



JEFFERSON SMURFIT CORPORATION
D-Graphics Division

December 7, 1994

3389 POWERS AVENUE
JACKSONVILLE, FL 32207
TELEPHONE: 904/733-4020
FAX: 904/733-4381

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

RECEIVED

DEC 8 1994

Bureau of
Air Regulation

Re: Press #4 Relocation Revised Application

Dear Charles:

Enclosed is one complete copy of our "Application To Operate/Construct Air Pollution Sources" for the D-Graphics Press #4 relocation project and three copies without the D size drawings. Please remove the D size drawings from the old applications I left with you on Monday, Dec. 5th and add them the these three applications. The order of the pages, attachments and drawings in the enclosed original can be duplicated for the other three. Note that there are two added pages 4 and 5 for this application. Please discard the copies of the application dated Dec. 2nd.

If you have any questions regarding the application, please call Doug Turner, the D-Graphics Plant Manager at (904) 733-4020 or Mr. Jim Manning, our Engineering Consultant at (904) 269-7012.

Sincerely,

Robert A. Dinehart
Division Engineer
Consumer Packaging Division
Jefferson Smurfit Corporation

Enclosures

cc: Jim Manning, P.E.



JEFFERSON SMURFIT CORPORATION
D-Graphics Division

December 6, 1994

3389 POWERS AVENUE
JACKSONVILLE, FL 32207
TELEPHONE: 904/733-4020
FAX: 904/733-4381

Mr. C. H. Fancy, P.E., Chief
Bureau of Air Management
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: Press #4 Relocation Project With Total Enclosure

Dear Mr. Fancy:

Enclosed are four copies of our "Application To Operate/Construct Air Pollution Sources" for the D-Graphics Press #4 relocation project. This includes some changes and additions to the application as a result of a December 5th meeting with John Brown, Bruce Mitchell, and Charles Logan in your Tallahassee offices.

If you have any questions regarding this issue, please call me at 733-4020; Bob Dinehart, our Division Engineer at 708-260-3574; or Mr. Jim Manning, our Engineering Consultant at 269-7012.

Sincerely,

Douglas V. Turner
Plant Manager
D-Graphics

Enclosures

cc: Jim Manning, P.E.



Florida Department of Environmental Regulation

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

DER Form # _____
Form Title _____
Effective Date _____
DER Application No. _____ (Spec in Div DER)

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Rotogravure Printing Press [] New [X] Existing

APPLICATION TYPE: [X] Construction [] Operation [X] Modification

COMPANY NAME: D-Graphics, Div of Jefferson Smurfit Corp. COUNTY: Duval

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired)

SOURCE LOCATION: Street 3389 Powers Avenue City Jacksonville

UTM: East _____ North _____

Latitude 30 ° 15 ' 55 "N Longitude 81 ° 37 ' 18 "W

APPLICANT NAME AND TITLE: Douglas V. Turner, Plant Manager

APPLICANT ADDRESS: 3389 Powers Avenue, Jacksonville, Florida 32207

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

D-Graphics-Div of

I am the undersigned owner or authorized representative* of Jefferson Smurfit Corp.

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: Douglas V. Turner

Douglas V. Turner, Plant Manager
Name and Title (Please Type)

Date: 12/6/94 Telephone No. 904-733-4020

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

1 See Florida Administrative Code Rule 17-2.100(57) and (104)

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.

Signed James L. Manning
James L. Manning
Name (Please Type)

Company Name (Please Type)
5077 Toproyal Lane, Jacksonville, Fl. 32277
Mailing Address (Please Type)

Florida Registration No. 36124 Date: 12/6/94 Telephone No. 904-744-7005

SECTION II: GENERAL PROJECT INFORMATION

1. 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.

To relocate Press #4 adjacent to Press #5 including foundation enhancement and operational controls. Construct a total enclosure that captures 100% of VOC emissions from the operation of Press #4 & #5 and evacuates to the existing catalytic oxidizer system. The press and control system will comply with all applicable regulations. (See Attachment A-Drawing)

2. Schedule of project covered in this application (Construction Permit Application Only)
Start of Construction January 15, 1995 Completion of Construction December 31, 1995

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.)

The cost of reconfiguring the collection system duct work and construction of the total enclosure to include the supply air and control system is approximately \$500,000. Final cost will be determined after completion of detailed engineering. No changes to the existing oxidizer is required.

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

Press #4: AC16-093347 issued 2/12/85; expired 3/31/86

Press #5: AC16-259725 issued 12/5/94; expires 5/15/95

1. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ;
if power plant, hrs/yr _____; if seasonal, describe: Normal operation of the equipment is
3 shifts, 5 to 7 days per week, 52 weeks per year, with projected 20% downtime for
cylinder changes, re-webbing, maintenance, clean up, etc.

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? Yes
 - a. If yes, has "offset" been applied? No
 - b. If yes, has "Lowest Achievable Emission Rate" been applied? Yes
 - c. If yes, list non-attainment pollutants. OZONE

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

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

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

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

- 4. Do "Reasonably Available Control Technology" (RACT) requirements apply
to this source? _____
 - a. If yes, for what pollutants? _____
 - b. If yes, in addition to the information required in this form,
any information requested in Rule 17-2.650 must be submitted.

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

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

Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Paper	None			
Coatings	VOC	54 (Avg)	264.5 13.23	Presses 4 & 5
Solvents	VOC	100	310.5 15.53	Presses 4 & 5
			28.76	

Process Rate, if applicable: (See Section V, Item 1)

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

2. Product Weight (lbs/hr): _____

Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission ¹		Allowed ² Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
VOC	28.8	95			575	1900	Press4&5
(see Attachment B for calculations)							

See Section V, Item 2.

Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

Calculated from operating rate and applicable standard.

Emission, if source operated without control (See Section V, Item 3).

100% capture and 95% destruction efficiency required by Consent Order dated November 14, 1994 (See Attachment C)

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

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Paper	None			
Coatings	VOC	54 (Avg)	161	Press 4
Solvents	VOC	100	189	Press 4
Total Press #4			350	
(See Attachment B)				

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): _____
2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission ¹		Allowed ² Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

³Calculated from operating rate and applicable standard.

⁴Emission, if source operated without control (See Section V, Item 3).

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

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Paper	None			
Coatings	VOC	54 (Avg)	207	Press 5
Solvents	VOC	100	243	Press 5
Total Press #5			450	
(See Attachment B)				

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): _____
2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission ¹		Allowed ² Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

³Calculated from operating rate and applicable standard.

⁴Emission, if source operated without control (See Section V, Item 3).

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Demtrol Enclosures	VOC	100% Capture		Manufacturers Warranty
Demtrol Oxidizer	VOC	95% Destruction		Manufacturers Warranty
			(See Attachment D)	

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Natural Gas			
Press #4 & #5 Combine)	0.0067	0.0092	11.2 (At start-up)
Control Device	0.0027	0.0045	6.0

*Units: Natural Gas--MMcf/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: .00017% Percent Ash: -0-
 Density: .05 lb/cf ~~lb/gal~~ Typical Percent Nitrogen: 0.6%
 Heat Capacity: 1042 BTU/CF BTU/lb _____ BTU/gal _____
 Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average _____ Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

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

Stack Height: 39 ft. Stack Diameter: 4.17 ft.
 Gas Flow Rate: 30.868 ACFM 20,000 DSCFM Gas Exit Temperature: 358 °F.
 Water Vapor Content: Varies % Velocity: 37.73 FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq. & Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume (ft) ³	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) _____

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Natural Gas			
Press #4	0.0031	0.0042	5.15

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average _____ Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Natural Gas			
Press #5	.0036	.0050	6.05

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average _____ Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

rief description of operating characteristics of control devices: _____

ltimate disposal of any effluent other than that emitted from the stack (scrubber water, sh, etc.):

OIE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

lease provide the following supplements where required for this application.

- . Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
- . 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.
- . Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
- . 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, design pressure drop, etc.)
- . 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).
- . An 8 1/2" 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.
- . An 8 1/2" 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).
- . An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

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- The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation:
- 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

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

_____	_____
_____	_____
_____	_____
_____	_____

Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

Yes No

Contaminant

Rate or Concentration

_____	_____
_____	_____
_____	_____
_____	_____

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

Contaminant

Rate or Concentration

_____	_____
_____	_____
_____	_____
_____	_____

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

- 1. Control Device/System:
- 2. Operating Principles:
- 3. Efficiency:*
- 4. Capital Costs:

Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

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:¹

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:²

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:¹

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:²

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

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j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:²

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:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:²

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:

Describe the control technology selected:

1. Control Device:

2. Efficiency:¹

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:²

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

Explain method of determining efficiency.

Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

(8) Process Rate:¹

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

(8) Process Rate:¹

10. Reason for selection and description of systems:

¹Applicant 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

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ () SO²* _____ 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.

Specify bubbler (B) or continuous (C).

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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

3. 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) _____

4. 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.

5. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO ²	_____ grams/sec

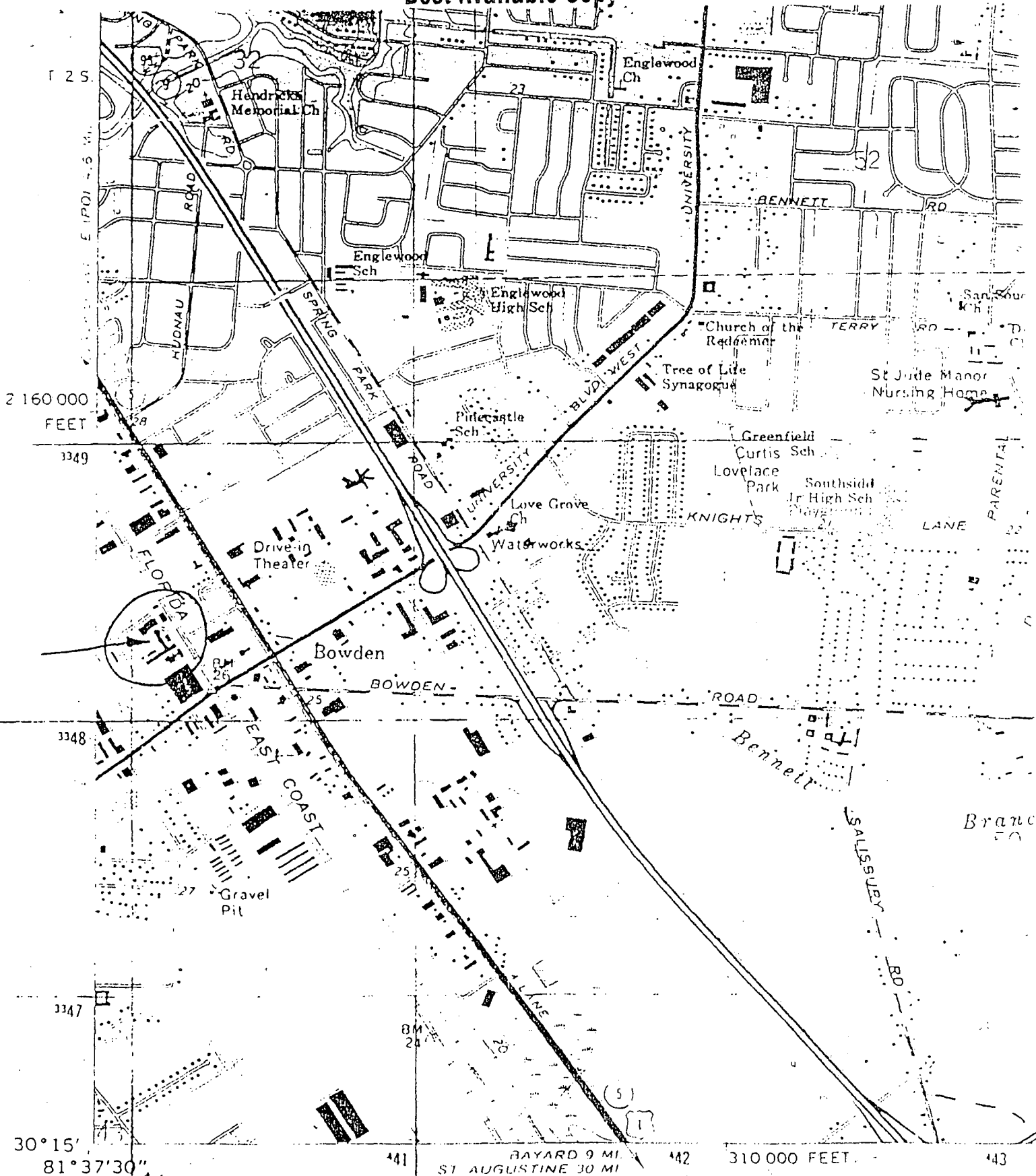
6. Emission Data Used in Modeling

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

- 7. Attach all other information supportive to the PSD review.
- 8. 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.
- 9. 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.

ATTACHMENT A
Drawings

- #1. Plot Plan Showing Location Of Facility (8 1/2" X 11")
- #2. 1st Enclosure Exhaust Schematic (36" X 24" blueprint)
- #3. 2nd Enclosure Exhaust Schematic (36" X 24" blueprint)
- #4. Preliminary Enclosure Layout (36" X 24" blueprint)



440
 Mapped, edited, and published by the Geological Survey
 Control by USGS, NOS/NOAA, and Florida Geodetic Survey
 Planimetry compiled from NOS charts 1933. Topography from
 planetable surveys 1948. Revised by photogrammetric methods
 from aerial photographs taken 1963. Field checked 1963
 Selected hydrographic data compiled from NOS chart 577 (1963)
 This information is not intended for navigational purposes
 Polyconic projection. 10,000-foot grid-ticks based on Florida
 coordinate system, east zone. 1000-meter Universal Transverse

Attached 4 #1

ARLINGTON
QUADRANGLE

ICE PARK I
 24 11 NW

2 1/2
 14 MILES