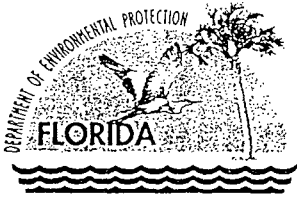
Other Individuals Involved in Conversation/Meeting \_\_\_\_\_

Summary of Conversation/Meeting The duct burner encountered problems during compliance testing in October and is still experiencing mechanical problems. The manufacturer will have to repair the burner characteristics. Operation of the burner ~~is not~~ has still not met the definition of official start-up or peak load. Conversations with Mr. Harley and Mr. Pennington (DEP Tallahassee) determined that the duct burner should be treated as a separate source. Compliance testing would not be required until it was made operational triggering start-up or peak load requirements. Proper advanced notice of compliance testing would be required at that time.

The turbine has been compliance tested within the proper amount of time after start-up or peak load so is OK.

Signature Robert Such

Eng. II



# Department of Environmental Protection

Lawton Chiles  
Governor

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Virginia B. Wetherell  
Secretary

## FACSIMILE TRANSMISSION SHEET

DATE 1/26/95

To: Robert Chatham  
Department Tiger Bay Limited Part.  
Phone \_\_\_\_\_ Fax \_\_\_\_\_

From: Bob Soich  
DEP Southwest District Office - Air Program  
Phone: (813) 744-6100 (Suncom 542-6100) Ext. 122

Operator: \_\_\_\_\_

Subject: Duct - Burner

Total Number of Pages, Including Cover Page: 2

DEP SWD AIR PROGRAM FAX NUMBER: (813) 744-6458  
(SUNCOM 542-6458)

**BEST AVAILABLE COPY**

Transmit Confirmation Report

No. : 007  
Receiver : 37137354571  
Transmitter : FLA DEF TPA AIR  
Date : Jan 26, 95 19:21  
Time : 01'08  
Mode : Norm  
Pages : 02  
Result : DL

Tiger Bay

Tel 12/13/94 @ 00 pm

Scott Kicker - Tiger Bay

Turbine:

Stack Test will be submitted late. Will Fed Ex Tommorrow. He has changed jobs <sup>positions</sup> and is trying to clear this up while he works in his new position. I stated that I would accept the test late. I was out on a Type II audit during the testing. I do not see a reason to require a retest do to the fact that the test was submitted late.

Duct Burner: still not officially operational.

problems were encountered during testing in October. The manufacturer will have to repair the burner characteristics. I directed Mr. Kicker to talk to Mike Harley in Tall DEP as per another conversation that we had concerning the Duct Burner. The burner has never become fully operational so has not met official start-up

Duct burner under separate NSPS subpart Dc so can be treated as a separate source.

Robert Chatham Fax 713-735-4571

Turbine - GG

Duct burner - DA

RECEIVED

JAN 27 1995

DESTEC ENERGY, INC.  
2500 CITYWEST BLVD., SUITE 150  
PO. BOX 4411  
HOUSTON, TEXAS 77210-4411  
(713) 735-4000

January 23, 1994

Bureau of  
Air Regulation

[CORRECTED]

State of Florida  
Department of Environmental Regulation  
Division of Air Resources Management  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399

**RE: Start of Commercial Operations  
Permit Nos. PSD-F1-190, AC53-214903 and AC53-230744  
Tiger Bay Limited Partnership  
Tiger Bay Cogeneration Facility**

To Whom It May Concern:

On behalf of Tiger Bay Limited Partnership (TBLP), we are pleased to announce that on **January 1, 1995**, TBLP commenced commercial operations.

Should you have any questions, please feel free to contact me at (713) 735-4087.

Sincerely,



Robert S. Chatham, P.E.  
Senior Environmental Engineer

RSC:gmc

cc: M. M. Davenport

*C. Nelson*  
*B. Thomas, SW Dist.*  
*J. Thompson, EPA*

RECEIVED  
FEB 06 1995  
Department of Environmental Protection  
BY SOUTHWEST DISTRICT

ccm

DESTEC ENERGY, INC.  
2500 CITYWEST BLVD., SUITE 150  
P.O. BOX 4411  
HOUSTON, TEXAS 77210-4411  
(713) 735-4000

December 20, 1994

D.E.P.

DEC 27 1994

SOUTHWEST DISTRICT  
TAMPA

Mr. Robert Soich  
Florida Department of Environmental Protection  
Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

**RE: 90 Day Extension for Duct Burner Unit  
Permit No. AC53-214903 and PSD-FL-190  
Tiger Bay Limited Partnership  
Tiger Bay Cogeneration Facility**

Dear Mr. Soich:

On behalf of Tiger Bay Limited Partnership (TBLP), we are requesting a 90 day extension for the duct burner unit's initial source test. Presently, TBLP is experiencing duct burner problems which will require an outage to make the necessary modifications or repairs. At this time, the outage schedule has not been finalized but the repairs are expected to be completed during the month of March 1995. During the time between now and the March outage, TBLP plans to not fire the duct burner unit until the modifications or repairs have been completed. The maximum firing date for the duct burner unit was October 31, 1994.

Should you have any questions, please feel free to contact me at (713) 735-4087.

Sincerely,



Robert S. Chatham, P.E.  
Senior Environmental Engineer

RSC:gmc

cc: M. M. Davenport  
Ms. Teresa Heron, FDEP - Tallahassee  
Mr. William Proses, FDEP - Tampa



DESTEC ENERGY, INC.  
2500 CITYWEST BLVD., SUITE 150  
P.O. BOX 4411  
HOUSTON, TEXAS 77210-4411  
713-735-4000

**RECEIVED**  
DEC 16 1994

December 14, 1994

Department of Environmental Protection  
SOUTHWEST DISTRICT  
BY \_\_\_\_\_

Mr. Robert Soich  
Florida Department of Environmental Protection  
Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33616

Dear Mr. Soich:

Enclosed is a copy of the source test report submitted on behalf of Tiger Bay Cogeneration Facility, Permit No: AC53-214903/PSD-FL-190. The report was prepared by Environmental Science and Engineering, Inc. for testing conducted on the gas turbine between October 19 and 23, 1994. Source testing for the duct burner has not been completed at this time.

If you have any questions, please contact Robert Chatham at 713/735-4087.

Sincerely,



Scott A. Kicker  
Environmental Engineer

Enclosure

cc: Ms. Teresa Heron (FDER Tallahassee)  
Mr. William Proses (FDEP Tampa)



Environmental  
Science &  
Engineering, Inc.

December 22, 1994  
3941050-0100-3100

Mr. Bob Stoich  
Florida Department of Environmental Protection  
Air Branch  
3804 Coconut Palm  
Tampa, FL 33619

Re: Tiger Bay Cogeneration Facility - CEMS Relative Accuracy Test Report

Dear Mr. Stoich:

On behalf of Destec Engineering, I am submitting the attached CEMS relative accuracy test report for the Tiger Bay Cogeneration Facility located in Fort Meade, Florida. The FDEP permit number for the facility is AC53-214903/PSD-FL-190.

If you have any questions regarding the attached test report, please contact Robert Chatom of Destec at (713)-735-4087.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

Bill Mayhew  
Chemical Engineer  
Manager, Source Testing

cc: Robert Chatom, Destec

H:\users\stacks\destec\desfdep.ltr