

Check Sheet

Company Name: *Chris Craft Boats*
Permit Number: *AC41-189603*
PSD Number:
County: *Manatee*
Permit Engineer:
Others involved:

Application:

- Initial Application
- Incompleteness Letters
- Responses
- Final Application (if applicable)
- Waiver of Department Action
- Department Response

*This permit was
after the first permit*

Intent:

- Intent to Issue
- Notice to Public
- Technical Evaluation
- BACT Determination
- Unsigned Permit

Attachments:

-
-
-
- Correspondence with:
 - EPA
 - Park Services
 - County
 - Other
- Proof of Publication
- Petitions - (Related to extensions, hearings, etc.)

Final Determination:

- Final Determination
- Signed Permit
- BACT Determination

Post Permit Correspondence:

- Extensions
- Amendments/Modifications
- Response from EPA
- Response from County
- Response from Park Services



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347

Lawton Chiles, Governor

Carol M. Browner, Secretary

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

February 15, 1991

In the matter of an
Application for Permit by:

DER File No. AC41-189663
County: Manatee

Mr. T. P. Robinson
Vice President/General Manager
OMC dba Chris Craft Boats
8161 15th Street East
Sarasota, FL 34243

Dear Mr. Robinson:

Enclosed is Permit Number AC41-189663 for the after-the-fact construction of the wood/fiberglass cutting and shaping operations at the boat manufacturing facility at 8161 15th Street East, Sarasota, issued pursuant to Section 403.087, Florida Statutes.

Any party to this Order (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 32399-2400; 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 Notice is filed with the Clerk of the Department.

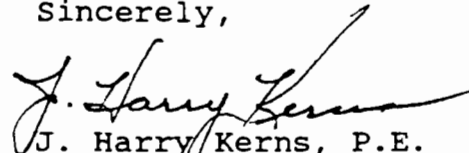
Executed in Tampa, Florida.

RECEIVED

MAY 20 1991

Division of Air
Resources Management

Sincerely,


J. Harry Kerns, P.E.
District Air Engineer

cc: Tom T. John, P.E., Tom T. John & Assoc., Inc. ✓
Manatee County Public Health Unit

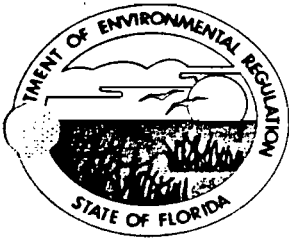
CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on FEB 15 1991 to the listed persons.

Clerk Stamp

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

Marilyn Quispe FEB 15 1991
(Clerk) (Date)



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347

Lawton Chiles, Governor

Carol M. Browner, Secretary

PERMITTEE:

OMC Inc. dba Chris Craft Boats
8161 15th Street East
Sarasota, FL 34243

PERMIT/CERTIFICATION:

Permit No: AC41-189663
County: Manatee
Expiration Date: 8/30/91
Project: Wood/Fiberglass
Cutting & Shaping

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 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 after-the-fact construction of the wood and fiberglass cutting and shaping operations typically consisting of the following equipment:

CNC Powermatic Router	12" Delta Table Saw
Onsrud Table Router	10" Delta Table Saw
Table Routers (2)	Band Saws (2)

Rockwell Belt and Radial Sander

Particulate matter generated by operation of the equipment is collected by a central dust collection system and controlled by a Murphey-Rodgers model MRA17-185H baghouse.

Location: 8161 15th Street East, Sarasota

UTM: 17-347.2 E 3030.6 N

NEDS No: 0077 Point ID No: 02

Replaces Permit No.: N/A

PERMITTEE

OMC Inc. dba Chris Craft Boats
8161 15th Street East
Sarasota, FL 34243

PERMIT/EXPIRATION

Permit No.: AC41-189663
County: Manatee
Expiration Date: 08/30/91
Project: Wood/Fiberglass Cutting
and Shaping Operations

Specific Conditions:

1. A part of this permit is the attached 15 General Conditions.
2. All applicable rules of the Department and design discharge limitations specified in the application must be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations. [Rule 17-4.070(7), F.A.C.].
3. As requested in the after-the-fact construction application dated 10/18/90, these operations are allowed to operate 16 hours/day, 5 days/week, and 52 weeks/year (4,160 hours/year).
4. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provisions in Rule 17-2.610(3), F.A.C. These precautions shall include the following:
 - a. Particulate emissions from the principle woodworking and fiberglass cutting, grinding and sanding operations shall be controlled at the point of origin by pickup points from the central dust collector (baghouse) system. The central baghouse shall be in service at all times that the above operations are being performed.
 - b. In order to ensure that the material collected in the central baghouse is properly handled and does not become a fugitive dust problem outside the assembly building, the permittee shall use a transition sock or boot to transfer material from the baghouse hopper to the disposal containers, which shall be covered.
5. In order to provide reasonable assurance that the above measures are being implemented and that they are effective in controlling unconfined emissions of particulate matter, visible emissions from the baghouse exhaust vent or any of the building openings or vents shall not exceed 5% opacity as determined by observations in accordance with EPA Method 9. There shall also be no visible emissions associated with the emptying of the baghouse hopper to disposal containers nor with handling of the disposal containers. [Rule 17-4.070(3), F.A.C.].
6. In order to document that the requirements of Specific Condition Nos. 4 and 5 are being met, an EPA Method 9 VE test shall be conducted on the baghouse stack within 90 days of the receipt of this permit and

PERMITTEE

OMC Inc. dba Chris Craft Boats
8161 15th Street East
Sarasota, FL 34243

PERMIT/EXPIRATION

Permit No.: AC41-189663
County: Manatee
Expiration Date: 08/30/91
Project: Wood/Fiberglass Cutting
and Shaping Operations

Specific Conditions:

6. (continued)

a test report submitted to the Southwest District Office of the Department within 45 days of the test. The test shall be conducted by a certified VE reader for a minimum of 30 minutes. This test shall be conducted with woodworking and fiberglass cutting, grinding and sanding equipment in operation in a manner to represent the "worst case scenario" for loading of the central dust collection system. Equipment in operation during the test period shall be noted in the test report. The test report shall also include a statement of any visible emissions observed from building openings, and the measures being used to control generation of fugitive dust when the baghouse hopper is emptied. [Rules 17-4.070(1) and (3), F.A.C.].

7. The permittee shall notify the Southwest District Office of the Department and the Manatee County Public Health Unit at least 15 days prior to the date on which any test is to begin of the date, time and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted. [Rule 17-2.700(2)(A)9., F.A.C.].

8. The permittee, may, for good cause, request that this construction permit be extended. Such a request shall be submitted to the Southwest District Office of the Department at least 60 days prior to the expiration date of the permit. [Rule 17-4.090, F.A.C.].

9. Four applications for an operating permit (Certificate of Completion of Construction) shall be submitted to the Southwest District Office of the Department within 45 days of testing or at least 60 days prior to the expiration date of this permit, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, and compliance test reports as required by this permit. [Rules 17-4.220 and 17-2.700(2)(a)1., F.A.C.].

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION



Richard D. Garrity, Ph.d.
Deputy Assistant Secretary
Southwest District

Visible Emissions Observation Form

YES NO UNKNOWN

Source/Process Information				Opacity Readings									
FACILITY NAME CHRIS CRAFT BOATS				OBSERVATION DATE 3-27-91				START TIME 2:06		STOP TIME 3:09			
SOURCE NAME Mill Shop		FURN. NO. AC41-189663		SEC MIN	5	10	15	20	25	30	35	40	
LOCATION/ADDRESS 8161 15th Street East, Sarasota				1	0	0	0	0	0	0	0	0	0
CONTACT Chris Lashley		PHONE NO. (813) 351 4900		2	0	0	0	0	0	0	0	0	
PROCESS/PRODUCTION RATE 11.9 lb/hr				3	0	0	0	0	0	0	0	0	
CONTROL EQUIPMENT Murphy-Rodgers baghouse		OPERATING MODE continuous		4	0	0	0	0	0	0	0	0	
FUEL TYPE/RATE N/A		MATERIAL TYPE/RATE particulate		PERMITTED RATE 11.9 lb/hr		5	0	0	0	0	0	0	
DESCRIBE EMISSION POINT horizontal exhaust				6	0	0	0	0	0	0	0	0	
HEIGHT ABOVE GROUND LEVEL 25 FT.		HEIGHT REL. TO OBSERVER 25 FT.		7	0	0	0	0	0	0	0	0	
Emissions Description				8	0	0	0	0	0	0	0	0	
DESCRIBE EMISSIONS particulate (wood working)				9	0	0	0	0	0	0	0	0	
PLUME COLOR N/A		PLUME TYPE N/A		10	0	0	0	0	0	0	0	0	
WATER DROPLETS PRESENT? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		IF YES, IS PLUME? N/A ATTACHED <input type="checkbox"/> DETACHED <input type="checkbox"/>		11	0	0	0	0	0	0	0	0	
Meteorological Information				12	0	0	0	0	0	0	0	0	
BACKGROUND blue		BACKGROUND, COLOR blue		13	0	0	0	0	0	0	0	0	
SKY CONDITIONS/S. CLOUD COVER p.cldy - light white		AMBIENT TEMP. 85°		14	0	0	0	0	0	0	0	0	
WIND SPEED 5-8-10 MPH		WIND DIRECTION SW		15	0	0	0	0	0	0	0	0	
Observation Data, Site Diagram				16	0	0	0	0	0	0	0	0	
<p>Observed Emission Point</p> <p>Distance 60 ft</p> <p>Sun Shadow Line</p> <p>Observers Position</p> <p>Key: Sun Wind </p> <p>Draw North Arrow</p>				17	0	0	0	0	0	0	0	0	
Compliance Information				18	0	0	0	0	0	0	0	0	
NAME OF OPACITY READING: MIN: 0 MAX: 0 AVERAGE OF HIGHEST 20 CONSECUTIVE READINGS: 0 SHORT TERM AVERAGE DATA: N/A READING PERIOD: _____ MINUTES ACTUAL AVERAGE: _____ COMMENTS: No emissions from exhaust with all equipment operating				19	0	0	0	0	0	0	0	0	
Certification Data, Signatures				20	0	0	0	0	0	0	0	0	
OBSERVERS NAME Tom T. John, P.E.				21	0	0	0	0	0	0	0	0	
OBSERVERS SIGNATURE <i>Tom T. John</i>				22	0	0	0	0	0	0	0	0	
DATE 27 March 1991				23	0	0	0	0	0	0	0		
ORGANIZATION Tom T. John Engineering, Inc.				24	0	0	0	0	0	0	0		
CERTIFIED BY FDER/ETA				25	0	0	0	0	0	0	0		
DATE 02-27-91				26	0	0	0	0	0	0	0		
I HAVE RECEIVED A COPY OF THESE OBSERVATIONS: SIGNATURE				27	0	0	0	0	0	0	0		
DATE				28	0	0	0	0	0	0	0		

Mr. R. Bruce Mitchell
Bureau of Air Regulation
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

re: **Chris Craft Boats** Particulates Permit - AC 41-189663
Donzi Marine Particulate Permit - AC 41-192558
Donzi Marine VOC/OS Permit - AC 41-165759

May 16, 1991

RECEIVED

MAY 20 1991

Dear Mr. Mitchell;

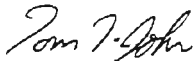
Division of Air
Resources Management

As requested in our meeting of May 15, 1991, I am enclosing a copy of the particulate application and the subsequent permit for **Chris Craft Boats**, Sarasota, issued through the Tampa DER office.

As we further discussed in that meeting, Donzi Marine requests that the expiration date of their construction permit (AC41-192558) be extended until December 31, 1992. This will provide the necessary time to apply for and be granted an alternative testing procedure (VE test) for the cyclone collector at that facility. Also, as we have discussed, the applicant wishes to have the requested operating hours increased to 8760 hours/yr. I am enclosing a new application page 3 reflecting that change for your use.

If you have any questions or wish to discuss the project in more detail, please call me at (813) 985-7881. Thank you for the attention and consideration you have provided.

Sincerely,



Tom T. John, P.E.

enc: as noted

cc: Chris Lashley

Robert Evangelisti, 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. _____ (Filed in by DER)

RECEIVED

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES MAY 20 1991

SOURCE TYPE: Air emission- Particulate [] New [x] Existing
APPLICATION TYPE: [x] Construction [] Operation [] Modification
Division of Air Resources Management

COMPANY NAME: OMCC dba Chris Craft Boats COUNTY: Manatee

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

SOURCE LOCATION: Street 8161 15th Street East City Sarasota

UTM: East 347215 North 3030633

Latitude 27° 23' 30" N Longitude 82° 32' 40" W

APPLICANT NAME AND TITLE: T. P. Robinson, Vice President/General Manager

APPLICANT ADDRESS: 8161 15th Street East, Sarasota, FL 34243

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

APPLICANT

I am the undersigned owner or authorized representative* of OMCCC Inc. dba Chris Craft Bo

I certify that the statements made in this application for an after-the-fact 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: _____

T. P. Robinson, Vice President/General Manager
Name and Title (Please Type)

Date: _____ Telephone No. 813-351-4900

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 _____

Tom T. John, P.E.

Name (Please Type)

Tom T. John and Associates, Inc.

Company Name (Please Type)

7522 North 40th Street, Suite H, Tampa, FL 33604

Mailing Address (Please Type)

Florida Registration No. 33157 Date: January 1983 Telephone No. (813) 985 7881

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.

The facility is a fiberglass boat manufacturing operation.

During construction of the boats, wood supports and forms and fiberglass parts

are cut and shaped. Particulate emissions are controlled by a baghouse.

(Murphey - Rogers Company (California), Model MRA17-185H)

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

Start of Construction upon granting of permit Completion of Construction one year

- 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.)

Original Cost of baghouse: Approximately \$18,000

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

VOC emission permit for facility: AC41-165851

E. Requested permitted equipment operating time: hrs/day 16 ; days/wk 5 ; wks/yr 52 ;
if power plant, hrs/yr _____ ; if seasonal, describe: _____

F. 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? _____
b. If yes, has "Lowest Achievable Emission Rate" been applied? _____
c. If yes, list non-attainment pollutants. _____

2. Does best available control technology (BACT) apply to this source?
If yes, see Section VI. NO

3. Does the State "Prevention of Significant Deterioration" (PSD)
requirement apply to this source? If yes, see Sections VI and VII. NO

4. Do "Standards of Performance for New Stationary Sources" (NSPS)
apply to this source? NO

5. Do "National Emission Standards for Hazardous Air Pollutants"
(NESHAP) apply to this source? NO

H. Do "Reasonably Available Control Technology" (RACT) requirements apply
to this source? NO

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)

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

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Wood and fiberglass	Particulate	n/a	n/a	See Attachment 2

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

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 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	
Particulate			n/a	n/a	See attachment 3		See attachment 2

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g. Rule 17-2.6DD(5)(b)2. Table 11, 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)
BAGHOUSE	PARTICULATE	99 +%	N/A	see Attach. 3

E. Fuels N/A

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	

*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. N/A

Annual Average _____ Maximum _____

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

Particulate solids are collected and disposed of in appropriate manner

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

Stack Height: 30 feet ft. Stack Diameter: 1.5 feet ft.
 Gas Flow Rate: 6000 ^{design} ACFM 6000 DSCFM Gas Exit Temperature: ambient °F.
 Water Vapor Content: negligible % Velocity: 60 (design) FPS

SECTION IV: INCINERATOR INFORMATION N/A

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) _____

Brief description of operating characteristics of control devices: _____

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

All wastes generated are disposed of in accordance with relevant State and local (if applicable) regulations

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

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
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.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
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, design pressure drop, etc.)
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).
6. 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.
7. 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).
8. 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.

9. The appropriate application fee in accordance with Rule 17-4.05. 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 N/A

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:* | 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.

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:

F. 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:

¹Explain method of determining efficiency.

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

- (5) Environmental Manager:
- (6) Telephone No.:
- (7) Emissions:¹

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

(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 N/A

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).

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 ²	_____	grams/sec

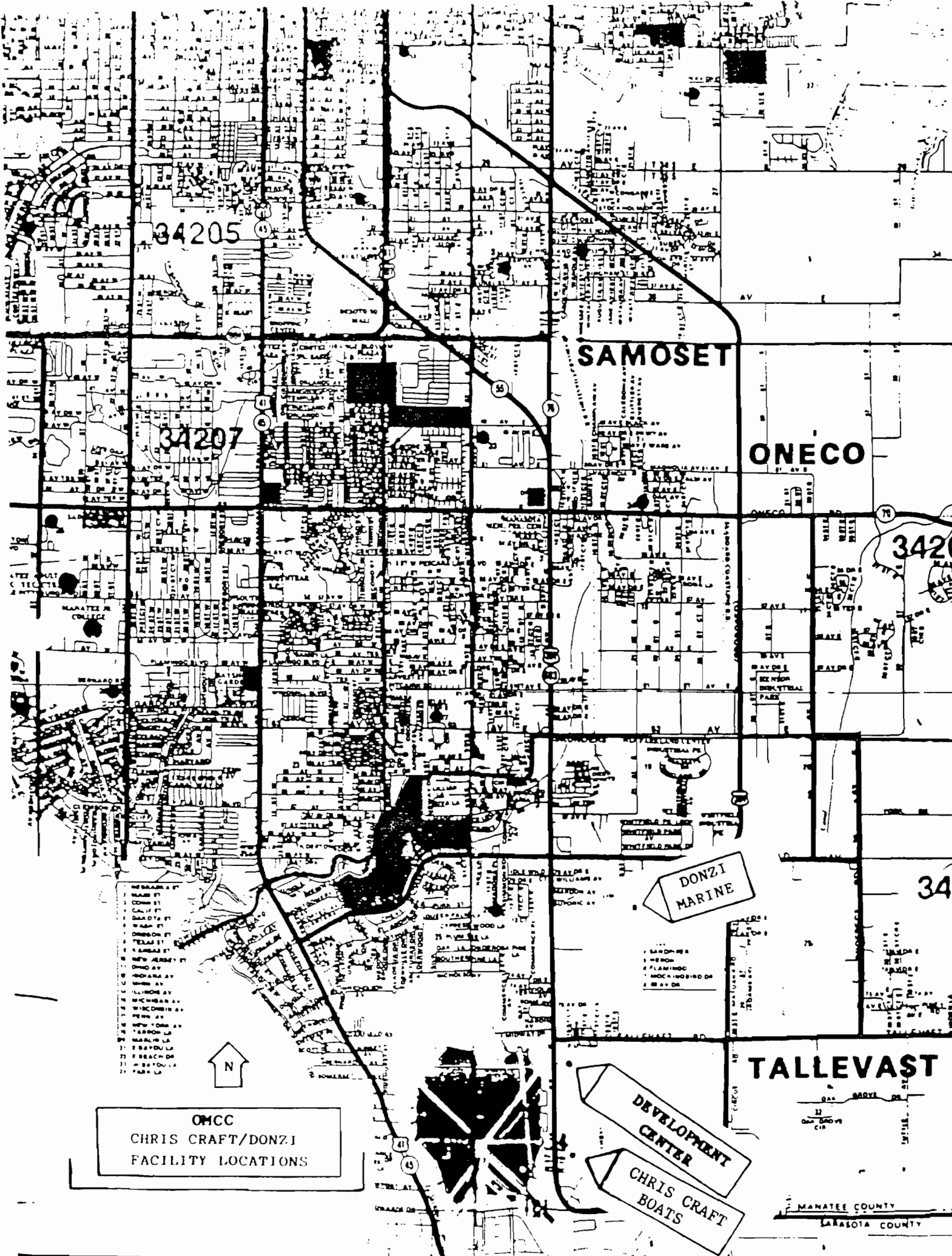
E. Emission Data Used in Modeling

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.

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

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.



34205

34207

SAMOSET

ONECO

34203

342

DONZI MARINE

TALLEVAST

OMCC
CHRIS CRAFT/DONZI
FACILITY LOCATIONS

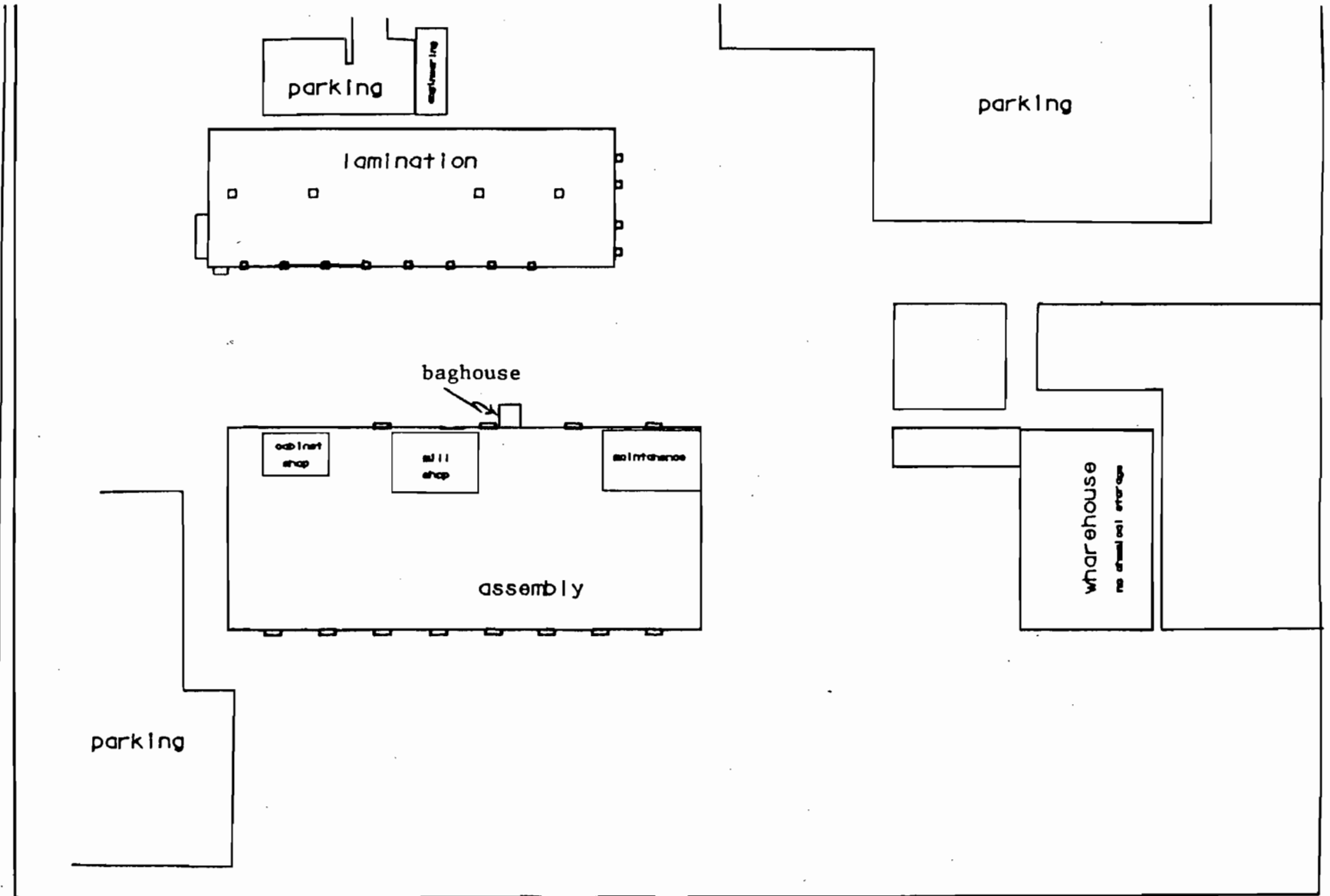
DEVELOPMENT
CENTER
CHRIS CRAFT
BOATS



MANATEE COUNTY
SARASOTA COUNTY

CHRIS CRAFT BOATS - FACILITY LAYOUT

U.S. Highway 301 



Particulate emission sources at the facility include woodworking and fiberglass cutting, grinding and sanding. The particulates generated from the principle operations are controlled by vacuum collectors at the point of origin.

The collector ductwork feeds to a Murphey-Rogers model MRA17-185H baghouse with electric bag shakers. Design air-to-cloth ratio is approximately 8:1. Vendor literature is included at the end of this section.

Plant operating experience has shown that the particulate control system will collect approximately twelve 55-gallon drums per week of loosely packed sawdust, shavings and fiberglass trimmings. The approximate bulk density of this material is estimated by plant personnel at 12 lbs/cubic foot. The particulates collected may then be estimated as:

$$(12 \text{ drums/wk})(55 \text{ gal/drum})(\text{ft}^3/8.3 \text{ gal})(12 \text{ lb/ft}^3)(\text{week}/80 \text{ hr}) \\ = 11.8 \text{ lb/hr}; (11.8 \text{ lb/hr})(4160 \text{ hr/yr})(\text{ton}/2000 \text{ lb}) = 24.5 \text{ TPY}$$

Assuming a collection efficiency of 99%, the particulates generated would be:

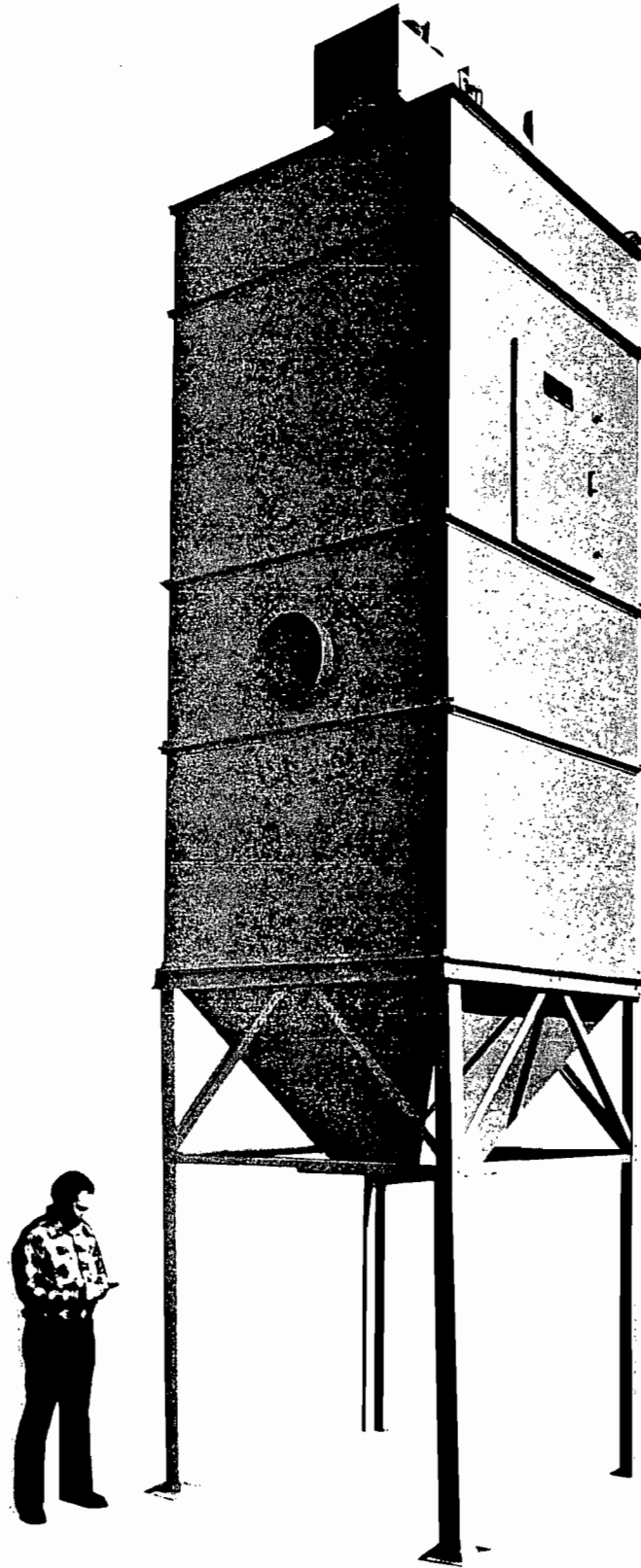
$$(11.8 \text{ lb/hr})(100/99) = 11.9 \text{ lb/hr or } 24.8 \text{ TPY}$$

and the particulates emitted (with controls) would be estimated as:

$$(11.9 \text{ lb/hr})(0.01) = 0.119 \text{ lb/hr or } 0.25 \text{ TPY}$$

Due to the expense and complexity of stack testing such a small particulate source, the applicant requests that a 5% opacity limit be placed on the source as an indication of satisfactory particulate control.

MURPHY-RODGERS



MODEL MRA DUST COLLECTOR

MODEL MRA DUST COLLECTOR

FEATURES . . .

- Highly efficient performance.
- Fits into low ceiling areas, yet takes up minimal amount of floor space.
- Can be installed inside a building as well as outside.
- Quiet operation.
- Easy to empty the collected waste.
- Flexible in design with capacities to fit all types of operations.
- Practically no maintenance.
- Totally enclosed in steel for fire protection and filter section protection.
- A good appearance.
- Completely self-contained.
- Easily installed by inexperienced personnel.
- Manual shaking mechanism (standard equipment).
- High performance on all types of dust particles.
- 2,500 to 12,500 cfm.
- Easy operation.
- All sections of the unit readily accessible.
- Not damaged by large pieces of material drawn into the unit through the exhaust system.
- Handles hot particles in metalworking trade.
- Shipped completely assembled (std. version).
- Flexible cfm ratings for top performance.
- Low initial cost.
- Primary separator.
- Secondary multi-bag type filtration.
- Retains warm air in plant.
- Equalized pressure in building.

The Murphy-Rodgers Model MRA Dust Collector is ideally suited for schools or small industrial applications where large volumes of air are required for relatively small amounts of dust collected. This unit is primarily designed for limited ceiling height installations, when used as an indoor installation.

The Model MRA is divided in four basic sections: (1) the top section with exhaust fan, motor and drives (2) the filter bag section with bag shaker frame (3) the in-let section with primary separator (4) the storage section for collecting the waste material.

The material enters the unit through the in-let and into the primary separator which removes the heavy particles. The air passes into the section immediately above, where bag type filters are used for secondary filtration of fine particles. Various filter media are available for a wide range of applications. This double acting system gives an extremely high efficient type of dust collector at a relatively low initial cost.

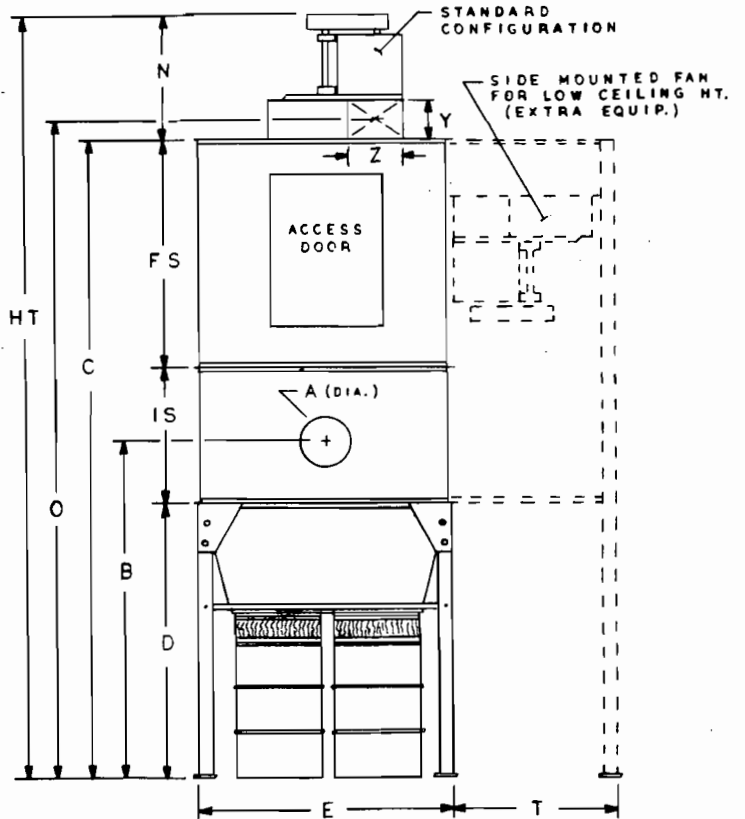
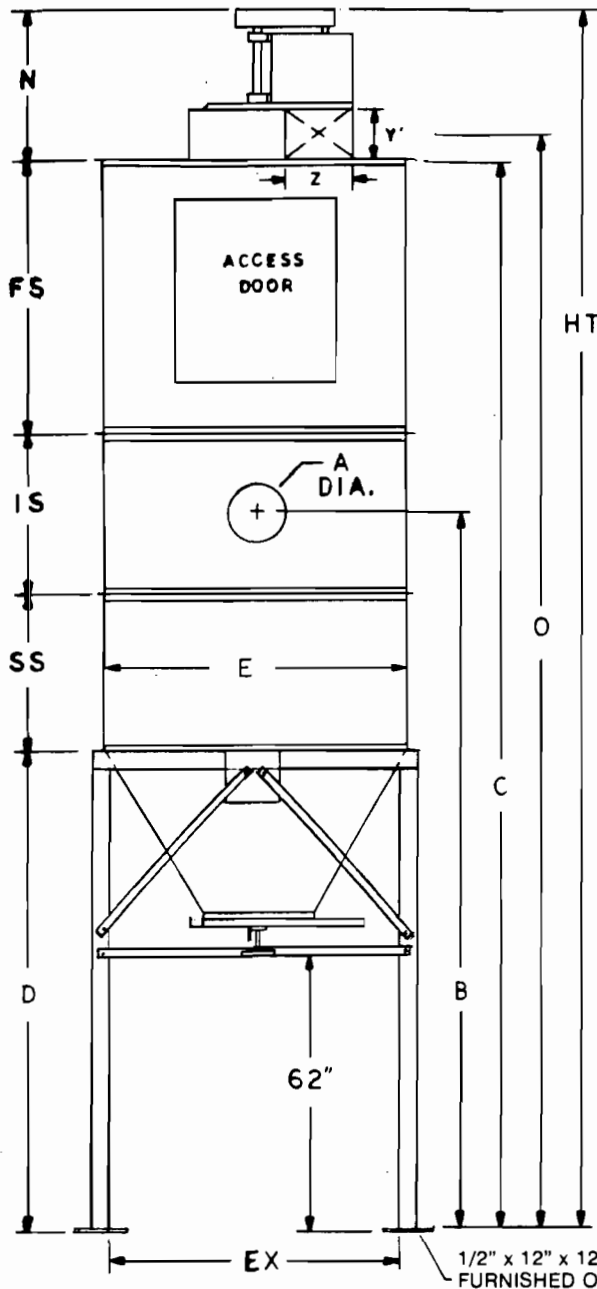
The material storage area and the secondary filtration section are accessible through large access doors which allow for easy material removal and bag maintenance of the unit. The Model MRA is part of the series of bag collectors designed by Murphy-Rodgers in which modular construction methods and parts are used to create a highly efficient unit at economical prices.

The unit requires a minimum of maintenance. All parts which must be maintained are very easily accessible.

The MRA comes ready to operate, requiring only connection to a power source through a starter, and connecting the piping to the unit. It features rugged construction and a convenient storage compartment with easy removal of the collected material. All components are shipped assembled, forming a single, completely self-contained collector.

Air to cloth ratios can be changed for extremely difficult types of material handling, although the standard unit is designed for proper efficiency in most woodworking applications. Hopper type storage sections are available for certain installations. Electric motor driven shakers and automatic shaking mechanisms are available for the secondary bag filtration section.

MURPHY-RODGERS MODEL MRA DUST COLLECTOR PHYSICAL DIMENSIONS



1/2" x 12" x 12" BASE PLATE
FURNISHED ON JOB SITE BY USER

SPECIFICATIONS (Subject to change without notice)

MODEL NO.	INLET A	SQ. FT. CLOTH	DIMENSIONS													SHIP. WT. W/STAND		
			B	C	D	E	EX	FS	HT	IS	N	O	SS	T	Y x Z			
MRA-11-4D	11	427	95½	175	77	68	63	63	61	207½	37	32½	179½	—	42	9 1/16	11	2405
MRA-13-4D	13	528	95½	187	77	68	63	63	73	222	37	35	192¼	—	47	10½	13	2625
MRA-15-4D	15	668	96½	188	78	76	71	73	73	225¾	37	37¾	194	—	53	12¾	15	3158
MRA-17-4D	17	825	103½	195	85	84	78	73	73	235¼	37	40¼	201¾	—	58	13¾	17	3995
MRA-11-120H	11	427	159½	239	104	68	65	61	61	271½	37	32½	243½	37	—	9 1/16	11	3990
MRA-13-120H	13	528	159½	251	104	68	65	73	73	286	37	35	256¼	37	—	10½	13	4271
MRA-15-185H	15	668	178½	270	111	76	73	73	73	307¾	37	37¾	276	49	—	12¾	15	5085
MRA-17-240H	17	825	188½	280	121	84	77	73	73	320¼	37	40¼	286¾	49	—	13¾	17	6690
MRA-20-405H	20	1,219	225½	334	155	92	120	87	87	379¾	43	45¾	341¼	49	—	15¾	19	8228
MRA-22-435H	22	1,414	233	339½	162½	98	120	85	85	388½	43	49	348	49	—	17	21	9716

(REVISED 10/89)

MODEL MRA WITH TRUCK TYPE STAND

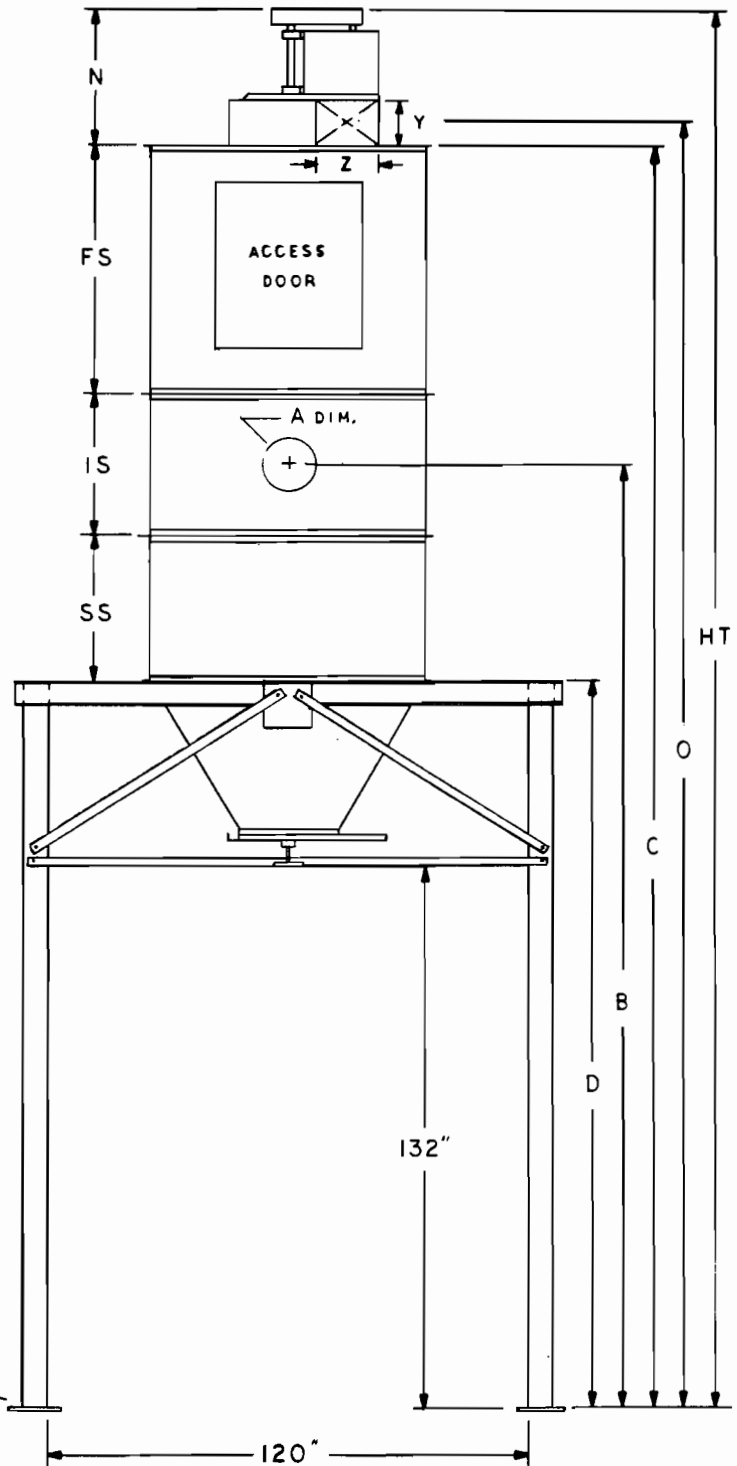
THE MODEL MRA DUST COLLECTOR CAN BE SUPPLIED WITH A TRUCK TYPE STAND AS EXTRA EQUIPMENT. NOMINAL DIMENSIONS CALL FOR 120" CLEARANCE BETWEEN THE SUPPORTING LEGS, AND 132" FROM GROUND LEVEL TO GATE DISCHARGE LOCKING HANDLE. ALTHOUGH NOT SHOWN ON THE DRAWING TO THE RIGHT, ADEQUATE BRACING IS FURNISHED ON ALL FOUR SIDES OF THE STAND.

LARGER SIZES OF SUPPORTING STANDS CAN BE FURNISHED TO SUIT INDIVIDUAL REQUIREMENTS. CONTACT THE FACTORY FOR SPECIAL PRICING.

IT SHOULD BE NOTED THAT BOTH DUMPSTER TYPE AND TRUCK TYPE SUPPORTING STANDS ARE SHIPPED K.D. FROM THE FACTORY. THESE STANDS ARE EQUIPPED WITH PRE-DRILLED HOLES AND BOLTS TO FACILITATE ERECTION ON THE JOB SITE. BOTH TYPES STANDS MUST BE SECURELY WELDED AT ALL POINTS ON THE JOB SITE BY THE ERECTOR. FAILURE TO PROVIDE PROPER WELDING WILL RESULT IN A WEAKENED SUPPORTING STAND.

PROPER CONCRETE PIER FOOTINGS SHOULD BE PROVIDED FOR SUPPORT OF THE LEGS. PIER FOUNDATION DRAWINGS ARE AVAILABLE UPON REQUEST. THE BASE PLATES FOR THE LEGS ARE TO BE PROVIDED BY THE USER ON THE JOB SITE, AND THESE MUST BE SECURELY ANCHORED TO THE PIER FOOTINGS.

1/2" x 12" x 12" BASE PLATE FURNISHED ON JOB SITE BY USER



SPECIFICATIONS

(Subject to change without notice)

MODEL NUMBER	DIMENSIONS											SHIP. WT. W/STAND	
	INLET A	B	C	D	FS	HT	IS	N	O	SS	OUTLET Y x Z		
MRA-11-120H	11	229½	309"	174"	61"	341½"	37"	32½"	313½"	37"	9 1/16"	11"	5244
MRA-13-120H	13	229½	321"	174"	73"	356"	37"	35"	326¾"	37"	10½"	13"	5495
MRA-15-185H	15	248½	340"	181"	73"	377¾"	37"	37¾"	346"	49"	12½"	15"	6498
MRA-17-240H	17	258½	350"	191"	73"	390¼"	37"	40¼"	356¾"	49"	13¾"	17"	7882
MRA-20-405H	20	295½	404"	225"	87"	449¾"	43"	43¾"	411¼"	49"	15¾"	19"	8520
MRA-22-435H	22	303	409½"	232½"	85"	458½"	43"	49"	418 "	49"	17"	21"	9990

(REVISED 9/89)

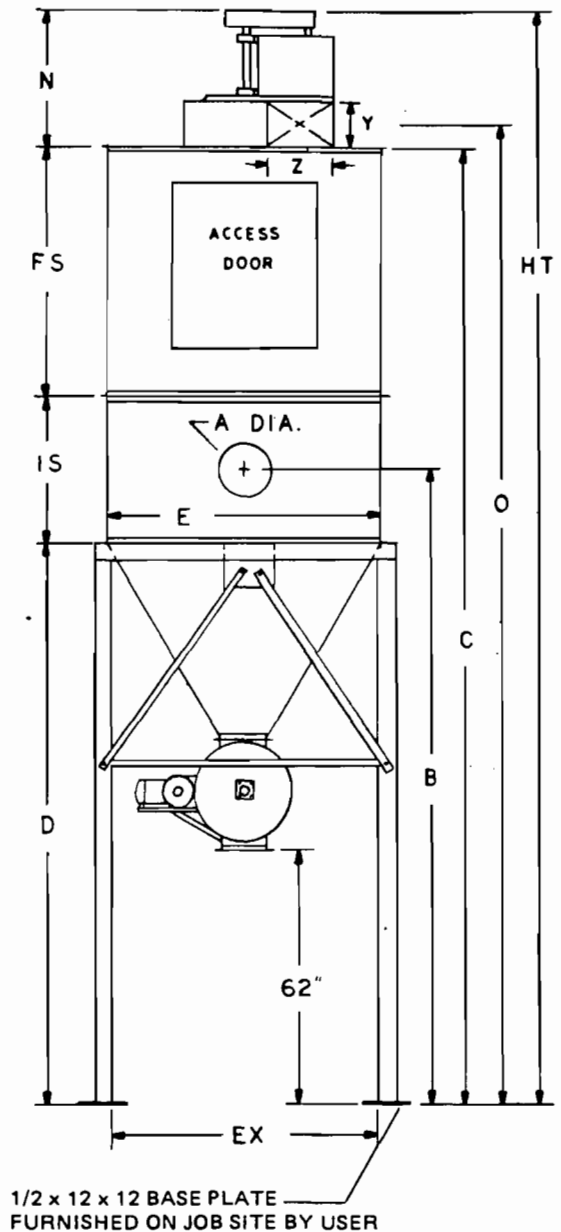
MODEL MRA WITH ROTARY AIR LOCK AND STAND

The Model MRA Dust Collector can be supplied with a Rotary Air Lock for continuous unloading of the waste material into a dumpster, or other type of receptacle. The Rotary Air Lock **CANNOT** be used below a storage bin, as bridging will occur with the build-up of material above the air lock.

Larger stands, or stand with higher clearance can be furnished to suit individual requirements. Contact the Factory for special pricing.

Stands are shipped K.D. from the Factory, and are equipped with pre-drilled holes and bolts to facilitate erection on the job site. Stands **MUST** be securely welded at all points on the job site by the erector. Failure to provide proper welding will result in a weakened supporting stand.

Proper concrete pier footings should be provided for support of the legs. Pier foundation drawings are available upon request. The base plates for the legs are to be provided on the job site, and these must be surely anchored to the pier footings.



SPECIFICATIONS (Subject to change without notice)

MODEL NO.	INLET A	DIMENSIONS										SQ. FT. CLOTH	OUTLET		SHIP. WT. W/ STAND
		B	C	D	E	EX	FS	HT	IS	N	O		Y x Z		
MRA-11-RAL	11"	162½"	242"	144"	68"	65"	61"	274½"	37"	32½"	246½"	427	9 1/16"	11"	4102
MRA-13-RAL	13"	162½"	254"	144"	68"	65"	73"	289"	37"	35"	259½"	528	10½"	13"	4383
MRA-15-RAL	15"	160½"	252"	142"	76"	73"	73"	289"	37"	37"	258"	668	12½"	15"	4993
MRA-17-RAL	17"	171"	262½"	152½"	84"	77"	73"	302½"	37"	40¼"	269½"	825	13¾"	17"	5385
MRA-20-RAL	20"	184"	292½"	162½"	92"	85"	87"	337½"	43"	45½"	300¼"	1219	15½"	19"	7780
MRA-22-RAL	22"	189"	295½"	167½"	98"	91"	85"	344½"	43"	49"	304"	1414	17"	21"	8160

(REVISED 9/89)

STANDARD EQUIPMENT, Basic Model MRA Dust Collector

Primary separator built into the unit. Secondary separation of fine particles by filter bag section. Belted motor driven exhaust fan with 3 phase, 60 cycle, 230/460 volt, open drip proof motor. NO controls furnished. Floor level storage section for 55 gallon drums (no drums included). Belt guard.

EXTRA EQUIPMENT

- SILENCER** The Model MRA has a very low noise level, made even quieter by the use of a silencer.
- LOW CEILING MODIFICATION** . The unit is designed for low ceiling installation. The fan and motor unit is mounted alongside of the unit, permitting installation in much lower ceiling room.
- FILTER MEDIA** The unit with standard filter media is designed to handle almost any type of dust problem. A number of special filter medias are available for the most unusual type of dust problems.
- INCREASED STORAGE** A hopper style discharge bin is available for increased storage capacity.
- ELECTRICAL CONTROLS** Magnetic controls are not furnished as standard equipment, but are available as an extra.
- AUTOMATIC SHAKER** The electric shaker can be controlled with a timing device which is energized when the fan is stopped. The shaker operates automatically for a predetermined length of time, then shuts itself off.
- ELECTRIC SHAKER** The manual lever on the bag shaking assembly can be replaced by an electric motor. This feature is furnished as standard equipment on models with hopper storage, but must be ordered as an extra on all basic models.
- DIRTY FILTER INDICATOR** A magnehelic gauge (an indicating gauge) can be installed on the unit to automatically indicate when filter media needs cleaning.
- WEATHER HOOD** For outside installation a weather hood can be installed to protect the motor. This feature is furnished as standard equipment on models with hopper storage.

WHEN YOU SEE MURPHY-RODGERS, YOU'RE LOOKING AT THE FINEST DUST COLLECTING AND AIR POLLUTION CONTROL EQUIPMENT AVAILABLE . . . ANYWHERE!

ANOTHER FINE PRODUCT OF

MURPHY-RODGERS, INC.

DUST COLLECTORS & AIR POLLUTION CONTROL EQUIPMENT

2301 BELGRAVE AVE, HUNTINGTON PARK, CALIF. 90255
TELEPHONE (213) 587-4118
FAX # (213) 583-9540

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Tom T. John Engineering Inc.
(813) 985 7881

7522 N 40th Street Tampa FL 33604
fax (813) 980 3564

Mr. David Zell
Air Section
Department of Environmental Regulation
4520 Oak Fair Blvd.
Tampa, FL 33610-7347

Dear Mr. Zell:

Re: Chris Craft Boats Particulate Permit Application

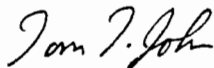
As we discussed, the following list is representative of the type of particulate-generating equipment used in the mill shop at Chris Craft Boats.

CNC Powermatic Router
12" Delta Table Saw
10" Delta Table Saw
Onsrud Table Router
2 - Table Routers
2 - Band Saws
Rockwell Belt and Radial Sander

This listing was provided by Chris Lashley, Environmental Representative for Chris Craft Boats.

Thank you for your attention to this application; if I can be of further assistance, please contact me at (813) 985 7881.

Sincerely,



Tom T. John, P.E.

cc: Chris Lashley
Robert Evangelisti, P.E.
T.P. Robinson