

I N T E R O F F I C E   M E M O R A N D U M

**Date:** 09-Feb-1994 11:56am ES  
**From:** Holly Burnaman TAL  
BURNAMAN H  
**Dept:** Office General Counsel  
**Tel No:** 904/488-9730  
**SUNCOM:**

**TO:** Patty Adams TAL ( ADAMS P )  
**TO:** Alex Alexander ORL ( ALEXANDER A @ A1 @ ORL1 )  
**TO:** Alan Zahm ORL ( ZAHM\_A @ A1 @ ORL1 )

**Subject:** NASA; KENNEDY SPACE CENTER

On February 8, 1994, we received a request for time extension from NASA for permit no. AC05-103832.

Alan, can you please send us a copy of the intent?

Thanks!

P 408 531 150

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to	
Mr. James D. Phillips	
Street and No.	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	
1/28/87	

PS Form 3800, Feb. 1982.

PS Form 3811, July 1983 447-845

<b>SENDER: Complete items 1, 2, 3 and 4.</b> Put your address in the "RETURN-TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. <u>The return receipt fee will provide you the name of the person delivered to and the date of delivery.</u> For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.	
1. <input type="checkbox"/> Show to whom, date and address of delivery.	
2. <input type="checkbox"/> Restricted Delivery.	
3. Article Addressed to: Mr. James D. Phillips Dir. of Engineering Development John F. Kennedy Space Center Kennedy Space Center, FL 32899	
4. Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail	Article Number P 408 531 150
Always obtain signature of addressee or agent and <b>DATE DELIVERED.</b>	
5. Signature — Addressee X	
6. Signature — Agent X <i>Cindy L. Keys</i>	
7. Date of Delivery <i>1-30-87</i>	
8. Addressee's Address (ONLY if requested and fee paid)	

DOMESTIC RETURN RECEIPT

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32399-2400



BOB MARTINEZ  
GOVERNOR  
DALE TWACHTMANN  
SECRETARY

January 22, 1987

Mr. James D. Phillips.  
Director of Engineering Development  
John F. Kennedy Space Center  
Kennedy Space Center, Florida 32899

Dear Mr. Phillips:

Re: AC 05-103832, Hot Water Generator #1

The department received your letter, dated January 15, 1987, which requested an extension of the expiration date of the above referenced permit to construct a hot water generator at the Vehicle Assembly Building (VAB). This request is acceptable and the expiration date is changed as follows:

From: March 31, 1987  
To: March 31, 1988

A copy of this letter must be attached to the referenced construction permit and shall become a part of this permit.

Attachment to be Incorporated:

Mr. James D. Phillip's letter of January 15, 1987.

Sincerely,

Howard L. Rhodes, P.E.  
Director, Division of  
Environmental Programs

HLR/ks

cc: C. Collins

State of Florida  
DEPARTMENT OF ENVIRONMENTAL REGULATION



# Interoffice Memorandum

FOR ROUTING TO OTHER THAN THE ADDRESSEE	
TO: _____	LOCTN: _____
TO: _____	LOCTN: _____
TO: _____	LOCTN: _____
FROM: _____	DATE: _____

TO: Howard L. Rhodes, Director  
FROM: C. H. Fancy, Deputy Chief, BAQM  
DATE: January 22, 1987  
SUBJ: Modifications of Conditions

*C. H. Fancy*  
**RECEIVED**  
JAN 22 1987

DIRECTOR - PROGRAMS

Attached for your approval and signature are five letters that will extend the expiration dates of the following air construction permits:

- AC 48-118328, Cirtus Central, Inc.
- AC 16-100644, USG Corporation
- AC 05-103832, Kennedy Space Center
- AC 65-115861 and AC 65-109412, Olin Corporation
- AC 17-098127 and AC 17-104265, Reichhold Chemicals Inc.

The bureau recommends these extensions be approved.

CHF/s

attachments

DER  
JAN 23 1987  
BAQM

John F. Kennedy Space Center  
Kennedy Space Center, Florida 32899

Reply to Attn of

DF-EMS

JAN 15 1987

Dept. of Environmental Regulation  
Attn: Mr. Clair H. Fancy  
Deputy Chief, Bureau of Air Quality  
Twin Towers Office Bldg.  
2600 Blair Stone Road  
Tallahassee, FL 32301

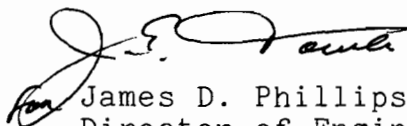
DER

JAN 20 1987

BAQM

Subject: Extension of Construction Permit for VAB Hot Water  
Generator #1 (Permit #AC05-103832) Kennedy Space Center

Due to delays in contract negotiations and procurement, the replacement of the subject boiler will not be completed as scheduled. We therefore request an extension of this permit to March 31, 1988. This will not affect the operating permit for the boiler currently in operation.



James D. Phillips  
Director of Engineering Development

P 408 532 125  
 RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—  
 NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. James D. Phillips	
Street and No.	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date 5/22/86	

PS Form 3800, Feb. 1982

PS Form 3811, July 1983 447-845

**SENDER: Complete items 1, 2, 3 and 4.**

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1.  Show to whom, date and address of delivery.

2.  Restricted Delivery.

3. Article Addressed to:  
 Mr. James D. Phillips  
 NASA-DF-EMS  
 Kennedy Space Center, FL 32899

4. Type of Service:	Article Number
<input type="checkbox"/> Registered <input type="checkbox"/> Insured	P 408 532 125 <sup>5</sup>
<input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD	
<input type="checkbox"/> Express Mail	

Always obtain signature of addressee on agent and **DATE DELIVERED.**

5. Signature — Addressee  
X

6. Signature — Agent  
X *R Phillips*

7. Date of Delivery  
860527

8. Addressee's Address (ONLY if requested and fee paid)

DOMESTIC RETURN RECEIPT

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

May 19, 1986

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. James D. Phillips  
Director of Engineering Development  
NASA-DF-EMS  
John F. Kennedy Space Center  
Kennedy Space Center, Florida 32899

Dear Mr. Phillips:

Re: Modification of Condition  
Permit No. AC 05-103832  
Hot Water Generator No. 1

The department received your letter, dated March 13, 1986, which requested an extension of the expiration date of the referenced permit to construct a hot water generator at the Vehicle Assembly Building (VAB). This request is acceptable and the expiration date is changed as follows:


From: March 31, 1986  
To: March 31, 1987

A copy of this letter must be attached to the referenced construction permit and shall become a part of this permit.

Attachment to be Incorporated

Mr. P. A. Minderman's letter dated March 13, 1986.

Sincerely,

  
Victoria J. Tschinkel  
Secretary

VHT/ks

State of Florida  
DEPARTMENT OF ENVIRONMENTAL REGULATION



# Interoffice Memorandum

FOR ROUTING TO OTHER THAN THE ADDRESSEE

TO: \_\_\_\_\_ LOCTN: \_\_\_\_\_  
TO: \_\_\_\_\_ LOCTN: \_\_\_\_\_  
TO: \_\_\_\_\_ LOCTN: \_\_\_\_\_  
FROM: \_\_\_\_\_ DATE: \_\_\_\_\_

TO: Victoria J. Tschinkel  
FROM: Clair Fancy *Clair Fancy*

DATE: May 19, 1986

SUBJ: Request to Extend Permit No. AC 05-103832  
Kennedy Space Center

Attached for your signature is a letter extending the expiration date of Permit No. AC 05-103832 to Kennedy Space Center. The Bureau of Air Quality Management recommends that the extension be approved.

CHF/ks

attachment

**RECEIVED**  
MAY 20 1986

Office of the Secretary



**John F. Kennedy Space Center**  
Kennedy Space Center, Florida 32899

DER  
MAR 19 1986  
BAQM

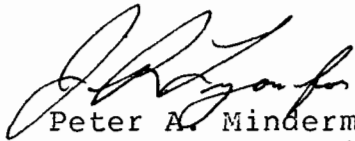
Reply to Attn of DF-EMS

MAR 13 1986

Dept. of Environmental Regulation  
Attn: Mr. Clair Fancy  
Twin Towers Office Bldg.  
2600 Blair Stone Road  
Tallahassee, FL 32301

Subject: Permit No. AC05-103832 - Construction of Hot Water  
Generator #1 at the Vehicle Assembly Bldg., Kennedy  
Space Center

Due to funding and scheduling considerations, the replacement of  
the subject boiler will be delayed approximately 12 months. We  
therefore request an extension of the subject permit to March 31,  
1987. Any questions concerning this permit should be directed to  
Mr. Mario Busacca at 305 867-4049.



Peter A. Minderman  
Director of Engineering Development

P 085 152 650

**RECEIPT FOR CERTIFIED MAIL**

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

PS Form 3800, Feb. 1982  
\* U.S.G.P.S. 1984-468-014

Sent to <b>Mr. Peter A. Minderman</b>	
Street and No.	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date  9/10/85	

PS Form 3811, July 1983

**SENDER: Complete items 1, 2, 3 and 4.**  
Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

- Show to whom, date and address of delivery.
- Restricted Delivery.

3. Article Addressed to:  
**Mr. Peter A. Minderman,  
DF-EMS  
Kennedy Space Center, FL 32899**

4. Type of Service: <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail	<input type="checkbox"/> Insured <input type="checkbox"/> COD	Article Number <b>P 085 152 650</b>
--	--	--

Always obtain signature of addressee or agent and **DATE DELIVERED.**

5. Signature - Addressee  
**X**

6. Signature - Agent  
**X** *RG...*

7. Date of Delivery  
**12 SEP 85**

8. Addressee's Address (ONLY if requested and fee paid)

DOMESTIC RETURN RECEIPT

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
NOTICE OF PERMIT


Mr. Peter A. Minderman  
Director of Engineering Development  
DF-EMS  
John F. Kennedy Space Center  
Kennedy Space Center, Florida 32899

September 10, 1985

Enclosed is Permit Number AC 05-103832 to NASA, Kennedy Space Center which authorizes the construction of hot water generator No. 1 at the VAB Annex. This permit is issued pursuant to Section 403, Florida Statutes.

Any Party to this permit has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this permit is filed with the clerk of the Department.

Sincerely,

  
C. H. Fancy, P.E.  
Deputy Chief  
Bureau of Air Quality  
Management

Enclosure

cc: Charles Collins

CERTIFICATION

This is to certify that the foregoing Notice of Permit and all copies requested were mailed before the close of business on 9-10, 1985.



\_\_\_\_\_  
C. H. Fancy, P.E.  
Deputy Chief  
Bureau of Air Quality  
Management  
2600 Blair Stone Road  
Tallahassee, Florida 32301

FILING AND ACKNOWLEDGEMENT  
FILED, on this date, pursuant to  
§120.52(9), Florida Statutes, with  
the designated Department Clerk,  
receipt of which is hereby  
acknowledged.

Patricia B. Adams  
Clerk

Sept. 10, 1985  
Date

Final Determination

National Aeronautics and Space Administration - NASA  
Kennedy Space Center - KSC  
Brevard County

HP Hot Water Generator No. 1  
Permit Number  
AC 05-103832

Florida Department of Environmental Regulation  
Bureau of Air Quality Management  
Central Air Permitting

September 9, 1985

## Final Determination

NASA's application for a permit to construct a hot water generator at the VAB Annex Building at the Kennedy Space Center (KSC), Florida, has been reviewed by the Bureau of Air Quality Management.

Public Notice of the Department's Intent to Issue the construction permit was published in Today Newspaper on July 5, 1985.

Copies of the preliminary determination have been available for public inspection at the Department's St. Johns River District office in Orlando and the Bureau of Air Quality Management office in Tallahassee.

No comments were received as a result of the public notice period.

The final action of the Department will be to issue the permit as noticed during the public notice period.

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

**PERMITTEE:**  
Kennedy Space Center  
Headquarters Building  
Kennedy Space Center, Florida  
32899

Permit Number: AC 05-103832  
Expiration Date: March 31, 1986  
County: Brevard  
Latitude/Longitude: 28° 35' 05" N/  
80° 39' 08" W  
Project: Hot Water Generator No. 1

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the construction of a hot water generator with 25 million BTU/hr heat input located at Kennedy Space Center (VAB Annex Heat Plant) in Brevard County, Florida.

Construction shall be in accordance with the attached permit application except as otherwise noted on pages 5 and 6, Specific Conditions.

**Attachments are as follows:**

1. Application to Construct Air Pollution Source, DER Form 17-2.122(16), received on May 6, 1985.

PERMITTEE:  
Kennedy Space Center

Permit Number: AC 05-103832  
Expiration Date: March 31, 1986

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.



PERMITTEE:  
Kennedy Space Center

Permit Number: AC 05-103832  
Expiration Date: March 31, 1986

**GENERAL CONDITIONS:**

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

PERMITTEE:  
Kennedy Space Center

Permit Number: AC 05-103832  
Expiration Date: March 31, 1986

**GENERAL CONDITIONS:**

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- ( ) Determination of Best Available Control Technology (BACT)
- ( ) Determination of Prevention of Significant Deterioration (PSD).
- ( ) Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

PERMITTEE:  
Kennedy Space Center

Permit Number: AC 05-103832  
Expiration Date: March 31, 1986

**GENERAL CONDITIONS:**

- b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.
- c. Records of monitoring information shall include:
  - the date, exact place, and time of sampling or measurements;
  - the person responsible for performing the sampling or measurements;
  - the date(s) analyses were performed;
  - the person responsible for performing the analyses;
  - the analytical techniques or methods used; and
  - the results of such analyses.

15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

**SPECIFIC CONDITIONS:**

1. Except as required pursuant to these specific conditions, the proposed hot water generator construction shall be carried out in accordance with the statements in the application.
2. The sulfur content of the No. 6 fuel oil to be burned in the proposed generator shall not exceed 1.0 percent by weight, as determined by ASTM Method D-219. The fuel analysis reports of the oil used shall be recorded and these records shall be kept for a minimum of two years for regulatory agency inspection.

PERMITTEE:  
Kennedy Space Center

Permit Number: AC 05-103832  
Expiration Date: March 31, 1986

SPECIFIC CONDITIONS:

3. The visible emissions from the proposed generator shall not exceed 20 percent opacity, six (6) minute average. DER Method 9 (17-2.700[6][a]9, FAC) shall be used for the performance test conducted by the permittee.
4. The test of visible emissions shall be accomplished at 90 to 100 percent of the design capacity. The permittee shall notify DER's St. Johns River District office 14 days prior to the compliance test.
5. No. 6 fuel oil consumption in this hot water generator shall not exceed 334,299 gallons per year.
6. The permit to operate the existing No. 1 Generator (AO 05-24131) shall be surrendered to the St. Johns River District office prior to placing the new hot water generator in service.
7. A complete operation permit application, with a compliance test and oil analysis report, shall be submitted to the St. Johns River District office 90 days prior to expiration of the construction permit.

Issued this 9<sup>th</sup> day of Sept,  
1985.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
\_\_\_\_\_  
VICTORIA J. TSCHINKEL, Secretary

\_\_\_ pages attached.

RECEIVED  
SEP 9



# Interoffice Memorandum

Office of the Secretary

FOR ROUTING TO OTHER THAN THE ADDRESSEE

To: \_\_\_\_\_ LOCTN: \_\_\_\_\_  
To: \_\_\_\_\_ LOCTN: \_\_\_\_\_  
To: \_\_\_\_\_ LOCTN: \_\_\_\_\_  
FROM: \_\_\_\_\_ DATE: \_\_\_\_\_

TO: Victoria J. Tschinkel  
FROM: Clair Fancy *Clair Fancy*  
DATE: Spetember 9, 1985  
SUBJ: Approval of Attached Air Construction Permit

Attached for your approval and signature is one Air Construction Permit to the National Aeornautics and Space Administration for the construction of a hot water generator at the Kennedy Space Center, Brevard County, Florida.

Day 90, after which the permit would be issued by default, is September 10, 1985

The Bureau recommends your approval and signature.

CF/pa

Attachment

PS Form 3811, July 1983

**SENDER: Complete Items 1, 2, 3 and 4.**

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

- Show to whom, date and address of delivery.
- Restricted Delivery.

3. Article Addressed to:  
 Mr. Peter Minderman  
 Director of Design Engineering  
 Kennedy Space Center  
 Kennedy Space Center, FL 32899

4. Type of Service:	Article Number:
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail	0155580

Always obtain signature of addressee or agent and **DATE DELIVERED.**

5. Signature - Addressee  
 X

6. Signature - Agent  
 X *R. G. [Signature]*

7. Date of Delivery  
 JUN 24 1985

8. Addressee's Address (ONLY if requested and fee paid)

DOMESTIC RETURN RECEIPT

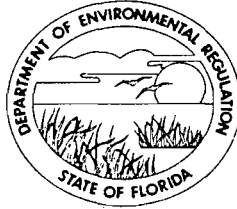
No. 0155580  
 RECEIPT FOR CERTIFIED MAIL  
 NO INSURANCE COVERAGE PROVIDED—  
 NOT FOR INTERNATIONAL MAIL  
 (See Reverse)

SENT TO		Mr. Peter Minderman	
STREET AND NO.			
P.O., STATE AND ZIP CODE			
POSTAGE		\$	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	\$	
	SPECIAL DELIVERY	\$	
	RESTRICTED DELIVERY	\$	
	OPTIONAL SERVICES	RETURN RECEIPT SERVICE	\$
		SHOW TO WHOM AND DATE DELIVERED	\$
		SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	\$
		SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	\$
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	\$		
TOTAL POSTAGE AND FEES		\$	
POSTMARK OR DATE		6/21/85	

PS Form 3800, Apr. 1976

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

June 21, 1985

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Peter A. Minderman  
Director of Design Engineering  
John F. Kennedy Space Center  
Kennedy Space Center, Florida 32899

Dear Mr. Minderman:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permit to construct a hot water generator at the VAB Annex Building at the Kennedy Space Center.

Before final action can be taken on your draft permit, you are required by Florida Administrative Code Rule 17-103.150 to publish the attached Notice of Proposed Agency Action in the legal advertising section of a newspaper of general circulation in Brevard County no later than fourteen days after receipt of this letter. The department must be provided with proof of publication within seven days of the date the notice is published. Failure to publish the notice may be grounds for denial of the permit.

Please submit, in writing, any comments which you wish to have considered concerning the department's proposed action to Mr. Bill Thomas of the Bureau of Air Quality Management.

Sincerely,

*C. H. Fancy*  
for C. H. Fancy, P.E.  
Deputy Chief  
Bureau of Air Quality  
Management

CHF/pa

Attachments

cc: Charles Collins

State of Florida  
Department of Environmental Regulation  
Notice of Proposed Agency Action  
on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a permit to the Kennedy Space Center to authorize the replacement of the high temperature hot water generator No. 1 at the VAB Annex Building, Kennedy Space Center, Brevard County, Florida. A determination of best available control technology (BACT) was not required.

Persons 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. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period constitutes a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

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 proposed agency action. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.



The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Dept. of Environmental Regulation  
St. Johns River District  
3319 Maguire Blvd., Suite 232  
Orlando, Florida 32803

Dept. of Environmental Regulation  
Bureau of Air Quality Management  
2600 Blair Stone Road  
Tallahassee, Florida 32301

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

RULES OF THE ADMINISTRATIVE COMMISSION  
MODEL RULES OF PROCEDURE  
CHAPTER 28-5  
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

- (1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.
- (2) All petitions filed under these rules should contain:
  - (a) The name and address of each agency affected and each agency's file or identification number, if known;
  - (b) The name and address of the petitioner or petitioners;
  - (c) All disputed issues of material fact. If there are none, the petition must so indicate;
  - (d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;
  - (e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;
  - (f) A demand for the relief to which the petitioner deems himself entitled, and
  - (g) Such other information which the petitioner contends is material.

BEFORE THE STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of an )  
Application for Permit by: )  
 )  
Kennedy Space Center ) DER File No. AC 05-103832  
Headquarters Building )  
Kennedy Space Center, Florida )  
32899 )

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its Intent to Issue, and proposed order of issuance for, a permit pursuant to Chapter 403, Florida Statutes, for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, John F. Kennedy Space Center, applied on May 6, 1985, to the Department of Environmental Regulation for a permit to construct a 25 million Btu per hour hot water generator at the Kennedy Space Center in Brevard County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The applicant was officially notified by the Department that an air construction permit was required for the proposed work.

This intent to issue shall be placed before the Secretary for final action unless an appropriate petition for a hearing pursuant to the provisions of Section 120.57, Florida Statutes, is filed within fourteen (14) days from receipt of this letter or

publication of the public notice (copy attached) required pursuant to Rule 17-103.150, Florida Administrative Code, whichever occurs first. The petition must comply with the requirements of Section 17-103.155 and Rule 28-5.201, Florida Administrative Code (copy attached) and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32301.

Petitions which are not filed in accordance with the above provisions are subject to dismissal by the Department. In the event a formal hearing is conducted pursuant to Section 120.57(1), all parties shall have an opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination of witnesses and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exceptions to any order or hearing officer's recommended order, and to be represented by counsel. If an informal hearing is requested, the agency, in accordance with its rules of procedure, will provide affected persons or parties or their counsel an opportunity, at a convenient time and place, to present to the agency or hearing officer, written or oral evidence in opposition to the agency's action or refusal to act, or a written statement challenging the grounds upon which the agency has chosen to justify its action or inaction, pursuant to Section 120.57(2), Florida Statutes.

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 proposed agency action. Therefore, persons who may not wish to file a petition, may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of

Administrative Hearings, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

Executed the 21<sup>st</sup> day of June, 1985, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

*for* *C. H. Fancy*  
C. H. Fancy, P.E.  
Deputy Chief  
Bureau of Air Quality  
Management

Copies furnished to:

Charles Collins  
Department of Environmental Regulation  
St. Johns River District  
3319 Maguire Blvd., Suite 232  
Orlando, Florida 32803

CERTIFICATION

This is to certify that the foregoing Intent to Issue and all copies were mailed before the close of business on June 21, 1985.

*C. H. Fancy*  
for C. H. Fancy, P.E.  
Deputy Chief  
Bureau of Air Quality  
Management  
2600 Blair Stone Road  
Tallahassee, Florida 32301

FILING AND ACKNOWLEDGEMENT  
FILED, on this date, pursuant to  
§120.52(9), Florida Statutes, with  
the designated Department Clerk,  
receipt of which is hereby acknow-  
ledged.

Patricia G. Adams      June 21, 1985  
Clerk                              Date

Technical Evaluation  
and  
Preliminary Determination

National Aeronautics and Space Administration (NASA)  
John F. Kennedy Space Center  
Kennedy Space Center, Brevard County, Florida

Permit Number:  
AC 05-103832

Florida Department of Environmental Regulation  
Bureau of Air Quality Management  
Central Air Permitting

June 21, 1985

## I. SYNOPSIS OF APPLICATION

### 1.1 Name and Address of Applicant

National Aeronautics and Space Administration (NASA)  
John F. Kennedy Space Center  
Kennedy Space Center, Florida 32899

### 2.1 Reviewing and Process Schedule

Date of receipt of application: May 6, 1985.

Completeness Review (30 days): June 5, 1985.

Application's completeness date: May 6, 1985.

Date of Distribution of Proposed Agency Action and Preliminary Determination: June 12, 1985.

Public Notice Period (30 days): "The applicant shall cause the notice to be published as soon as possible after notification by the Department of its intended action and no later than fourteen (14) days prior to final agency action. The applicant shall provide proof of publication to the Department within seven (7) days of publication. The application shall be held in abeyance until fourteen (14) days after publication. (Rule 17-1-62., Fla. Administrative Code)".

Permit Issuance: On or before 90 days after the application has been determined complete, providing the requirement of the public notice period has been met.

## II. FACILITY INFORMATION

### II.1 Facility Location

The proposed construction will occur at the VAB Annex building at the Kennedy Space Center in Brevard County, Florida. The UTM coordinates are Zone 17, 611.65 km East and 1554.0 km North.

### II.2 Standard Industrial Classification Code (SIC) and Source Classification Code (SCC)

This new source will be classified as follows:

Group Number: 966, SPACE RESEARCH AND TECHNOLOGY  
Industry Number: 9661, Space Research and Technology  
SCC 1-02-004-01



### II.3 Facility Category

The Kennedy Space Center (KSC) is classified as a major emitting facility for sulfur dioxide (SO<sub>2</sub>) and volatile organic compounds (VOC).

This facility category is not in the list of the 28 Major Facility Categories, Table 500.1, Chapter 17-2, Florida Administrative Code.

### III. PROJECT DESCRIPTION

This project involves the replacement of the High Temperature Hot Water Generator No. 1 at the VAB Annex Building at KSC. This equipment replacement, a 25 million BTU/hr unit, is the same as one for Generator No. 2, which was permitted on March 5, 1985.

It is anticipated that the operation of one of the 25 million BTU/hr generators alone will satisfy the heat demands most of the time. Therefore, it is planned that the operating schedule will consist of the alternate operation of one of the 25 million BTU/hr generators with Generator No. 3 (a 12.5 million BTU/hr existing unit). Generator No. 3 will provide additional heat output to supplement the larger units as necessary. The total emissions will not be affected although the distribution of emissions may vary between the units.

#### III.1 Background Information

In February, 1985, the Kennedy Space Center requested the department to modify their existing operating permits for the six heating units located at the Central Heat Plant and the VAB Annex Heat Plant. The total SO<sub>2</sub> permitted emissions for these sources were 427.6 tons per year. The current operating permits for these sources show a total SO<sub>2</sub> permitted emissions of 138.6 tons per year. These permitted emissions would vary if any of the generators are replaced and the allowable emissions changed. At the present time, plans are to replace two generators at the VAB annex building (Generators No. 1 and No. 2).

### IV. RULE APPLICABILITY

The proposed project is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes and Chapter 17-2, Florida Administrative Code.

The proposed facility, Kennedy Space Center, is located in an area (Brevard County) currently designated attainment for all criteria pollutants in accordance with Florida Administrative Code, Rule 17-2.420.

The Kennedy Space Center is a major emitting facility for sulfur dioxide and volatile organic compounds (VOC), as defined in Rule 17-2.100, Florida Administrative Code.

This facility category is not on the list of the 28 Major Facility Category, Florida Administrative Code, Table 500.1. Therefore, this project is exempt from provisions of Rule 17-2.500, Prevention of Significant Deterioration. ?

The proposed source shall be permitted under Rule 17-2.520, Sources Not Subject to Prevention of Significant Deterioration of Nonattainment Requirements, and shall comply with Rule 17-2.610(2), FAC, General Particulate Emission Limiting Standards.

## V. SOURCE IMPACT ANALYSIS

### V.1 Emission Limitations

The air pollutants emitted from the proposed generator No. 1 will be sulfur dioxide, nitrogen oxides, particulate matter, and carbon monoxide. The maximum sulfur content of the oil fuel will be one percent (1.0%).

The following table summarizes potential to emit all pollutants regulated under the Act which are affected by the proposed project. As the table shows, there is not a significant emission increase of any pollutant.

Pollutant	lb/hr	lb/yr	ton/yr	PSD*
Sulfur dioxide (SO <sub>2</sub> )	25.91	52,485	26.2	40
Nitrogen Oxide (NO <sub>x</sub> )	9.57	19,390	9.7	40
Particulate (PM)	2.15	4,346	2.2	25
Carbon Monoxide (CO)	0.83	1,672	0.82	100

\*Prevention of Significant Deterioration (PSD) levels (tons per year).

### V.2 Air Quality Analysis

From a technical review of the application, the department has determined that the construction and operation of these sources will not have a significant impact on Florida's ambient air quality standards.

VI. CONCLUSION

Based on an evaluation of the application, the department concludes that the proposed source will comply with related state air regulations, provided certain specific conditions are met.

The general and specific conditions are listed in the attached draft state permit.

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

**PERMITTEE:**  
Kennedy Space Center  
Headquarters Building  
Kennedy Space Center, Florida  
32899

Permit Number: AC 05-103832  
Expiration Date: March 31, 1986  
County: Brevard  
Latitude/Longitude: 28° 35' 05" N/  
80° 39' 08" W  
Project: Hot Water Generator No. 1

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the construction of a hot water generator with 25 million BTU/hr heat input located at Kennedy Space Center (VAB Annex Heat Plant) in Brevard County, Florida.

Construction shall be in accordance with the attached permit application except as otherwise noted on pages 5 and 6, Specific Conditions.

**Attachments are as follows:**

1. Application to Construct Air Pollution Source, DER Form 17-2.122(16), received on May 6, 1985.

**PERMITTEE:**  
Kennedy Space Center

Permit Number: AC 05-103832  
Expiration Date: March 31, 1986

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.

PERMITTEE:  
Kennedy Space Center

Permit Number: AC 05-103832  
Expiration Date: March 31, 1986

**GENERAL CONDITIONS:**

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

PERMITTEE:  
Kennedy Space Center

Permit Number: AC 05-103832  
Expiration Date: March 31, 1986

**GENERAL CONDITIONS:**

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- ( ) Determination of Best Available Control Technology (BACT)
- ( ) Determination of Prevention of Significant Deterioration (PSD).
- ( ) Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

**PERMITTEE:**  
Kennedy Space Center

Permit Number: AC 05-103832  
Expiration Date: March 31, 1986

**GENERAL CONDITIONS:**

- b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.
- c. Records of monitoring information shall include:
  - the date, exact place, and time of sampling or measurements;
  - the person responsible for performing the sampling or measurements;
  - the date(s) analyses were performed;
  - the person responsible for performing the analyses;
  - the analytical techniques or methods used; and
  - the results of such analyses.

15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

**SPECIFIC CONDITIONS:**

- 1. Except as required pursuant to these specific conditions, the proposed hot water generator construction shall be carried out in accordance with the statements in the application.
- 2. The sulfur content of the No. 6 fuel oil to be burned in the proposed generator shall not exceed 1.0 percent by weight, as determined by ASTM Method D-219. The fuel analysis reports of the oil used shall be recorded and these records shall be kept for a minimum of two years for regulatory agency inspection.



PERMITTEE:  
Kennedy Space Center

Permit Number: AC 05-103832  
Expiration Date: March 31, 1986

**SPECIFIC CONDITIONS:**

3. The visible emissions from the proposed generator shall not exceed 20 percent opacity, six (6) minute average. DER Method 9 (17-2.700[6][a]9, FAC) shall be used for the performance test conducted by the permittee.
4. The test of visible emissions shall be accomplished at 90 to 100 percent of the design capacity. The permittee shall notify DER's St. Johns River District office 14 days prior to the compliance test.
5. No. 6 fuel oil consumption in this hot water generator shall not exceed 334,299 gallons per year.
6. The permit to operate the existing No. 1 Generator (AO 05-24131) shall be surrendered to the St. Johns River District office prior to placing the new hot water generator in service.
7. A complete operation permit application, with a compliance test and oil analysis report, shall be submitted to the St. Johns River District office 90 days prior to expiration of the construction permit.

Issued this \_\_\_\_\_ day of \_\_\_\_\_,  
19\_\_.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

\_\_\_\_\_  
VICTORIA J. TSCHINKEL, Secretary

\_\_\_\_\_ pages attached.

National Aeronautics and  
Space Administration



John F. Kennedy Space Center  
Kennedy Space Center, Florida 32899

DER

JUL 15 1985

BAQM JUL 10 1985

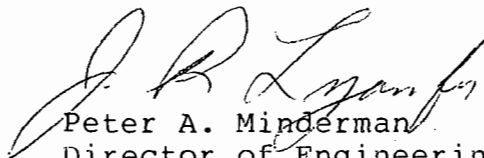
Reply to Attn of DF-EMS

Dept. of Environmental Regulation  
Attn: Mr. C. H. Fancy, Deputy Chief  
Bureau of Air Quality Management  
Twin Towers Office Bldg.  
2600 Blair Stone Road  
Tallahassee, FL 32301-8241

Subject: Publication of "Notice of Proposed Agency Action"  
for Construction of a Hot Water Generator at the VAB  
Annex Bldg. at Kennedy Space Center

As requested in your letter of June 21, 1985, the subject "Notice of Proposed Agency Action" was publicized in the legal section of "Today" newspaper on July 5, 1985. Although the publisher was instructed to send you a copy of the advertisement and an affidavit immediately after publication, we are enclosing a copy of the advertisement as proof of public notice. We understand that we can expect to receive the requested permit after the required 45 days unless an appropriate petition is filed for a hearing.

If you need further assistance in processing the application please contact Mr. Kirby Key at telephone no. (305) 867-4049.



Peter A. Minderman

Director of Engineering Development

Enclosure

State of Florida  
Department of  
Environmental Regulation  
Notice of Proposed Agency  
Action on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a permit to the Kennedy Space Center to authorize the replacement of the high temperature hot water generator No. 1 at the VAB Annex Building, Kennedy Space Center, Brevard County, Florida. A determination of best available control technology (BACT) was not required.

Persons 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. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period constitutes a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

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 proposed agency action. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Dept. of Environmental  
Regulation  
St. Johns River District  
3319 McGuire Blvd.,  
Suite 232  
Orlando, Florida 32803

Dept. of Environmental  
Regulation  
Bureau of Air Quality  
Management  
2600 Blair Stone Road  
Tallahassee, Florida 32301

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

T075371-1T-7/5, 1985, Fri.

TREASURY  
BUREAU OF GOVERNMENT  
FINANCIAL OPERATIONS

WASHINGTON, D. C.

Check No. 20,404,904

SYMBOL 3005

DO NOT FOLD, SPINDLE OR MUTILATE  
KNOW YOUR ENDORSER... REQUIRE IDENTIFICATION



1985 04 24

United States Treasury

15-51  
000

PAY TO THE

ORDER OF

MONTH DAY YEAR  
04 24 85

STATE OF FLORIDA  
DEPT OF ENVIRONMENTAL  
REGULATIONS

80004904

DOLLARS	CTS.
\$000500	00

NASA JFK  
SPACE CENTER  
A3985

*Joe O'Brien*  
RECEIVED RECEIPTING OFFICE

PERMIT



STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

No 76070

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from United States Treasury Date May 6, 1985

Address Washington, D.C. Dollars \$ 500.00

Applicant Name & Address Kennedy Space Center

Source of Revenue \_\_\_\_\_

Revenue Code 001031 Application Number AC 05-103832

By Patricia B. Adams

National Aeronautics and  
Space Administration

John F. Kennedy Space Center  
Kennedy Space Center, Florida 32899

DER

NASA

MAY 6 1985

BAQM

APR 30 1985

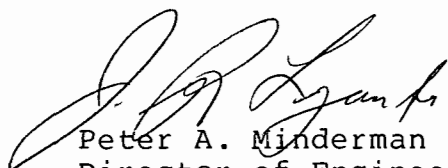
Reply to Attn of DF-EMS

Dept. of Environmental Regulation  
Attn: Mr. C. H. Fancy  
Deputy Chief, Bureau of Air Quality  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32301-8241

Subject: Application for a Construction Permit to Replace Boiler  
Number 1 (A005-24131) in the VAB Annex

We are applying for a construction permit for the subject  
project. Enclosed are four copies of the signed application and  
drawing sheets describing the proposed project. Also enclosed is  
a check for \$500 for the permit fee.

Please refer any questions to Mr. John Ryan at 305 867-4049.



Peter A. Minderman  
Director of Engineering Development

Enclosures

*John - Betty 5/9*  
*BF*  
*new application*  
*Bressa & dist - have*  
*copies -*  
*Please return*  
*for file*  
*Pattry*

AIR POLLUTION SOURCE  
CONSTRUCTION PERMIT APPLICATION  
FOR  
VAB ANNEX BUILDING  
HIGH TEMPERATURE HOT WATER GENERATOR NO. 1

MAY 6 1985

BAQM

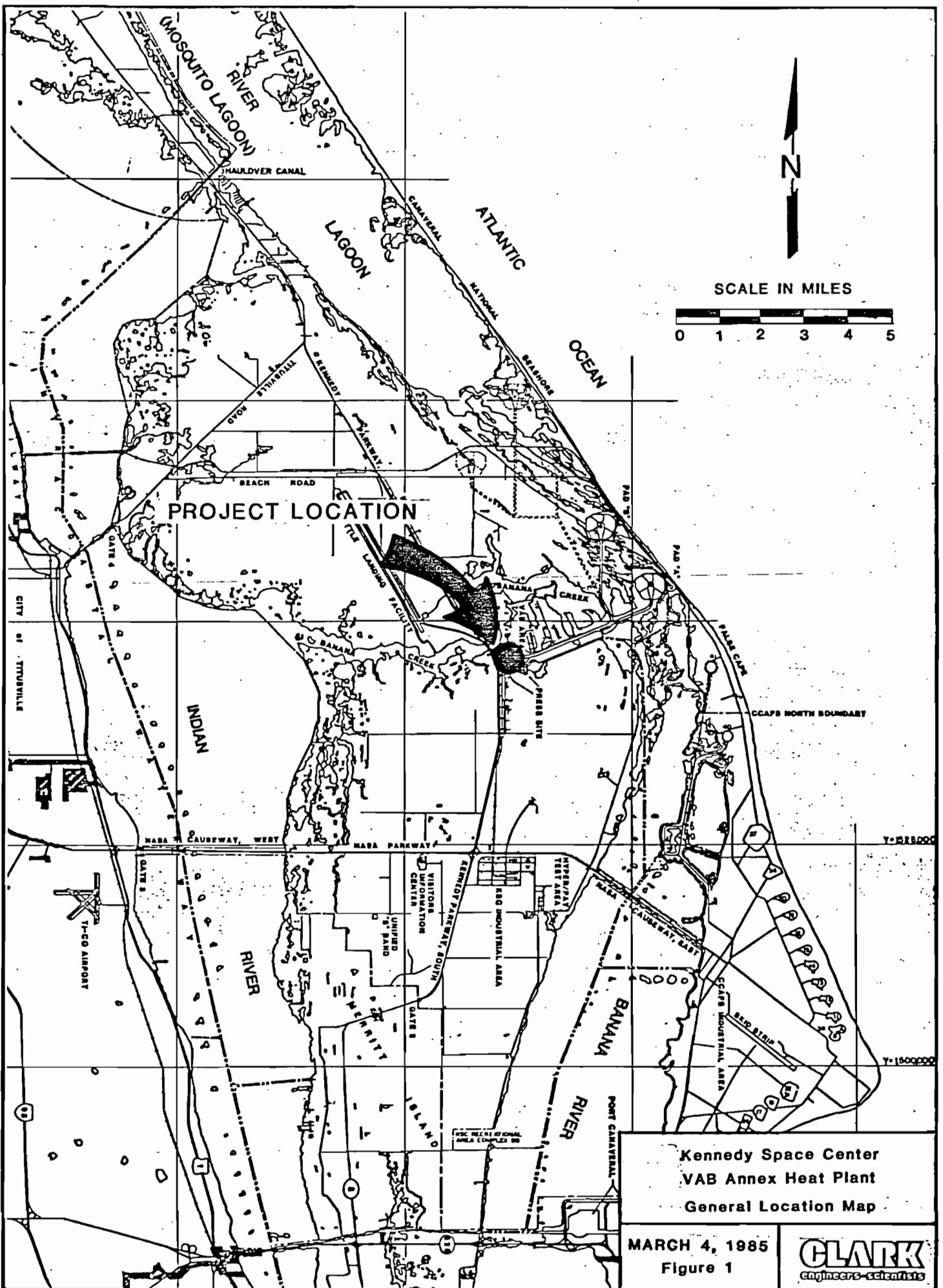
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
KENNEDY SPACE CENTER

MARCH 4, 1985

## INTRODUCTION

NASA proposes to replace the existing High Temperature Hot Water Generator No. 1 at the VAB Annex Building at Kennedy Space Center (see Figures 1 and 2). The existing 13.7 MMBTU/hr generator is permitted under the Department of Environmental Regulation Air Pollution Source Operation Permit A00524131. The addition of the new generator will result in more efficient operation of the heating facility.

The following is the application for the Air Pollution Source Construction Permit required by the Department of Environmental Regulation.









AC 05-103832

DER  
MAY 6 1985  
BAQM

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
APPLICATION TO OPERATE/CONSTRUCT  
AIR POLLUTION SOURCES

SOURCE TYPE: Hot Water Generator  New<sup>1</sup>  Existing<sup>1</sup>

APPLICATION TYPE:  Construction  Operation  Modification

COMPANY NAME: Kennedy Space Center, NASA COUNTY: Brevard

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) No. 6 Oil fired hot water generator

SOURCE LOCATION: Street Utility Annex Rd., VAB(K6-947) City Kennedy Space Center  
UTM: East X = 611,650 North Y = 1,554,000  
Latitude 28 ° 35 ' 05 " N Longitude 80 ° 39 ' 08 " W

APPLICANT NAME AND TITLE: Peter A. Minderman, Director of Design Engineering, KSC

APPLICANT ADDRESS: Headquarters Building, Kennedy Space Center, Fla. 32899

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative\* of Kennedy Space Center, NASA

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

\*Attach letter of authorization

Signed: *Peter A. Minderman*  
Peter A. Minderman, Director, Design  
Name and Title (Please Type) Engineering  
Date: 5/1/85 Telephone No. (305)867-2565

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

(Exempt per 471.05 F.S.)

Signed: \_\_\_\_\_

\_\_\_\_\_  
Name (Please Type)

\_\_\_\_\_  
Company Name (Please Type)

\_\_\_\_\_  
Mailing Address (Please Type)

Florida Registration No. \_\_\_\_\_ Date: \_\_\_\_\_ Telephone No. \_\_\_\_\_

<sup>1</sup>See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

**SECTION II: GENERAL PROJECT INFORMATION**

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

(See Attachment No. 1)

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction \_\_\_\_\_ Completion of Construction \_\_\_\_\_

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

N/A

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

A005-24131 issued: 12/12/80 expires: 12/10/85

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? Yes  No

F. Normal equipment operating time: hrs/day 24; days/wk 7; wks/yr 26; if power plant, hrs/yr \_\_\_\_\_;

if seasonal, describe: This heater is one of two identical units at the facility. It is anticipated that the normal operating schedule will involve the full time operation of this unit six months per year.

(See attachment No. 1 for more detail).

G. If this is a new source or major modification, answer the following questions. (Yes or No)

1. Is this source in a non-attainment area for a particular pollutant?

NO

a. If yes, has "offset" been applied?

N/A

b. If yes, has "Lowest Achievable Emission Rate" been applied?

N/A

c. If yes, list non-attainment pollutants.

N/A

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI.

N/A

3. Does the State "Prevention of Significant Deterioration" (PSD) requirements apply to this source? If yes, see Sections VI and VII.

N/A

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source?

N/A

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source?

N/A

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

ATTACHMENT NO. 1  
KENNEDY SPACE CENTER  
AIR POLLUTION SOURCE  
CONSTRUCTION PERMIT APPLICATION  
HOT WATER GENERATOR #1 (Building K6-947)

Section II: General Project Information

This project involves the replacement of the High Temperature Hot Water Generator No. 1 at the VAB Annex building at KSC. The existing No. 1 generator is a 13.7 MM BTU/hr (heat input) capacity No. oil-fired unit and is permitted by DER permit A0 05-24131 which was issued on December 12, 1980.

This equipment replacement is the same as one for generator No. 2. Prior to the replacement of generators No. 1 and No. 2, the facility included two 13.7 MM BTU/hr generators and one generator with a heat input of 12.5 MM BTU/hr. The normal operating schedule for the facility consisted of the continuous operation of one of the larger generators along with the operation of the second generator much of the time to satisfy heating demands. The third generator (12.5 MM BTU/hr) served as a standby unit utilized during maintenance of generators No. 1 and No. 2.

The replacement of the existing generators No. 1 and No. 2 with larger capacity units will significantly affect the operating schedule described above. It is anticipated that the operation of one of the 25 MM BTU/hr generators alone will satisfy the heat demands most of the time. Therefore, it is planned that the operating schedule will consist of the alternate operation of one of the 25 MM BTU/hr generators with generator No. 3 utilized to provide additional heat output to supplement the larger units as necessary. It is anticipated that the operation will be divided evenly between the two units. It must be kept in mind, however, that maintenance and other considerations may not allow such an evenly divided operating schedule. The total emissions will not be affected although the distribution of emissions may vary between the units.

The actual fuel usage will be determined more accurately once both of the new units have been installed and operational. The new hot water generators will be state of the art with improved thermal efficiency. These units will have newer model burners with more efficient atomization and therefore have lower air requirements. As a result, it is estimated that this project will result in a more efficient facility operation with decreased fuel consumption and emission than the existing facility.

**SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)**

A. Raw Materials and Chemicals Used in your Process, if applicable: **Not Applicable**

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		

B. Process Rate, if applicable: (See Section V, Item 1) **Not Applicable**

1. Total Process Input Rate (lbs/hr): \_\_\_\_\_

2. Product Weight (lbs/hr): \_\_\_\_\_

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission <sup>1</sup>		Allowed Emission <sup>2</sup> Rate per Ch. 17-2, F.A.C.	Allowable <sup>3</sup> Emission lbs/hr	Potential Emission <sup>4</sup>		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
SO <sub>2</sub>	25.9	26.2	In Accordance	With	25.9	26.2	(See
NO <sub>x</sub>	9.6	9.7	Section 17-2.	600 (6)	9.6	9.7	Figure
Particulate	2.2	2.2	F.A.C. -	BACT	2.2	2.2	No. 2)
Carbon Monoxide	0.8	0.8	Shall Be Applied	:	0.8	0.8	

D. Control Devices: (See Section V, Item 4) **Not Applicable**

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles <sup>5</sup> Size Collected (in microns)	Basis for Efficiency (Sec. V, It <sup>5</sup> )

<sup>1</sup>See Section V, Item 2.

<sup>2</sup>Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. — 0.1 pounds per million BTU heat input)

<sup>3</sup>Calculated from operating rate and applicable standard

<sup>4</sup>Emission, if source operated without control (See Section V, Item 3)

<sup>5</sup>If Applicable

MIAMI, FLORIDA

JOB NASA - KSC JOB NO. 8361 COMPUTED BY JJM DATE 2/28/85  
DESCRIPTION VAB Annex - High Temp. CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
Hot Water Generator No. 1 SHEET 1 OF \_\_\_\_\_

Air Pollution Source Permit Application

VAB Annex Building - High Temperature

Hot Water Generator - No. 2

Emission Type	Maximum Potential (lbs/hr)	Actual Annual (Tons/yr)
Sulfur Dioxide	25.91	26.2
Nitrogen Oxide	9.57	9.7
Particulate	2.15	2.2
Carbon Monoxide	0.83	0.8

Note: Values represent emissions according to EPA-AP-42, "Compilation of Air Pollutant Emission Factors" based on maximum fuel rate and actual operational schedule at the heating facility.

MIAMI, FLORIDA

JOB KSC - NASA JOB NO. 8361 COMPUTED BY JJM DATE 2/28/85  
DESCRIPTION VAB Annex - High Temp CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
Hot Water Generator No. 1 SHEET 2 OF \_\_\_\_\_

Air Pollution Source Permit Application:

VAB Annex Building - High Temp.

Hot Water Generator - No. 1

(20 MM BTU/hr - max heat output)

(25 MM BTU/hr - max heat input)

Section III - C - Air Emissions Generator No. 1

Fuel Characteristics:

No. 6 fuel oil

S = 1.0%

N = .3%

Maximum Potential

Maximum fuel rate  $Q = 165 \text{ gal/hr}$

$$SO_2 = (165 \text{ gals/hr}) (157 (1.0) \text{ lb}/10^3 \text{ gal}) = 25.91 \frac{\text{lbs}}{\text{hr}}$$

$$NO_x = (165 \text{ gals/hr}) (22 + 400 (.3)^2) \frac{\text{lb}}{10^3} \text{ gal} = 9.57 \frac{\text{lb}}{\text{hr}}$$

$$\text{Particulate} = (165 \text{ gals/hr}) (10(1.0) = 3) \frac{\text{lb}}{10^3} \text{ gal} = 2.15 \text{ lb/hr}$$

$$CO = (165 \text{ gals/hr}) (5 \text{ lbs}/10^3 \text{ gal}) = 0.83 \text{ lb/hr}$$

MIAMI, FLORIDA

JOB KSC - NASA JOB NO. 8361 COMPUTED BY JJM DATE 2/28/85  
DESCRIPTION VAB Annex - High Temp CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
Hot Water Generator No. 1 SHEET 3 OF \_\_\_\_\_

## Air Emissions (continued)

### Actual Emissions

Fuel usage (1983) = 718,598 gallons (total heat plant)

Note: 50,000 gallons for generator No. 3.  
Remainder of fuel used by No. 1 and No. 2 generator - No. 2 generator replaced first and will operate full time. Eventually, No. 1 and No. 2 will be used alternately to provide full time operation.

Fuel usage for generators No. 1 and No. 2 is estimated at 668,598 gallons/yr. This volume will be divided equally between units No. 1 and No. 2.

Generator No. 1 Fuel Usage = 334,299

$$SO_2 = (334,299 \text{ gal/yr}) (157(1.0) \frac{\text{lb}}{10^3 \text{ gal}}) = 52,485 \frac{\text{lbs}}{\text{yr}} = 26.2 \text{ T/yr}$$

$$NO_x = (334,229 \text{ gal/yr}) (22 + .400(.3) \frac{2 \text{ lbs}}{10^3 \text{ gal}}) = 19,390 \frac{\text{lbs}}{\text{yr}} = 9.7 \text{ T/yr}$$

$$\text{Particulate} = (334,299 \text{ gal/yr}) (10(1.0) + 3) \frac{\text{lb}}{10^3 \text{ gal}} = 4,346 \frac{\text{lbs}}{\text{yr}} = 2.2 \text{ T/yr}$$

$$\text{Carbon monoxide} = (334,299 \text{ gal/yr}) (5 \frac{\text{lbs}}{10^3 \text{ gal}}) = 1672 \frac{\text{lb}}{\text{yr}} = 0.8 \text{ T/yr}$$



E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
No. 6 Fuel oil	75	166 gal/hr	25

\*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, lbs/hr

Fuel Analysis:

Percent Sulfur: 1.0 Percent Ash: 0.03  
 Density: 8.105 lbs/gal Typical Percent Nitrogen: 0.3  
 Heat Capacity: 18,591 BTU/lb 150,680 BTU/gal

Other Fuel Contaminants (which may cause air pollution): \_\_\_\_\_

F. If applicable, indicate the percent of fuel used for space heating. Annual Average 20 Maximum 25

G. Indicate liquid or solid wastes generated and method of disposal.  
None

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: 35 ft. Stack Diameter: 2.25 ft.  
 Gas Flow Rate: 8947.6 ACFM Gas Exit Temperature: 497 °F.  
 Water Vapor Content: -- % Velocity: 37.5 FPS

SECTION IV: INCINERATOR INFORMATION Not Applicable

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

Description of Waste \_\_\_\_\_

Total Weight Incinerated (lbs/hr) \_\_\_\_\_ Design Capacity (lbs/hr) \_\_\_\_\_

Approximate Number of Hours of Operation per day \_\_\_\_\_ days/week \_\_\_\_\_

Manufacturer \_\_\_\_\_

Date Constructed \_\_\_\_\_ Model No. \_\_\_\_\_

Not Applicable

	Volume (ft) <sup>3</sup>	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: \_\_\_\_\_ ft. Stack Diameter \_\_\_\_\_ Stack Temp. \_\_\_\_\_

Gas Flow Rate: \_\_\_\_\_ ACFM \_\_\_\_\_ DSCFM\* Velocity \_\_\_\_\_ FPS

\*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device:  Cyclone  Wet Scrubber  Afterburner  Other (specify) \_\_\_\_\_

Brief description of operating characteristics of control devices: \_\_\_\_\_

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.): \_\_\_\_\_

### SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight — show derivation. **Not Applicable**
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made. (see calculations)
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test). (see calculations)
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.). **Not Applicable**
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3, and 5 should be consistent: actual emissions = potential (1-efficiency). (See calculations)
6. An 8½" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained. (See Figure No. 2)
7. An 8½" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map). (See Figure No. 1)
8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram. (See Figure No. 2)

**Best Available Copy**

- 9. An application fee of \$20, unless exempted by Section 17-4.05(3), F.A.C. The check should be made payable to the Department of Environmental Regulation.
- 10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

**SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY (Not Applicable)**

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?  
 Yes  No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)  Yes  No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

- 1. Control Device/System:
- 2. Operating Principles:
- 3. Efficiency:
- 5. Useful Life:
- 7. Energy:
- 9. Emissions:

- 4. Capital Costs:
- 6. Operating Costs:
- 8. Maintenance Cost:

Contaminant	Rate or Concentration

\*Explain method of determining D 3 above.

10. Stack Parameters

- a. Height: \_\_\_\_\_ ft.      b. Diameter: \_\_\_\_\_ ft.
- c. Flow Rate: \_\_\_\_\_ ACFM      d. Temperature: \_\_\_\_\_ °F
- e. Velocity: \_\_\_\_\_ FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency\*:
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy\*\*:
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency\*:
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy\*\*:
- h. Maintenance Costs:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

\*Explain method of determining efficiency.

\*\*Energy to be reported in units of electrical power — KWH design rate.

3.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency\*:
- d. Capital Cost:
- e. Life:
- f. Operating Cost:
- g. Energy:
- h. Maintenance Cost:

\*Explain method of determining efficiency above.

- i. Availability of construction materials and process chemicals:
  - j. Applicability to manufacturing processes:
  - k. Ability to construct with control device, install in available space and operate within proposed levels:
- 4.
- a. Control Device
  - b. Operating Principles:
  - c. Efficiency\*:
  - d. Capital Cost:
  - e. Life:
  - f. Operating Cost:
  - g. Energy:
  - h. Maintenance Cost:
  - i. Availability of construction materials and process chemicals:
  - j. Applicability to manufacturing processes:
  - k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

- 1. Control Device:
- 2. Efficiency\*:
- 3. Capital Cost:
- 4. Life:
- 5. Operating Cost:
- 6. Energy:
- 7. Maintenance Cost:
- 8. Manufacturer:
- 9. Other locations where employed on similar processes:

a.

- (1) Company:
- (2) Mailing Address:
- (3) City:
- (4) State:
- (5) Environmental Manager:
- (6) Telephone No.:

\*Explain method of determining efficiency above.

(7) Emissions\*:

Contaminant	Rate or Concentration

(8) Process Rate\*:

b.

- (1) Company:
- (2) Mailing Address:
- (3) City:
- (4) State:

\*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

**SECTION VII – PREVENTION OF SIGNIFICANT DETERIORATION Not Applicable**

**A. Company Monitored Data**

1. \_\_\_\_\_ no sites \_\_\_\_\_ TSP \_\_\_\_\_ ( ) SO<sup>2</sup> \_\_\_\_\_ Wind spd/dir \_\_\_\_\_

Period of monitoring \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
 month day year month day year

Other data recorded \_\_\_\_\_

Attach all data or statistical summaries to this application.

**2. Instrumentation, Field and Laboratory**

a) Was instrumentation EPA referenced or its equivalent? \_\_\_\_\_ Yes \_\_\_\_\_ No

b) Was instrumentation calibrated in accordance with Department procedures? \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Unknown

**B. Meteorological Data Used for Air Quality Modeling**

1. \_\_\_\_\_ Year(s) of data from \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
 month day year month day year

2. Surface data obtained from (location) \_\_\_\_\_

3. Upper air (mixing height) data obtained from (location) \_\_\_\_\_

4. Stability wind rose (STAR) data obtained from (location) \_\_\_\_\_

**C. Computer Models Used**

1. \_\_\_\_\_ Modified? If yes, attach description.

2. \_\_\_\_\_ Modified? If yes, attach description.

3. \_\_\_\_\_ Modified? If yes, attach description.

4. \_\_\_\_\_ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

**D. Applicants Maximum Allowable Emission Data**

Pollutant	Emission Rate
TSP	_____ grams/sec
SO <sup>2</sup>	_____ grams/sec

**E. Emission Data Used in Modeling**

Attach list of emission sources. Emission data required is source name, description on point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

\*Specify bubbler (B) or continuous (C).

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions\*:

Contaminant	Rate or Concentration

(8) Process Rate\*:

10. Reason for selection and description of systems:

[This section contains faint, illegible text and horizontal lines, likely representing a table or list of systems and their descriptions.]

\*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.