



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

October 2, 1991

Joseph R. Treshler
Ogden Martin System of Lake, Inc.
3830 Rogers Industrial Park Road
P.O. Box 189
Okahumpka, Florida 34762

RE: Lake County Solid Waste Energy Recovery Facility

Dear Mr. Treshler:

I have reviewed the material furnished to justify assessing the Lake County solid Waste Energy Recovery Facility at salvage value for Ad Valorem tax assessment purposes. I do not agree that the entire facility qualifies as a pollution control device pursuant to Section 193.621, F.S. and Florida Administrative Code Chapter 17-8. In my opinion the following items qualify:

1. Air pollution control system
2. Cooling system
3. Ash handling system
4. The refuse pit
5. Water treatment equipment including pumps and piping

A more detailed listing needs to be developed with associated costs.

Sincerely,

Hamilton S. Oven
Hamilton S. Oven, Jr., P.E.
Administrator
Siting Coordination Office
Division of Air Resources
Management

cc: Jan Rae Clark, DER
Ed Havill, Lake County

OGDEN MARTIN SYSTEMS OF LAKE, INC.

3830 ROGERS INDUSTRIAL PK. RD.
P.O. BOX 189
OKAHUMPKA, FL 34762
(904) 365-1611
FAX: (904) 365-6359

LAKE-0270-OP



September 13, 1991

RECEIVED

SEP 16 1991

Division of Air
Resources Management

Mr. Buck Oven
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Lake County Solid Waste Energy Recovery Facility (the
"Facility") Ad Valorem Tax Assessment Rulings

Dear Mr. Oven:

Currently the Lake County, Florida Property Appraiser's Office is in the process of evaluating the above identified project for the purposes of determining the taxable portion of the Facility with respect to Ad Valorem Property Tax Assessment.

In our review of the applicable statutes and rules governing procedures for assessment of "Pollution Control Facilities" we have developed the opinion that the portion of the Facility which has been previously qualified by the Florida Department of Environmental Regulation ("FDER") as "Resource Recovery Equipment" for sales tax exemption purposes (in accordance with Florida Statutes Section 212.08 (7) (p) and Florida Administrative Code Chapter 17-704) should also qualify for treatment as "Pollution Control Facilities" in accordance with the provisions of Florida Statutes Section 193.621 and Florida Administrative Code Chapter 17-8. We hereby request that FDER evaluate and provide to us a ruling on this issue.

The primary purpose of resource recovery facilities such as the Facility is to prevent, control, abate, decrease, and mitigate pollution of ambient air and ground and surface water which results from the improper disposal of municipal solid waste. This purpose was recognized and confirmed by the State of Florida legislature in enacting the Resource Recovery and Management Act wherein the legislature stated:

"Inefficient and improper methods of managing solid waste create hazards to public health [and] cause

pollution of air and water resources." Fla. Stats.
S 403.702(a).

The equipment and facilities used in the process of resource recovery at the Facility, starting with the enclosed handling and storage of the waste and continuing through the chemical process of combustion (thermal destruction via rapid, high temperature oxidation) of the waste followed by removal of pollutants from the flue gas and water streams associated with the process, fits within the definition of "Pollution Control Facilities" used for pollution prevention set forth in and contemplated by Chapter 17-8-020(c) and should be given status as such.

Clearly, pollution emissions, to both the air (green house gases, smog producing gases and carcinogens) and the water (heavy metals and toxic organics), are less on a per ton processed basis for waste processed at the Facility than for waste in a raw municipal waste landfill. Further, the Facility has the capacity to generate up to 14.5 Megawatts of electric power using a method which is environmentally cleaner than those methods utilized by current coal or oil fossil fuel generation facilities.

In further support of our position that a significant portion of the Facility should be designated as "Pollution Control Facilities", we would like to call to your attention a ruling by the Oregon Environmental Quality Commission with respect to an application for a pollution control tax credit for a resource recovery facility owned by one of our affiliates in Brooks, Oregon. The Oregon Environmental Quality Commission ruled that seventy five percent (75%) of the approximate \$52 million cost of the resource recovery facility was properly allocable to pollution control and prevention, and thus, qualified for significant tax credits under applicable Oregon law.

In summary, the process of resource recovery undertaken at the Facility and the resource recovery equipment used in that process have a significant impact on removing, preventing, decreasing and mitigating pollution and contamination of the state's air and water. Thus, the resource recovery equipment used in the Facility should be considered Pollution Control Facilities for ad valorem tax assessment purposes.

We have included with this request copies of information pertinent to our opinion and have included a copy of the final sales tax exemption determination filed with FDER for the Lake County project.

Mr. Buck Oven
September 13, 1991
Page 3

We look for your direction on this issue and stand ready to answer any question or provide you with any additional information pertaining to the subject.

Sincerely,

A handwritten signature in cursive script that reads "Joseph R. Treshler". To the right of the signature is a handwritten "x6".

Joseph R. Treshler

JRT/wh

Attachments

cc: A. Rittner
P. Young
J. Gaffney
K. Garrett
Ed Havill - Lake County

SEP-12-'91 THU 14:53 ID:

TEL NO: 70201088204168000000 #253 P01

**OGDEN MARTIN SYSTEMS
OF LAKE, INC.**

Kyle Garrett



AN OGDEN COMPANY

PO BOX 2815
FAIRFIELD, NEW JERSEY 07007-1093

(201) 882-9000

August 31, 1990

Florida Department of Environmental Resources
2000 Blair Stone Road
Tallahassee, FL 32399-2400

Attention: Ms. Jan Rae Clark

Reference: Lake County Resource Recovery Facility
Okahumpka, Florida
OK0591L, Project C-1025

Subject: APPLICATION FOR FINAL EXAMINATION AND CERTIFICATION OF
RESOURCE RECOVERY EQUIPMENT

Gentlemen,

Enclosed please find four (4) copies of the subject application for
your examination and processing.

The Lake County Resource Recovery Facility has essentially
completed construction and has commenced start-up operations.
Please contact us to set up a site inspection at your convenience.
We look forward to your response.

Very truly yours,

L. Peter Young
L. Peter Young
Project Manager

cc: A. Thelen - Lake County
J. Treshler - OMS
pf 4.7

SEP-12-'91 THU 14:54 ID:

TEL NO: 70201088204168000000 #253 P02



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

DER Form #	17-704.800(1)
As for Prelim. Exam. Final Exam.	
Form Title	Resource Recovery & Recycling Equipment
Effective Date	August 14, 1988
DER Application No.	(Filled in by DER)

Application for

☐ Preliminary Examination

☒ Final Examination and Certification

of Resource Recovery and Recycling Equipment

An application for preliminary examination of proposed Resource Recovery equipment is required for issuance of preliminary examination report pursuant to Rule 17-704.400, Florida Administrative Code (F.A.C.). An application for final examination and certification is required for final examination and certification of Resource Recovery equipment, pursuant to Rule 17-704.410, F.A.C. An applicant may not apply for final examination and certification of Resource Recovery equipment before that equipment is installed.

1. Identity of Applicant

Applicant's Name: Ogden Martin Systems of Lake, Inc. (aka: NRG/Recovery Group, Inc.)

Mailing Address: 40 Lane Road, Fairfield, N.J. 07007-2615

Phone Number: (201) 882-9000

2. a. Name of the facility or project: Lake County Resource Recovery Facility

b. Construction permit number for the facility: OCF-SW-87-0488

c. Street address of the facility (Main Entrance): 3830 Rogers Industrial Park Road
Okahumpka, Florida 34762

d. Estimate the date when the facility or project will be ready for operation: Sept. 6, 1990

3. Name of the unit of local government that will eventually own or benefit from the resource recovery equipment:

Lake County, Florida

Attach proof of contractual agreement between the purchaser of the equipment and the unit of local government which is to benefit from or own the resource recovery equipment. (see section 2, A of the Preliminary Examination Application dated 2/14/89)

4. Describe the resource recovery process (include technology used and materials or energy recovered): Attach descriptions (including blueprints, drawings, engineering plans, etc.) that will indicate where and how the equipment is integrated into the resource recovery process. (attach additional sheets, if necessary)

See Sections 3A, 3B of the Preliminary Examination Application submitted on February 14, 1989.
Final drawings are enclosed.

5. Attach a numbered listing of equipment which the applicant declares is qualified resource recovery equipment subject to the exemption provisions of Rule 17-704.400, 17-704.410, 17-704.420, and 12A-1.001(27), F.A.C., using the format on page 3.

a. Use the "Item No." column to sequentially number equipment on the list.

b. Use the "Item Description" column to provide the name and a brief description of the equipment.

c. Use the "Number of Pieces" column to indicate how many of this particular piece of equipment are being certified.

d. Use the "Process Description" column to indicate the page number of the process description text where the equipment and its function is described.

If drawings are submitted as supporting documentation:

e. Use the "Drawing Number" column to indicate the drawing number on which the equipment is shown.

f. Use the "Drawing Item No." column to indicate what number on the drawing represents this piece of equipment.

g. Use the "Equipment Cost" column to indicate the cost of the equipment.

SEP-12-'91 THU 14:54 ID:

TEL NO: 70201088204168000000 #253 P03

Form No.	17-704.600
Form Title	Form for Professional Engineer's Signature & Seal
Form Date	August 14, 1991
Form Number	Form No. 17-704.600

6. Certification A shall be completed if the applicant wishes to certify only equipment appearing on the list in Rule 17-704.600, F.A.C.

Certification B shall be completed if the applicant wishes to certify equipment not appearing on the list in Rule 17-704.600, F.A.C. or equipment appearing on the list in Rule 17-704.600, F.A.C. together with auxiliary equipment.

Certification A

I hereby certify that the equipment contained herein is Resource Recovery Equipment as defined in Rule 17-704.200(12), F.A.C. I further certify that all of the equipment meets the criteria set forth in Rule 17-704.420, F.A.C., and all of the equipment appears on the list in Rule 17-704.600, F.A.C.

Signature of Purchaser

Name and Title

Date

Certification B

I hereby certify that the equipment contained herein is Resource Recovery Equipment as defined in Rule 17-704.200(12), F.A.C. I further certify that the equipment, including all auxiliary equipment associated with this equipment, meets the criteria set forth in Rule 17-704.420, F.A.C.

Affix Seal Here

Signature of Professional Engineer

PETER J. DORSCHE CH. ME
Name and Title

Florida Registration No. 41691

Date 9/2/18/90 12/28/93

7. The undersigned applicant is aware that statements made in this form and attached exhibits constitute an application for certification of Industrial Recycling equipment from the Florida Department of Environmental Regulation. The applicant certifies that the information in this application is true, correct, and complete to the best of his knowledge and belief.

L. Peter Young
Signature of Applicant

L. Peter Young - Project Manager
Name and Title

Date 12/7/90

An applicant shall submit four (4) copies of the application to:

Environmental Administrator
Solid Waste Section
Department of Environmental Regulation
Twin Towers Office Building
2800 Blair Stone Road
Tallahassee, Florida 32309-2400
904/622-6104

SEP-12-'91 THU 14:55 ID:

TEL NO: 70201088204168000000 #253 P04

DER Form	17-704.0001
App. by	State, Local, Fed, Other & Corp
Form Title	of Resource Recovery & Recycling Equipment
Effective Date	AUGUST 16, 1989
DER Addition No.	Added by EPA

Listing of Major Equipment for Lake County Resource Recovery Facility (Facility Name)
 (see attached Appendix A)

Item No.	Item Description	Number of Pieces	Process Description, page reference	Drawing No.	Drawing Item No.	Equipment Cost
	Attached find the following drawings:					
	P1,A		P11,A			
	P2,2		P12,2			
	P3A,A		P13,2			
	P3B,A		P14,A			
	P4A,A		P15A,B			
	P4B,A		P15B,1			
	P5,A		E004,C			
	P6,A		E005,B			
	P7,A		E6A,C			
	P9,A		E6B,C			
	P10,A		E7A,C			
			E7B,C			
			E9,C			
			E10,B			

LAKE COUNTY RESOURCE RECOVERY FACILITY

MAJOR EQUIPMENT LISTING

for

FINAL EXAMINATION AND CERTIFICATION

The attached Appendix A lists in detail the qualified Resource Recovery Equipment subject to the exemption provisions of Rule 17-704.400, 17-704.410, 17-704, 17-704.420, and 12A-1.001 (27), F.A.C.

Of the \$80,000,000 cost for the construction of the entire Facility the value of qualified Resource Recovery Equipment is \$40,024,000. This value excludes the cost of non-Resource Recovery Equipment, property improvements, engineering, and all other general expenses. The following provides a breakdown of the qualified Resource Recovery Equipment costs:

o Boilers and stokers including all combustion systems	\$ 17,320,000
o Air pollution control system including I.D. fans and stack	5,641,000
o Turbine-generator system	2,573,000
o Cooling systems including exchangers and condensers	821,000
o Tipping, refuse, residue, and scalper buildings including equipment support steel and refuse pit	3,792,000
o Ash handling system	827,000
o Auxiliary support systems including pumps, tanks, refuse cranes, compressors, and water treatment equipment	3,233,000
o Electrical and instrumentation systems	3,771,000
o Process piping	1,845,000
o Front-end loaders (2)	201,000
TOTAL	\$ 40,024,000

**MILLER, NASH, WIENER,
HAGER & CARLSEN**

ATTORNEYS AND COUNSELORS AT LAW
3500 U.S. BANCORP TOWER
111 S.W. FIFTH AVENUE
PORTLAND, OREGON 97204-3699
TELEPHONE (503) 224-5858
TELEX 364462 KINGMAR PTL
FACSIMILE (503) 224-0155

SEATTLE OFFICE:
4400 TWO UNION SQUARE
601 UNION STREET
SEATTLE, WASHINGTON 98101-2352
TELEPHONE (206) 622-8484
FACSIMILE (206) 622-7485

DAVID W. BROWN

September 11, 1991

Mr. John F. Gaffney
Tax Manager
Ogden Corporation
Two Pennsylvania Plaza
New York, New York 10121

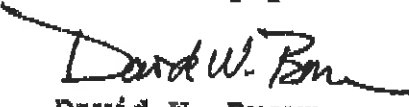
Dear Mr. Gaffney:

I have enclosed the official findings and certificate of the Oregon Environmental Quality Commission on the Ogden Martin Systems facility in Marion County, Oregon.

As you can see, the commission ruled that the entire facility was a pollution control facility eligible for a pollution control tax credit. After consideration of the revenues from the energy by-product, the percentage of total project cost certified as properly allocable to pollution control was 75 percent.

Please let me know if you have any further questions.

Very truly yours


David W. Brown

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
OF THE STATE OF OREGON

In the Matter of the Certification
of Pollution Control Tax Credit
for Columbia-Willamette Leasing

Findings and Reasons

On December 19, 1986, the Environmental Quality Commission considered the application for tax credits from Columbia-Willamette Leasing for the resource recovery facility in Brooks, Oregon. The Commission makes the following findings:

1. Based on statutes and rules, the entire facility is eligible for pollution control tax credit.

2. The facility will achieve compliance with DEQ statutes, rules and permit conditions.

3. In determining the portion of the costs properly allocable to pollution control, the following factors have been considered:

(a) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The calculated efficiency of the boiler should be used. Based on staff calculations the figure is 71 percent.

(b) The estimated annual percent return on the investment in the facility.

(1) The revenue and deductions based on the sale of the tax credit shall be removed from consideration in the return on investment calculation.

(2) Conversion costs shall be included as part of the actual cost of the claimed facility making this figure \$52,335,027.

(3) The percentage allocable based on return on investment is 86.897 percent.

(c) The alternative methods, equipment and costs for achieving the same pollution control objective.

This factor applies to more traditional types of industrial tax credits and should not be used in this case.

(d) Related savings or increases in costs which occur or may occur as a result of the installation of the facility.

This factor is not computable for this facility and should therefore not be used.

(e) Other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

Based on an independent consultant a waste reduction of 87 percent can be expected.

(4) The Commission finds it appropriate to apply a combination of the factors discussed above in order to determine percent allocable. The percent allocable shall be based on an average of boiler efficiency of 71 percent (factor (a)), return on investment of 56.897 percent (factor (b)), and volume reduction of 87 percent (factor (c)). Factor (c), volume reduction, shall receive a weighting factor of two because it is the major purpose of the facility. Although use of the return on investment factor alone would result in the smallest percent allocable, the Commission finds that use of this factor alone would not adequately reflect other important factors including waste reduction and the conversion of waste products to electricity which need to be considered in determining percent allocable. The use of this combination produces the smallest portions of costs allocable resulting from consideration of relevant factors. The calculation of percentage allocable therefore is as follows:

87.000	x	2	=	174.000
56.897	x	1	=	56.897
71.000	x	1	=	71.000
				<u>301.897</u>

$$301.897 \div 4 = 75.474$$

Rounded to nearest percent = 75%

Summation

Based on the findings, the Environmental Quality Commission issues a Pollution Control Facility Certificate for \$52,335,027 with 75 percent of actual cost properly allocable to pollution control to Columbia-Williamette Leasing Inc.

James Petersen
James Petersen
Chairman
Environmental Quality Commission

December 22, 1986
Date

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Certificate No. 121841

Date of Issue 22 Dec 1986

Application No. 121841

POLLUTION CONTROL FACILITY CERTIFICATE

Issued To: Columbia Willamette Leasing, Inc., 101 SW Main St., Suite 850 Portland, OR 97204		Location of Pollution Control Facility: Brooks, Oregon	
As: ☐ Lessee ☐ Owner ☒ Beneficial Interest Holder			
Description of Pollution Control Facility: Solid Waste resource recovery facility			
Type of Pollution Control Facility: ☐ Air ☐ Noise ☐ Water ☒ Solid Waste ☐ Hazardous Waste ☐ Used Oil			
Date Pollution Control Facility was completed: <u>September 30, 1986</u> Placed into operation: <u>Sept. 30, 1986</u>			
Actual Cost of Pollution Control Facility: <u>\$2,335,027.00</u>			
Percent of actual cost properly allocable to pollution control: 75 percent			

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of ORS 466.175 and subsection (1) of ORS 466.185, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 464, 466, 467 and 468 and rules adopted thereunder.

Therefore, this Pollution Control Facility Certificate is issued this date subject to compliance with the statutes of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE—The facility described herein is not eligible to receive tax credit certification as an Energy Conservation Facility under the provisions of Chapter 512, Oregon Law 1979, if the person issued the Certificate elects to take the tax credit relief under ORS 316.007 or 317.073.

Signed James E. Peterson
Title James E. Peterson, Chairman

COMPARISON OF LANDEILL EMISSIONS (TONS PER YEAR) TO PROJECTED WTE FACILITY EMISSIONS

Pollutant	500,000 Ton/Year	500,000 Ton/Year
	Landfill ^(A)	WTE Facility
Nitrogen Oxides	320	715 ^(B)
Reactive Organic Gases	33	20.6
Total Hydrocarbons	1,637	21
Vinyl Chloride	0.15	0.002
Chlorinated Benzene	0.44	0.0002

A - Controlled Landfill (Flares)

B - Assumes Use of Thermal DeNO_x

Technology to Meet Promulgated NSPS



COMPARATIVE RANGES OF LEACHATE CONCENTRATIONS OF INORGANIC CONSTITUENTS
FROM MUNICIPAL SOLID WASTE LANDFILLS VS. ASH RESIDUE MONOFILLS

Constituent	MSW Leachate (USEPA) (mg/L)	Ash Leachate (CORRE Study) (mg/L)	Primary Drinking Water Standard (mg/L)
Cadmium	0-0.375	* ND-0.004	0.010
Chromium	0.02-18	ND-0.032	0.050
Lead	0.001-1.44	ND-0.054	0.050
Mercury	0-0.16	ND	0.002
Selenium	0-2.7	ND-0.340	0.010

*ND = Non Detect



2

COMPARATIVE RANGES OF ORGANIC CONSTITUENTS IN LEACHATE

MSW Landfill (USEPA) Vs. Ash Monofill (CORRE)

Constituent	MSW Landfill (ppb = ug/l)	Ash Monofill (ug/l)
bis (2-Chloroethoxy) methane	2 - 14	*ND
1,4-Dichlorobenzene	2 - 20	ND
Diethyl phthalate	2 - 45	ND
Dimethyl phthalate	4 - 55	ND
Di-n-butyl phthalate	4 - 12	ND
bis (2-Ethylhexyl) phthalate	6 - 110	ND
Isophorene	10 - 85	ND
Naphthalene	4 - 19	ND
Nitrobenzene	2 - 40	ND
4-Nitrophenol	17 - 40	ND
Pentachlorophenol	3 - 25	ND
Phenol	10 - 28,800	ND - 32

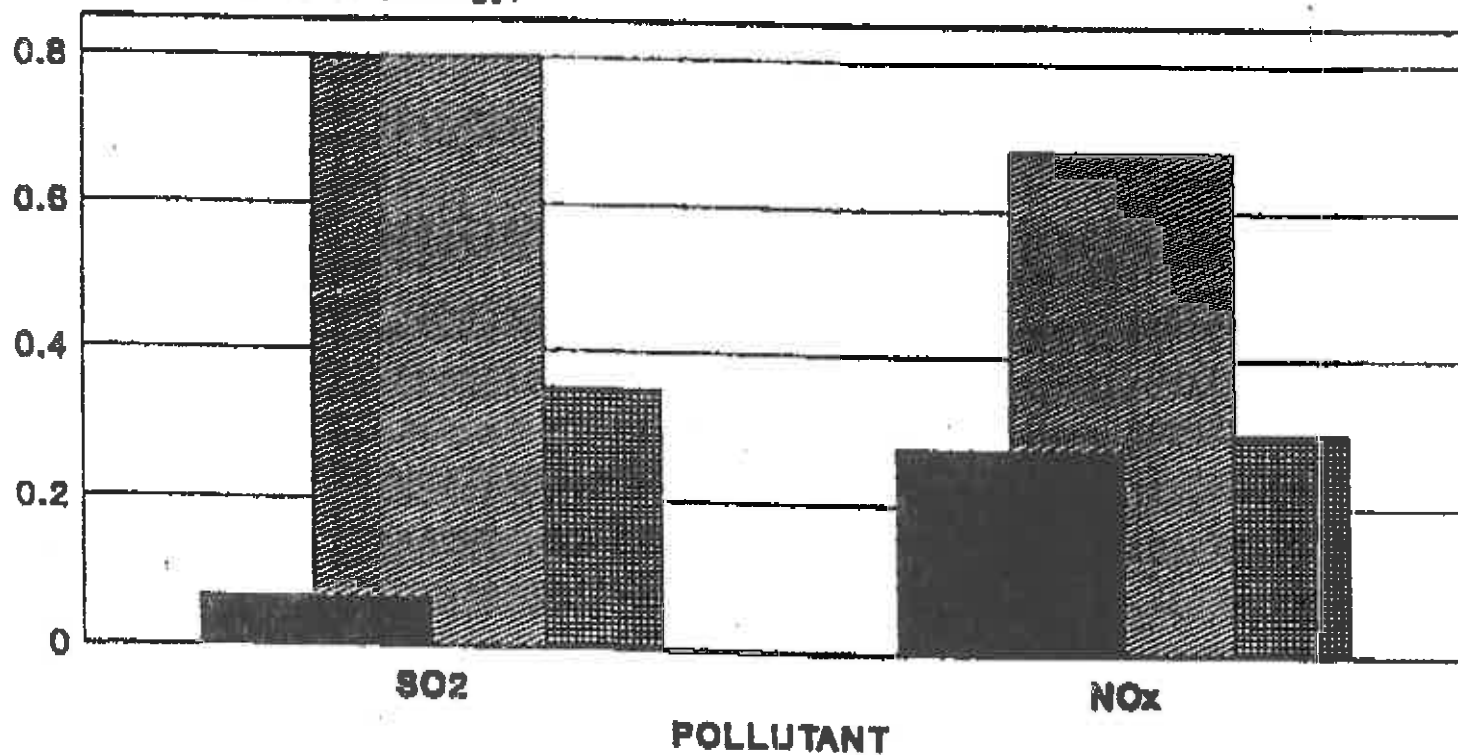
*ND = Non Detect



3

POLLUTANT EMISSIONS FROM RESOURCE RECOVERY, COAL- AND OIL-FIRED PLANTS PER UNIT OF ENERGY PRODUCED

Lb/Million BTUs (Energy)



Resource Recovery

Coal-Fired

Oil-Fired