

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of a request  
for variance by:

Jackson Memorial Hospital  
1900 N.W. 12th Street  
Miami, Florida 33136

OGC Case no.: 92-66R

-----/  
NOTICE OF INTENT TO GRANT VARIANCE

The Department has reviewed a petition for variance filed on behalf of the Public Health Trust, d/b/a/ Jackson Memorial Hospital (JMH), pursuant to Chapter 403.201(1)(c), Florida Statutes (F.S). The Petitioner seeks a variance from the particulate matter emission limitation for biological waste incineration facilities with capacities greater than 2000 pounds per hour set forth in Rule 62-296.401(4)(d)1., Florida Administrative Code (F.A.C.), (formerly part of Chapter 17-296.401). This emission standard is applicable to the subject of this variance request for an existing facility consisting of two biological waste incinerators owned by and located at JMH. One of the incinerators at this facility, the 500 TES, is operated by the University of Miami Radiation Control Center and has received a permit from the Department of Health and Rehabilitative Services (DHRS) for incinerating radioactive wastes from the medical research complex.

The Department finds that a variance is necessary to prevent undue hardship to the Petitioner because of the unique disposal problems of radioactive biological waste, because of the large backlog of radioactive biological waste being held for disposal by the University of Miami and because the Department anticipates new federal regulations to be promulgated in the next twenty-four months that may render pollution control technology necessary to meet current standards obsolete. This variance will allow JMH to operate each of the two

incinerators only at separate times, with each incinerator complying with the particulate matter emission standard applicable to the capacity of that incinerator. The 500 TES shall not exceed .100 grains per dry standard cubic foot of flue gas, corrected to 7% O<sub>2</sub> of particulate matter emissions. The 2500 TES shall not exceed .020 grains per dry standard cubic foot of flue gas, corrected to 7% O<sub>2</sub> of particulate matter emissions. The 500 TES will be operated in such a manner as to ensure that all other applicable requirements for facilities with capacity greater than 2,000 pounds per hour are met. The two incinerators at this facility will not be permitted to incinerate waste at the same time.

The variance is subject to the following conditions:

1. This variance is valid for a period of 24 months. During the 24 month period of the variance, the Petitioner shall seek alternate methods of disposal for its radioactive wastes from the medical research complex. At the conclusion of the 24 month variance, JMH must be in compliance with all applicable regulations for its incinerator facility, including the applicable particulate matter standard, or cease operating the 500 TES incinerator.
2. Only those waste permitted to be incinerated under the provisions of DHRS Radioactive Materials License Number 76-13 shall be incinerated in the 500 TES incinerator.
3. Only waste which is radioactive shall be incinerated in the 500 TES incinerator.
4. No more than 3,000 pounds in any one continuous seven day period nor more than 6,000 pounds in any consecutive thirty day period will be incinerated in the 500 TES.
5. No PVC plastics shall be incinerated in the 500 TES.

6. The 500 TES will be operated in such a manner as to ensure that all other requirements applicable to facilities with a capacity greater than 2,000 pounds per hour are met.

7. Petitioner will immediately notify the Department of any violations noted by DHRS of the provisions of Radioactive Materials License Number 76-13 regarding the operation of the 500 TES. Any violation of the provisions of the Petitioner's construction or operating permit for the 500 TES shall be sufficient cause for suspension of this variance. Any violation of the provisions of Radioactive Materials License Number 76-13, which is confirmed by H.R.S regarding the waste segregation for and the operation of the TES 500 shall be sufficient cause for suspension of this variance.

8. An electronic interlock system will be installed at the facility to ensure that the 2500 TES and the 500 TES will incinerate no waste and generate no particulate matter at the same time.

9. This variance is not intended to supersede any new federal regulations that may affect JMH's incinerator facility. The Petitioner agrees to comply with all applicable regulations that may become effective during the 24 months of this variance, including all applicable particulate matter standards established by federal regulation.

Pursuant to Section 403.815, F.S., and DEP Rule 62-103.150, F.A.C., you are required to publish at your own expense the enclosed Notice of Proposed Agency Action. The notice shall be published one time only within 30 days in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the

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newspaper used must be one with significant circulation in the area that may be affected by the variance. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. You must provide proof of publication to the Department at the address listed below within seven days of publication.

The Department will issue this Variance unless a petition for an administrative proceeding is filed pursuant to the provisions of Section 120.57, F.S. A person whose substantial interests are affected by the Department's proposed action may petition for an administrative proceeding (hearing) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of receipt of this notice, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the time of filing at: Jackson Memorial Hospital / Public Health Trust, C/O Sara A. Price, Assistant County Attorney, 1611 N.W. 12th Avenue, West Wing Suite 109, Miami, Florida 33136. Failure to file a petition within this 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 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 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 Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel of the Department at the above address. 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 60Q-2.010, F.A.C.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

*Virginia B. Wetherell*

VIRGINIA B. WETHERELL

Secretary

Department of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by facsimile and by U.S. Mail this 2<sup>nd</sup> day of February, 1995, to Marty Dix, 106 East College Avenue, Suite 1200, Tallahassee, Florida 32301 and by U.S. Mail to Sara A. Price, Assistant County Attorney, Jackson Memorial Hospital/Public Health Trust, 1611 NW. 12th Avenue, West Wing Suite 109, Miami, Florida 33136, and to Leyda Benitez-Herrmann, Esquire, Office of Vice President and General Counsel, University of Miami, P.O. Box 248052, Coral Gables, Florida 33124-2425.

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52(11), Florida Statutes, with the designated Department clerk, receipt of which is hereby acknowledged.

  
(Clerk)

2/01/95  
(Date)

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NOTICE OF PROPOSED AGENCY ACTION

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emissions. The 500 TES will be operated in such a manner as to ensure that all other applicable requirements for facilities with capacity greater than 2,000 pounds per hour are met. The two incinerators at this facility will not be permitted to incinerate waste at the same time.

The Department's file on this matter is available for public inspection during normal business hours, 8:00 am to 5:00 PM, Monday through Friday, except legal holidays, at the Office of General Counsel, Air and Waste Division, Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399.

A person whose substantial interests are affected by the Department's proposed action may petition for an administrative proceeding (hearing) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant must be filed within 14 days of receipt of this Notice. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of receipt of this notice, whichever first occurs. 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 period shall constitute a waiver of any right such person may have to request an administrative determination ( hearing) under Section 120.57, F.S.

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(a) the name, address, and telephone number of each petitioner, the applicant's name and address, the Department 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 petitioner wants the Department to take with respect to the Department's action or proposed action.

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# JACKSON MEMORIAL HOSPITAL

1611 N.W. 12TH AVENUE

MIAMI, FLORIDA 33136

RECEIVED  
DER - MAIL ROOM  
1991 DEC -5 PM 12:00

November 13, 1991

Mr. Steve Smallwood  
Director of Air Resources Management  
Florida Department of Environmental Regulations  
2600 Blair Stone Road  
Tallahassee, Florida 32399-24000

Re: Jackson Memorial Hospital  
Medical Waste Incinerator  
Permit/Certification #A-013-162492

Dear Mr. Smallwood:

Enclosed please find a check in the amount of \$2,000 for permit processing fee on the above referenced certification, Ecolaire 500TE Incinerator variance request.

We thank you for your prompt assistance in obtaining this permit, if you have any questions, please contact our office at (305)585-6474.

Sincerely,



R. Gonzalez, Administrator  
Facilities Planning & Programming

RG:lb

xc: Oliver Bonnert  
Dean Kenyon

00031

PUBLIC HEALTH TRUST OF DADE COUNTY, FLORIDA

A058101

INVOICE NUMBER	DATE	VOUCHER NUMBER	GROSS AMOUNT	DISC. AMOUNT	NET AMOUNT
WATER-PERMIT	11/13/91	1111 CW00403234	2,000.00	0.00	2,000.00
			2,000.00	0.00	2,000.00

PAYOR: 030101 DISB: 058101 DATE: 11/27/91

DETACH BEFORE DEPOSITING

**PUBLIC HEALTH TRUST**

OF DADE COUNTY, FLORIDA

JACKSON MEMORIAL HOSPITAL  
1611 N.W. 12TH AVENUE  
MIAMI, FLORIDA 33136

DISBURSE NO.

058101

VENDOR

030101

<sup>63-60</sup>  
660

CHECK NUMBER

A058101

CHECK DATE

11/27/91

CHECK AMOUNT

\*\*\*\*\*2,000.00

EXACTLY TWO THOUSAND AND NO/100\*\*\*\*\*

AY

TO  
THE ORDER  
OF

FLORIDA DEPT. OF ENVIRONMENTAL  
REGULATION  
TWIN TOWER OFFICE BLDG.  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLA. 32399-2400

GENERAL OPERATING FUND

*Jay W. Davis*  
*John C. Clark*

SUN BANK/MIAMI N.A.  
MIAMI, FLORIDA 33136

⑈058101⑈ ⑆066000604⑆ 0189000020310⑈

Clair-handle

Bosek, Gibson and Associates, Inc.

111 Bullard Parkway

Suite 204

Temple Terrace, Florida 33617

(813) 985-3499

Fax (813) 989-1267

October 31, 1991

RECEIVED

NOV 4 1991

Division of Air Resources Management

Mr. Steve Smallwood  
Director of Air Resources Management  
Dept. of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

RE: Jackson Memorial Hospital - Medical Waste Incinerator  
Variance Request (Model 500 TE)  
I.D. Number 50/DAD/13/0323/04  
Permit/Certification Number A013-162492

Dear Mr. Smallwood:

Jackson Memorial Hospital is requesting a variance for their existing Ecolaire Model 500 TE incinerator at Jackson Memorial Hospital, 1900 N.W. 12th Street, Miami, Florida 33136. Please find below the emission requirement from which this variance is sought, along with factors that support a variance to the existing permit for the 500 TE incinerator in accordance with the new amendments to Air Pollution Rule 17-2.

Variance Position

The existing Ecolaire 500 TE incinerator is in good condition and is of a recent enough vintage that it will not need structural modifications to meet the new Air Pollution rules. The only emission requirement that cannot be feasibly complied with is for particulates. Under provision (a) of the Florida Department of Environmental Regulations (DER) Rule 403.201, the hospital is requesting a variance for particulate matter emissions required by recent DER Rule 17-2 amendments. The information to follow justifies our variance request.

Existing Equipment:

	<u>Model</u>	<u>Year Built</u>	<u>Permitted Capacity lbs/hr</u>	<u>Waste BTUs/lb at Permitted Capacity</u>	<u>Current Permitted Hours Per Day Operation</u>
#1	Ecolaire 500 TE	1988	400	7230	16
#2	Ecolaire 2500 TES	1988	2,083	7800	24

DER Compliance Requirements for the Existing Incinerator:

The specific requirements and proposed compliance procedures for the new Air Pollution Rules which will affect Jackson Memorial's Ecolaire 500 TE incinerator in addition to new testing and training requirements are as follows:

1. Radioactive waste may not be burned in an incinerator subject to rule 17-2.600(4) unless the incinerator has been issued a permit or the waste is of such quantity to be exempt in accordance with Department of Health and Rehabilitative Services (HRS) Rule 10D-91 or 10D-104.003, F.A.C.

The Ecolaire 500 TE incinerator operates under a license issued by the Department of Health and Rehabilitative Services, Office of Radiation Control.

2. Particulate matter emissions shall not exceed 0.020 grains per dry standard cubic foot of flue gas, corrected to 7% O<sub>2</sub>.

The State of Florida Department of Health and Rehabilitative Services (HRS), Office of Radiation Control, issued a license requiring that only limited amounts of specific isotopes be burned under defined operating conditions. It controls the concentrations which may be released to the atmosphere and specifies the way in which the ash must be disposed. Since much of the release is in the form of tritiated water, Edward C. Pombier, Director and Radiation Safety Officer, University of Miami, Radiation Control Center, feels that a pollution control system which would be capable of meeting the .02 grains/dscf would tend to concentrate this radioactive waste within the scrubber. This concentrated radioactive waste would eventually be sent to the sanitary sewer through the scrubber blowdown. The scrubber blowdown may cause the facility to exceed their maximum allowed radioactivity to be sent to the sanitary sewer system. Denial of our variance request would be counter-productive to the purpose of the incineration unit as well as to the State of Florida mandate to reduce the amount of radioactive waste which must be disposed of at a licensed burial site.

3. Hydrochloric acid (HCl) emissions shall not exceed 50 parts per million by volume, dry basis, corrected to 7% O<sub>2</sub> on a three hour average basis; or shall be reduced by 90% by weight on an hourly average basis.

The Ecolaire Model 500 TE is primarily used for burning regulated radioactive waste under a license from the State of Florida, HRS. As a result of this special usage, a very defined waste stream is burned in this incineration unit.

The vials which make-up the major plastic component of the waste stream are exclusively polyethylene and/or polypropylene which have no chlorinated plastics in their composition. Other components of the waste stream include paper and animal carcasses. Therefore, there will be little (i.e., much less than 50 ppm) or no HCl emissions associated with burning the above mentioned waste stream.

4. Incinerator must have a one second residence time (minimum) in the secondary or last combustion chamber at 1800°F. This combustion chamber temperature must be monitored continuously.

The existing Ecolaire 500 TE incinerator was designed for a two second gas residence time in the secondary chamber (see calculation below) at 1800°F and it also has a circular chart type temperature recorder.

$$183 \text{ ft}^3/5,035 \text{ ACFM} * 60\text{s}/\text{min} = 2.18 \text{ sec.}$$

5. Carbon monoxide (CO) emissions shall not exceed 100 ppmv on a dry basis corrected to 7% O<sub>2</sub> on an hourly basis.

The existing 500 TE incinerator was designed with state of the art combustion equipment to provide for a complete combustion. It can meet the CO requirement with no modifications.

6. The facility must install, operate and maintain in accordance with the manufacturer's instructions continuous emission monitoring equipment for the secondary combustion chamber exit temperature and oxygen.

Jackson Memorial Hospital intends to comply fully with this requirement upon obtaining the variance.

Jackson Memorial Hospital is more than willing to accept a variance to the existing permit limiting the 500 TE incinerator to burn no more than 2000 pounds in any seven day period. The unit's average monthly burn has been only 2,065 pounds since the first day of operation in February 1989. It is unlikely, due to the radioactive restrictions set forth by HRS, that the incineration unit would ever approach that level of burning. If the existing Ecolaire 500 TE incinerator cannot operate in the future then the generated radioactive waste would have to be sent to a radioactive waste landfill in Barnwell, South Carolina. Since the radioactive waste site in Barnwell is soon to be closed and the site being developed in North Carolina is not expected to be ready, the production of any additional low level radioactive waste for off-site disposal would constitute a significant problem if incineration cannot be utilized in the future.

Mr. Steve Smallwood  
October 31, 1991  
Page Four

If you have any questions, please feel free to contact me.

Sincerely,

BOSEK, GIBSON AND ASSOCIATES, INC.

A handwritten signature in cursive script that reads "Dean Kenyon".

Dean S. Kenyon, P.E.  
Director of Solid Waste Technology

MS/DSK:cw

cc: Oliver Bonnert, Jackson Memorial Hospital  
C.H. Fancy, P.E., DER  
Edward C. Pombier, Univ. of Miami  
Marty Sorrentino, BGA

Mr. Steve Smallwood  
October 31, 1991  
Page Four

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Sincerely,

BOSEK, GIBSON AND ASSOCIATES, INC.



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Director of Solid Waste Technology

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Marty Sorrentino, BGA  
*B. Andrews*