Scott Bruce

Walt Disney World Co.

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AIR REGULATION

April 8, 1998

Mr. Clair Fancy, P.E.
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Construction Permit Application
Walt Disney World Co. - North Service Area
Central Shops Building Urethane Adhesive Layup Workstations

Dear Mr. Fancy:

Enclosed are three copies of the air construction permit application and three ELSA submission diskettes for the above referenced emissions unit. The fourth copy has been sent to Mr. Len Kozlov at the Central District office to facilitate the review of the application.

This application is for four existing, but previously unpermitted ventilated workstations. The units are in use at this time for grinding and sanding. Once the permit has been issued, the units will be used for the adhesive layup operation that the permit application specifies. Since this application is for a minor modification to a Title V facility, no processing fee is included.

If you have any questions or need any further information, please call me at 407-827-2748.

Sincerely,

Rich Bumar

Rich Bumar
Environmental Control Representative
Environmental Control Department

Enclosure

cc: Bob Beaver (w/o enclosure)
Bruce Mitchell
Lee Schmudde (w/o enclosure)

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AIR REGULATION

APPLICATION FOR AN AIR CONSTRUCTION PERMIT

WALT DISNEY WORLD CO.

NORTH SERVICE AREA CENTRAL SHOPS BUILDING

URETHANE ADHESIVE LAYUP WORKSTATIONS

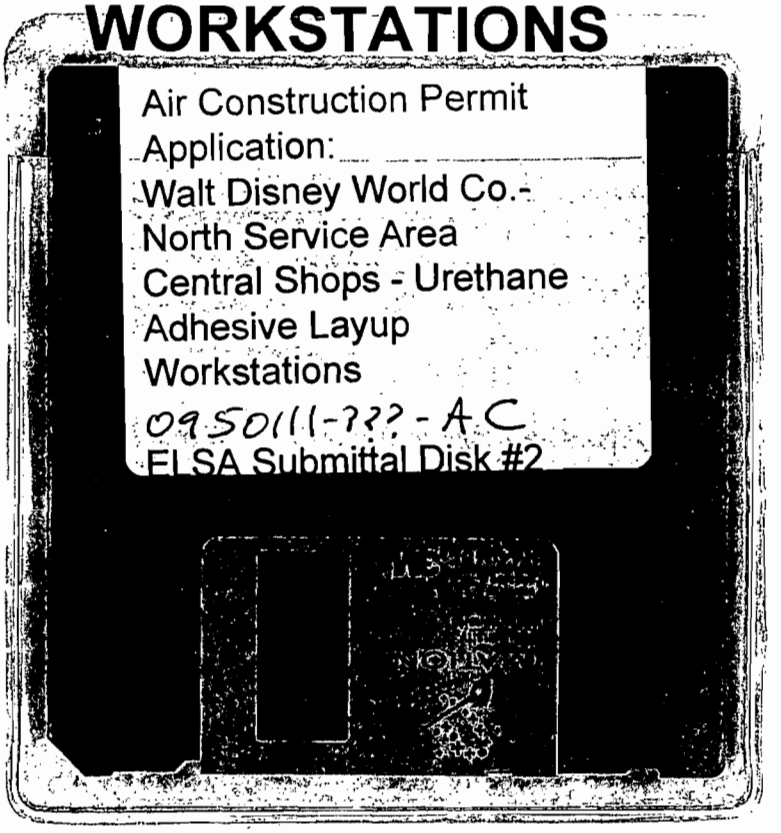


TABLE OF CONTENTS

Department of
Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Identification of Facility Addressed in This Application

1. Facility Owner/Company Name : Walt Disney World Co.
2. Site Name : Walt Disney World Resort
3. Facility Identification Number : 0950111 [ ] Unknown
4. Facility Location : This site is located in North Service Area (NSA) of the Walt Disney World Resort. Street Address or Other Locator : P.O. Box 10,000 City : Lake Buena Vista County : Orange Zip Code : 32830-1000
5. Relocatable Facility? [ ] Yes [X] No 6. Existing Permitted Facility? [X] Yes [ ] No

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official :

Name : Lee Schmudde
Title : Vice President, Legal

2. Owner or Authorized Representative or Responsible Official Mailing Address :

Organization/Firm : Walt Disney World Co.
Street Address : P.O. Box 10,000
City : Lake Buena Vista
State : FL Zip Code : 32830-1000

3. Owner/Authorized Representative or Responsible Official Telephone Numbers :

Telephone : (407)828-3701 Fax : (407)828-3239

4. Owner/Authorized Representative or Responsible Official Statement :

I, the undersigned, am the owner or authorized representative of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions units.*

Signature

4-3-98
Date

* Attach letter of authorization if not currently on file.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type
No Id	Character Heads- urethane adhesive layup workstations	AC1F

Purpose of Application and Category

Category I : All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to obtain :

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number :

[ ] Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed :

[ ] Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number :

Operation permit to be revised :

[ ] Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application.

Operation permit to be revised/corrected :

[ ] Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit.

Operation permit to be revised :

Reason for revision :

Category II : All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain :

[ ] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s) :

[ ] Renewal air operation permit under Fule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed :

[ ] Air operation permit revision for a synthetic non-Title V source.

Operation permit to be revised :

Reason for revision :

Category III : All Air Construction Permit Applications for All Facilities and Emissions Units

This Application for Air Permit is submitted to obtain :

[ ] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any :

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s) :

[**X**] Air construction permit for one or more existing, but unpermitted, emissions units.

Application Processing Fee

Check one :

[ ] Attached - Amount : _____ [X] Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations :

   The Character Heads department of the Walt Disney World Co. Shops Services division uses methylene chloride (MC) in the layup of urethane adhesive to build character costume heads. In order to reduce employee exposure to MC, four pre-existing ventilated workstations will be used for the layup operation. The workstations were previously used for grinding, sanding, and mixing small amounts of paints. The workstations will become emissions points within the North Service Area Central Shops Building (NSACSB) emissions unit and will increase the overall emissions of VOCs for the Walt Disney World Resort Complex by a total of 5.5 tpy. The existing aggregate VOC emissions limit for the NSACSB emissions unit is 20.7 tons VOC per 12 months. With the addition of this operation, the aggregate limit would increase to 26.2 tons VOC per 12 months.

2. Projected or Actual Date of Commencement of Construction :

3. Projected Date of Completion of Construction :

Professional Engineer Certification

1. Professional Engineer Name : Bob Beaver
   Registration Number : 32528

2. Professional Engineer Mailing Address :

   Organization/Firm : Walt Disney World Co.
   Street Address : P.O. Box 10,000
   City : Lake Buena Vista State : FL Zip Code : 32830-1000

3. Professional Engineer Telephone Numbers :
   Telephone : (407)828-1584 Fax : (407)934-7297

4. Professional Engineer Statement :

I, the undersigned, hereby certified, except as particularly noted herein, that :*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollutant control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [ ] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [✓] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature _____ Date 4/7/98

ROBERT DAVID BEAVER CERTIFICATE 32528 STATE OF FLORIDA REGISTERED ENGINEER

* Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact :

Name : Richard Bumar, E.I.
Title : Environmental Ctrl. Represenatative

2. Application Contact Mailing Address :

Organization/Firm : Walt Disney World Co.
Street Address : P.O. Box 10,000
City : Lake Buena Vista
State : FL Zip Code : 32830-1000

3. Application Contact Telephone Numbers :

Telephone : (407)827-2748 Fax : (407)827-2774

Application Comment

This application is being submitted for a previously existing set of four ventilated sanding stations which will be converted (once they are permitted) to use methylene chloride as a thinner in the layup of urethane adhesive.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility, Location, and Type

1. Facility UTM Coordinates : Zone : East (km) : North (km) :			
2. Facility Latitude/Longitude : Latitude (DD/MM/SS) : 28 21 31 Longitude (DD/MM/SS) : 81 34 36			
3. Governmental Facility Code : 0	4. Facility Status Code : C	5. Facility Major Group SIC Code : 79	6. Facility SIC(s) :
7. Facility Comment : Facility SIC is 79-96			

Facility Contact

1. Name and Title of Facility Contact : Armando Rodriguez Director of Environmental Affairs
2. Facility Contact Mailing Address : Organization/Firm : Walt Disney World Co. Street Address : P.O. Box 10,000 City : Lake Buena Vista State : FL Zip Code : 32830-1000
3. Facility Contact Telephone Numbers : Telephone : (407)827-2730 Fax : (407)827-2774

Facility Regulatory Classifications

1. Small Business Stationary Source?	N
2. Title V Source?	Y
3. Synthetic Non-Title V Source?	N
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	Y
5. Synthetic Minor Source of Pollutants Other than HAPs?	N
6. Major Source of Hazardous Air Pollutants (HAPs)?	Y
7. Synthetic Minor Source of HAPs?	N
8. One or More Emissions Units Subject to NSPS?	N
9. One or More Emission Units Subject to NESHAP?	Y
10. Title V Source by EPA Designation?	Y
11. Facility Regulatory Classifications Comment :	

B. FACILITY REGULATIONS

Rule Applicability Analysis

B. FACILITY REGULATIONS

List of Applicable Regulations

Title V core list

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification
VOC	B

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 1

1. Pollutant Emitted :	VOC
2. Requested Emissions Cap :	(lbs/hour) 26.2000 (tons/year)
3. Basis for Emissions Cap Code :	OTHER
4. Facility Pollutant Comment :	This emissions cap requested is equal to the combined emissions limits for the existing emissions units in the NSACSB (20.7 tpy) plus the contribution of the new urethane adhesive layup station's potential VOC emissions (5.5 tpy). Please refer to the emissions unit section and Attachment F for emissions calculations.

D. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location :	Attachment A
2. Facility Plot Plan :	Attachment B
3. Process Flow Diagram(s) :	Attachment C
4. Precautions to Prevent Emissions of Unconfined Particulate Matter :	NA
5. Fugitive Emissions Identification :	NA
6. Supplemental Information for Construction Permit Application :	NA

Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities :	NA
8. List of Equipment/Activities Regulated under Title VI :	NA
9. Alternative Methods of Operation :	NA
10. Alternative Modes of Operation (Emissions Trading) :	NA
11. Identification of Additional Applicable Requirements :	NA
12. Compliance Assurance Monitoring Plan :	NA
13. Risk Management Plan Verification :	NA
14. Compliance Report and Plan :	NA
15. Compliance Certification (Hard-copy Required) :	

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1

Character Heads- urethane adhesive layup workstations

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Information Section 1

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Character Heads- urethane adhesive layup workstations		
2. Emissions Unit Identification Number : [X] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 79
6. Emissions Unit Comment : This operation will become an emissions point within the North Service Area Central Shops Building (NSACSB) emissions unit.		

Emissions Unit Information Section 1
Character Heads- urethane adhesive layup workstations

Emissions Unit Control Equipment 1

1. Description : The urethane adhesive layup stations are site-built ventilation units which are designed to reduce workers' exposure to organic vapors. The units are not designed to remove particulates from the exhaust stream and therefore, have no control devices. Please refer to Attachment D for design drawings and specifications.
2. Control Device or Method Code :

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Character Heads- urethane adhesive layup workstations

Emissions Unit Details

1. Initial Startup Date :	01-Jun-1998
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer : Lapin Sheet Metal Company, Inc.	Model Number : custom design
4. Generator Nameplate Rating :	MW
5. Incinerator Information :	
Dwell Temperature :	Degrees Fahrenheit
Dwell Time :	Seconds
Incinerator Afterburner Temperature :	Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	4000	gallons/year
4. Maximum Production Rate :		gallons/year

5. Operating Capacity Comment :
Maximum process or throughput rate is based on facility production schedule. Please refer to Attachment E for product MSDSs.

The products used are BJB TC-960 A, TC-960 B and methylene chloride as a thinner. The mixture is 50% part A and 25% each of part B and methylene chloride. Part A contains no VOCs, part B is 1% VOC and methylene chloride is 100% VOC. The maximum expected material usage is 2000 gallons for part A, and 1000 gallons each for part B and methylene chloride.

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :			
	24 hours/day		7 days/week
	52 weeks/year		8,760 hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Character Heads- urethane adhesive layup workstations

Rule Applicability Analysis

This emissions unit is subject to the general pollutant emissions limiting standards for VOC, objectionable odors, particulates, and visible emissions.

Emissions Unit Information Section 1
Character Heads- urethane adhesive layup workstations

List of Applicable Regulations

62-296.320, F.A.C.: General Pollutant Emission Limiting Standard

Title V core list

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 1

Character Heads- urethane adhesive layup workstations

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram : NSA-16		
2. Emission Point Type Code : 1		
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Two stacks with weather caps on the south side of the top of the NSA Central Shops building. See Atta		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : No other emissions units share this emission point.		
5. Discharge Type Code :	W	
6. Stack Height :	35	feet
7. Exit Diameter :	2.0	feet
8. Exit Temperature :	85	°F
9. Actual Volumetric Flow Rate :	1250	acfm
10. Percent Water Vapor :		%
11. Maximum Dry Standard Flow Rate :	1250	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : East (km) : North (km) :		
14. Emission Point Comment : Please refer to Attachment D for unit specifications.		

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

Character Heads- urethane adhesive layup workstations

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Urethane adhesive layup using methylene chloride as a thinner. The SCC refers to gallons of "Other Not Classified" solvent consumed.	
2. Source Classification Code (SCC) : 4-01-003-98	
3. SCC Units : Gallons Used	
4. Maximum Hourly Rate : 10.00	5. Maximum Annual Rate : 4,000.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment : Maximum usage rate is based process knowledge: the operation can not exceed 10 gallons per hour of material usage. The 4000 gallons per year rate is the maximum amount of adhesive and thinner that is expected to be applied.	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1
Character Heads- urethane adhesive layup workstations

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - VOC			EL

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
Character Heads- urethane adhesive layup workstations

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **VOC**
2. Total Percent Efficiency of Control : 0.00 %
3. Potential Emissions : 27.60 lb/hour 5.50 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : materials balance
7. Emissions Method Code : 3
8. Calculations of Emissions : Please refer to Attachment F for emissions calculations.
9. Pollutant Potential/Estimated Emissions Comment : Emission Factor of 2.76 lb VOC/gallon is based on a 1:2:1 ratio of thinner to part A to part B and an initial estimate of 100% evaporation losses during the hand layup process. Following permit issuance, a detailed analysis will be performed to determine the actual evaporation losses during the layup process.

Emissions Unit Information Section 1
Character Heads- urethane adhesive layup workstations

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :			
3. Requested Allowable Emissions and Units :	26.20		tons VOC/12 mo.
4. Equivalent Allowable Emissions :	lb/hour	26.20	tons/year
5. Method of Compliance : Materials balance and usage recordkeeping			
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions are equal to the potential emissions.			

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Character Heads- urethane adhesive layup workstations

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :
2. Basis for Allowable Opacity :
3. Requested Allowable Opacity : Normal Conditions : % Exceptional Conditions : % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance :
5. Visible Emissions Comment : Only general VE standards are applicable.

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Character Heads- urethane adhesive layup workstations

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : No continuous monitoring system is required.	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 1

Character Heads- urethane adhesive layup workstations

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[X] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[X] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :		
PM : C	SO2 : C	NO2 : C
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 1

Character Heads- urethane adhesive layup workstations

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Attachment C
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Attachment D
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	Attachment E
9. Other Information Required by Rule or Statue :	Attachment F

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :	NA
11. Alterntive Modes of Operation (Emissions Trading) :	NA

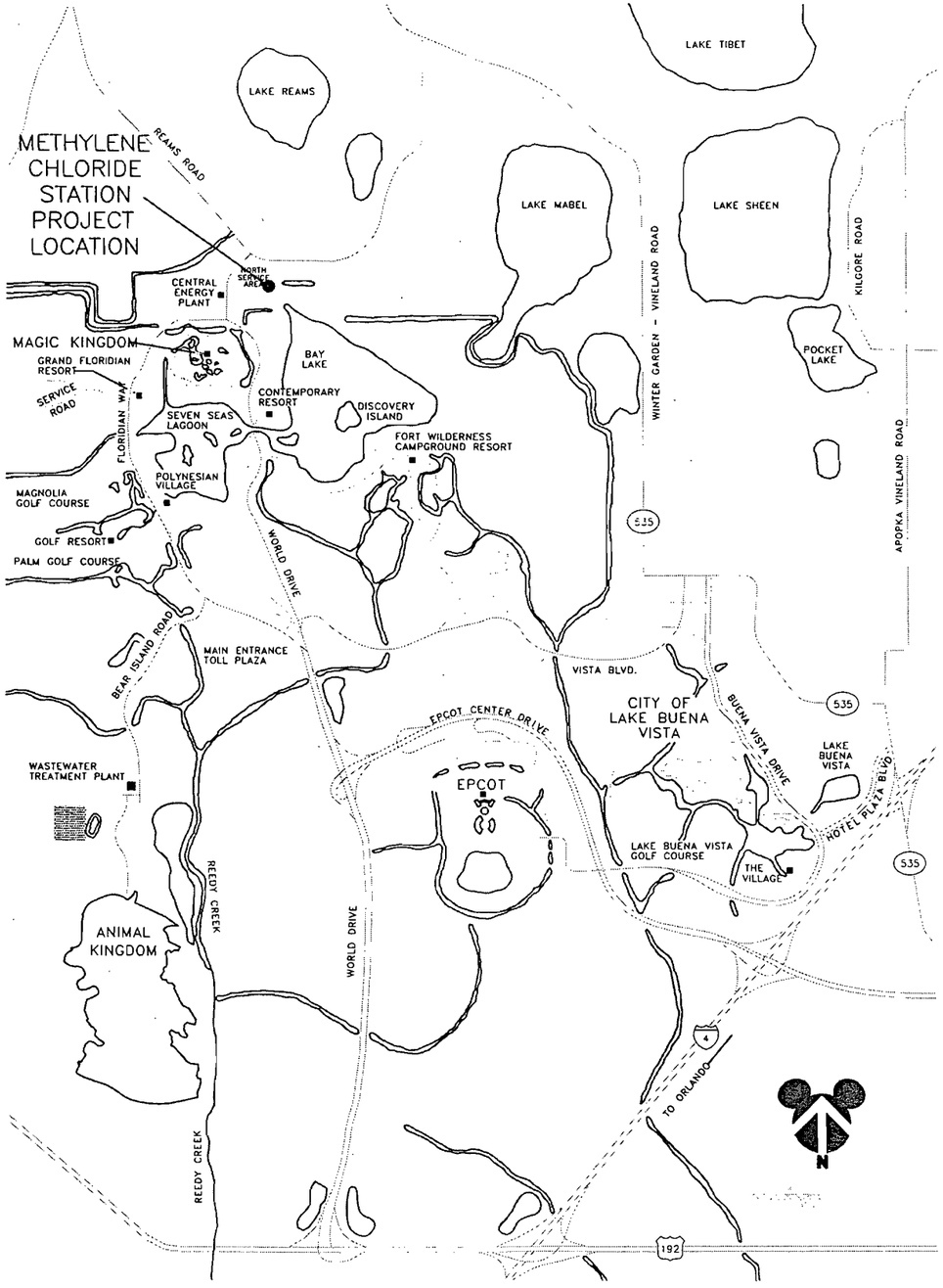
12. Identification of Additional Applicable Requirements :	NA
13. Compliance Assurance Monitoring Plan :	NA

14. Acid Rain Application (Hard-copy Required) :

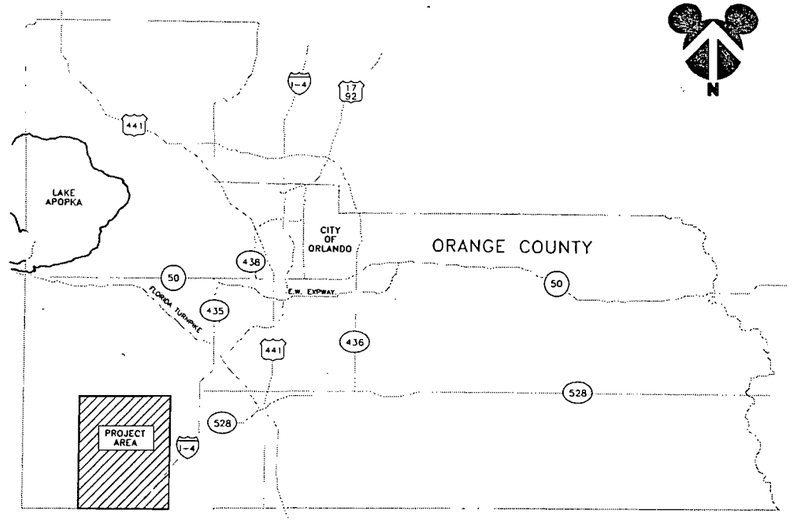
NA	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

ATTACHMENT A

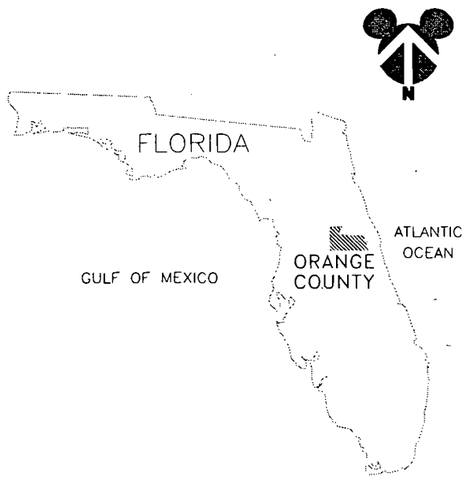
AREA MAP SHOWING FACILITY LOCATION



SITE LOCATION MAP



VICINITY MAP



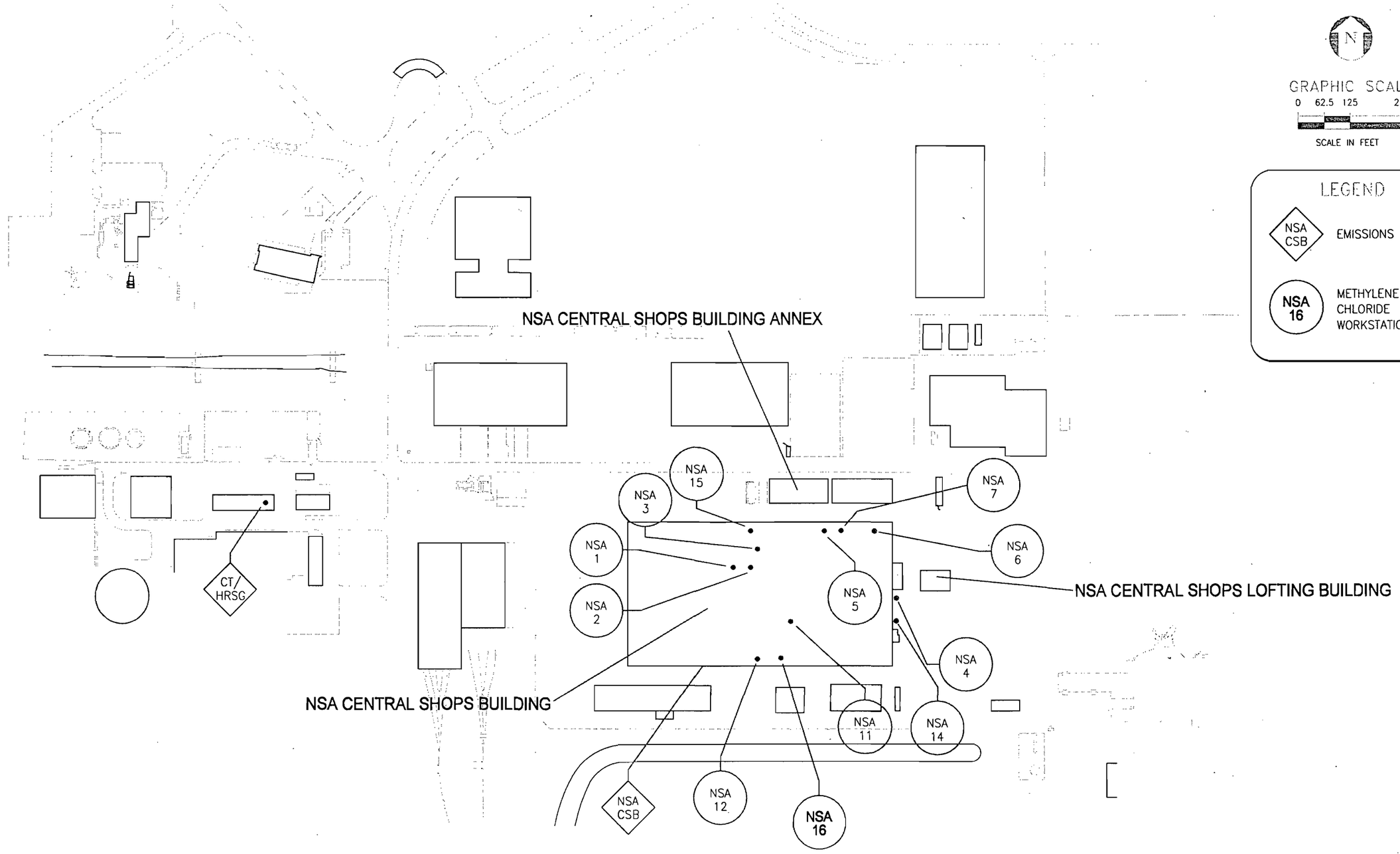
LOCATION MAP

ATTACHMENT A
AREA MAP SHOWING FACILITY LOCATION
NORTH SERVICE AREA CENTRAL SHOPS BUILDING (NSACSB) - METHYLENE CHLORIDE VENTILATED WORKSTATIONS

Walt Disney World®

ATTACHMENT B

FACILITY PLOT PLAN

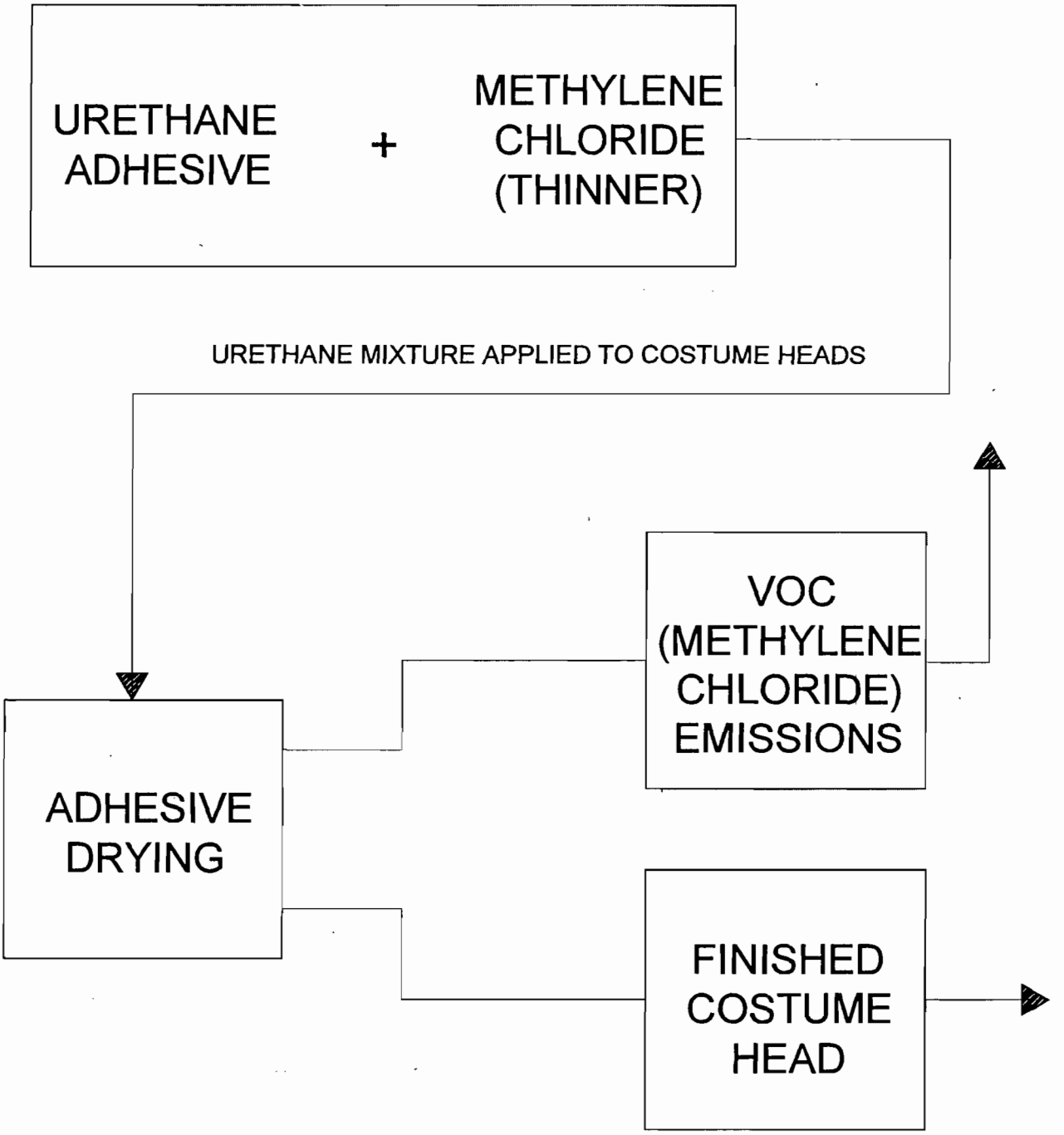


ATTACHMENT B
FACILITY PLOT PLAN
NORTH SERVICE AREA CENTRAL SHOPS BUILDING (NSACSB)- METHYLENE CHLORIDE VENTILATED WORKSTATIONS

Walt Disney World®

ATTACHMENT C

PROCESS FLOW DIAGRAM

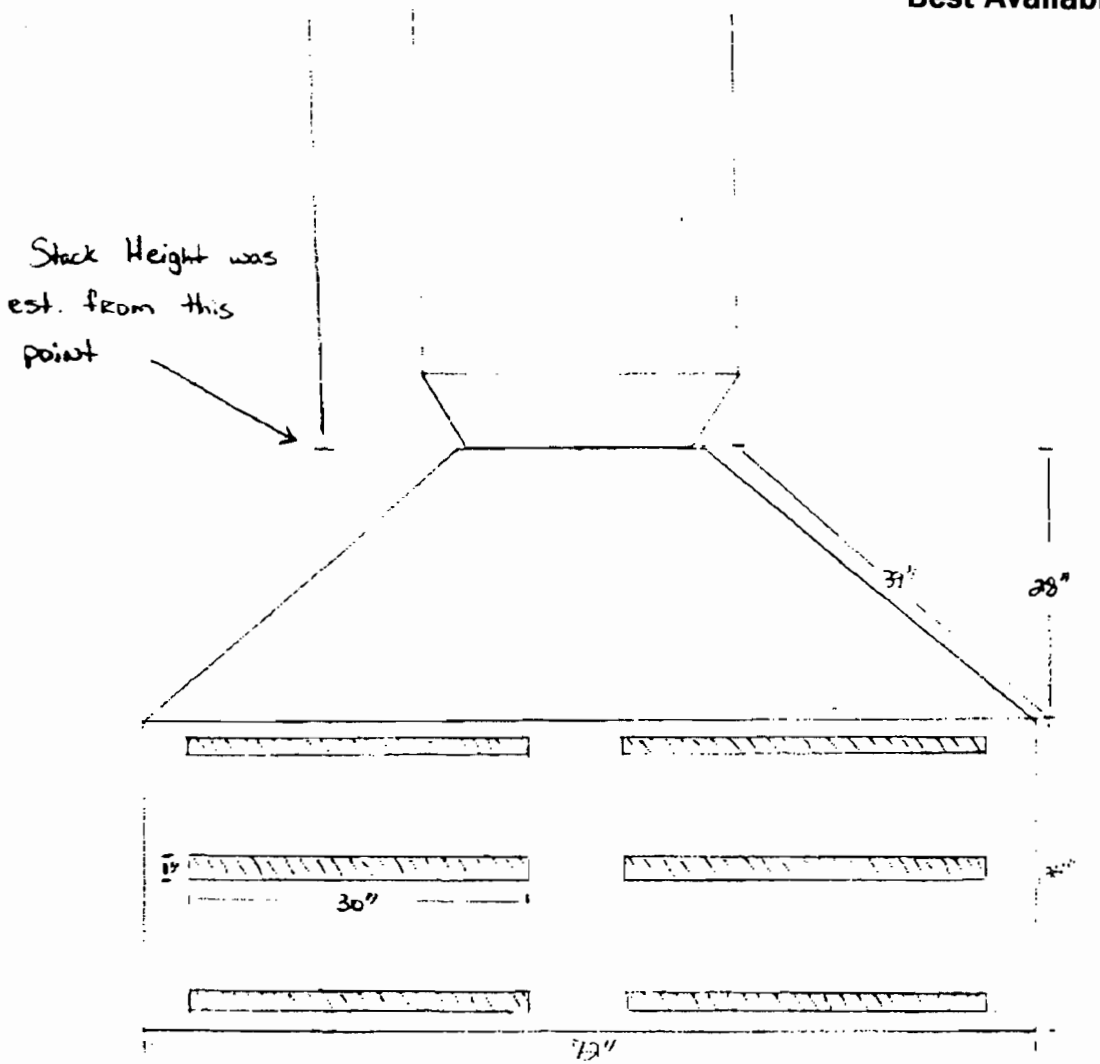


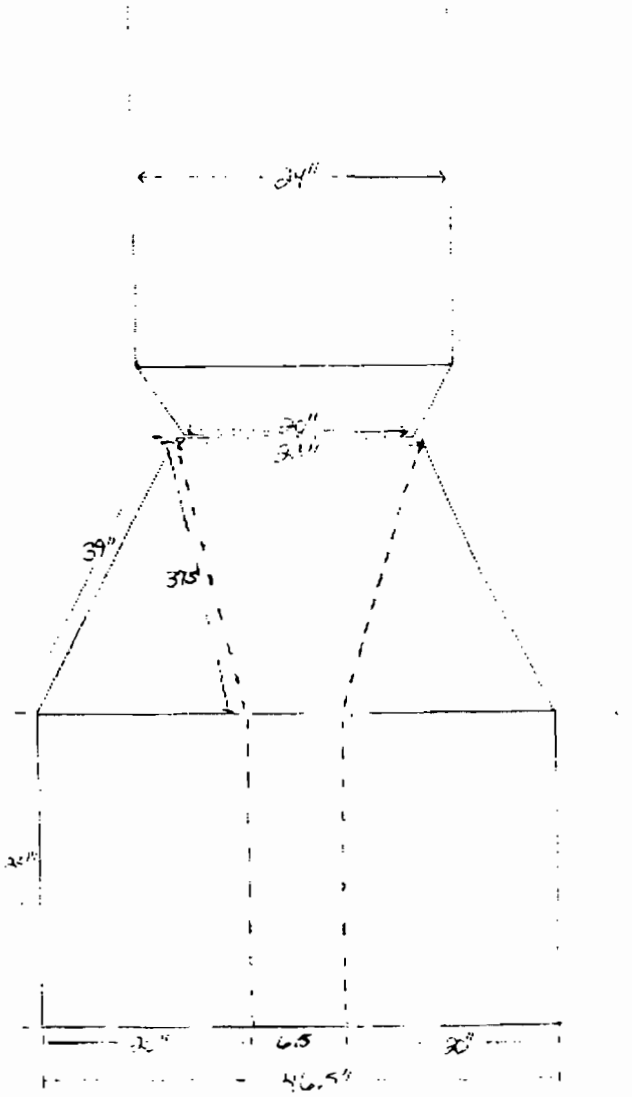
ATTACHMENT C
PROCESS FLOW DIAGRAM
NORTH SERVICE AREA CENTRAL SHOPS BUILDING (NSACSB)-
METHYLENE CHLORIDE VENTILATED WORKSTATIONS

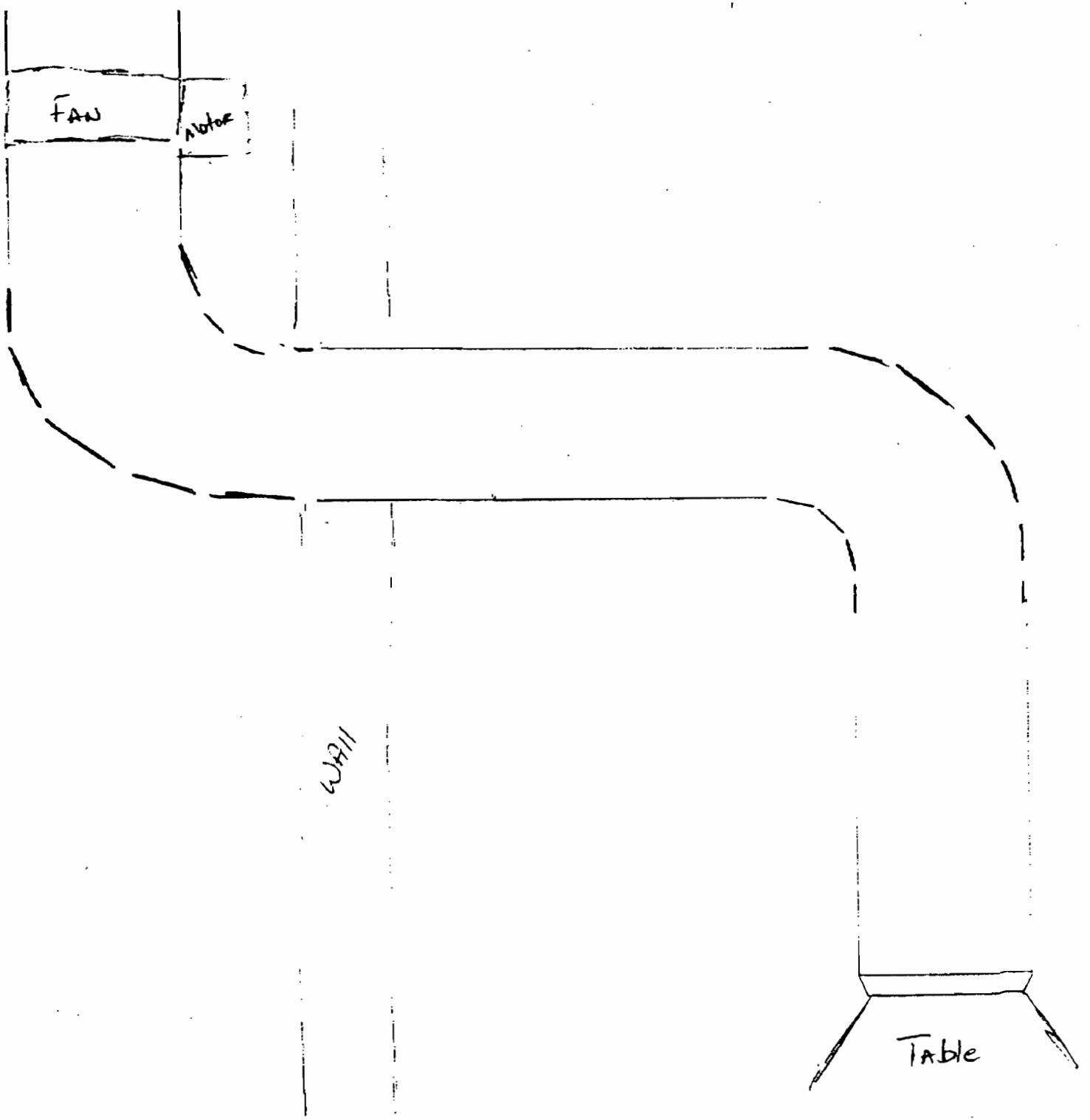
Walt Disney World Co.

ATTACHMENT D

EMISSIONS UNIT SPECIFICATIONS

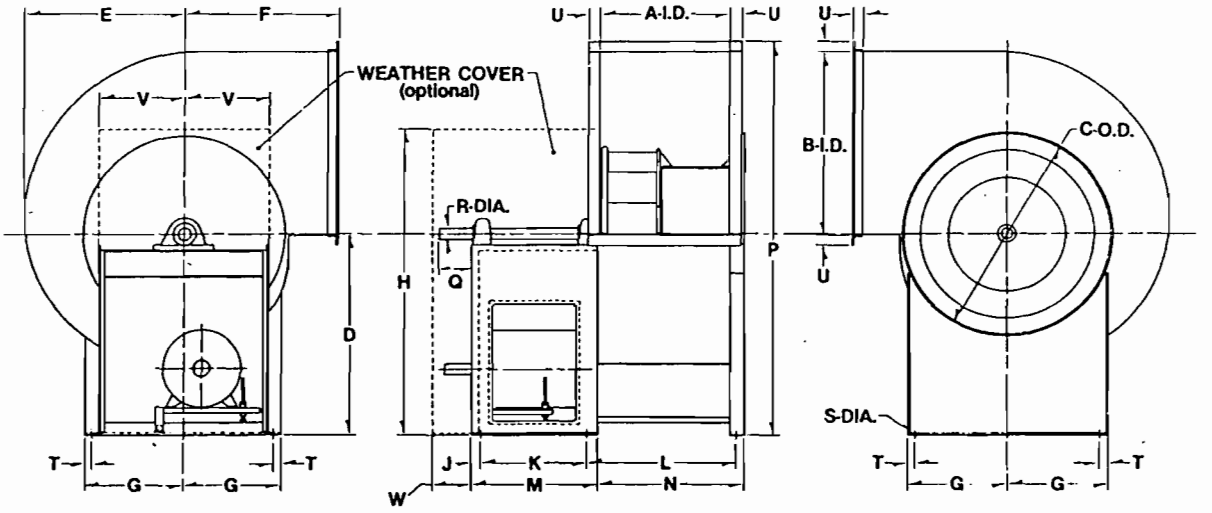






F-1

CPS-CPA
CENTRI-PAC CENTRIFUGAL BLOWER
ARRANGEMENT 10

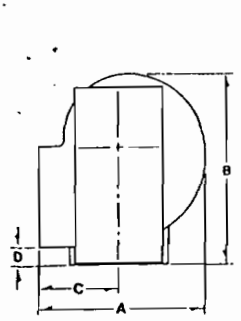


ARRANGEMENT 10

CPS-CPA DIMENSION DATA

SIZE	A	B	C	D	E	F	G	H	J	K	L	M
120	9-3/16	13-1/8	16-1/4	18	11-7/16	12-1/8	9-3/8	26-1/4	1-1/2	10	11-7/8	13-1/8
135	10-5/16	14-3/4	17-3/4	18	12-13/16	13-1/8	↓	27	↓	12	13	15-1/8
150	11-7/16	16-7/16	19-1/4	19-1/16	14-1/4	13-13/16	↓	29-1/16	↓	↓	14-1/8	↓
165	12-5/8	18-1/16	21-1/4	20-7/16	15-11/16	14-7/8	•	31-7/16	↓	↓	15-5/16	↓
180	13-3/4	19-11/16	22-3/4	22-1/16	17-1/8	15-5/8	10-3/8	33-9/16	↓	•	16-7/16	•
195	14-15/16	21-5/16	24-1/4	23-11/16	18-1/2	16-13/16	10-3/8	35-11/16	↓	15	17-11/16	18-1/8
210	16-1/16	23	26	25-3/8	19-15/16	20	11-3/8	38-7/8	↓	↓	18-13/16	↓
225	17-3/16	24-5/8	27-1/2	27	21-3/8	20-5/8	11-7/8	41	↓	↓	20	↓
245	18-3/4	26-13/16	29-1/2	29-5/8	23-5/16	21-3/4	13-3/8	44-5/8	↓	•	21-3/4	•
270	20-5/8	29-9/16	32	32-3/8	25-11/16	23-3/8	14-3/8	48-7/8	↓	18	23-5/8	21-1/8
300	22-15/16	32-13/16	35	35-5/8	28-1/2	25-7/8	15-5/16	53-5/8	↓	↓	26	21-3/8
330	25-1/4	36-1/8	38	38-7/8	31-3/8	28-7/16	16-13/16	58-3/8	↓	•	28-3/8	21-3/16
365	27-7/8	39-15/16	41-1/2	42-3/4	34-11/16	31-7/16	17-13/16	64-1/4	↓	21	30-15/16	24-3/16
402	30-3/4	44-1/16	45-1/4	46-3/4	38-1/4	34-11/16	19-13/16	70-1/4	↓	21	34-5/16	24-3/16
445	34	48-11/16	49-1/2	51-3/8	42-1/4	38-5/16	21-13/16	76-7/8	↓	25	37-9/16	28-3/16
490	37-7/16	53-5/8	55	56-1/4	46-9/16	42-3/16	23-13/16	84-1/4	•	25	41-3/8	28-3/16

SIZE	N	P	Q	R	S	T	U	V	W	MAX. MOTOR FRAME	APPROX. SHIP'G. WT. STEEL	APPROX. SHIP'G. WT. ALUM.
120	11	32-9/16	3	1	9/16	3/4	1-1/2	8-1/16	4-1/16	184T	150	119
135	12-1/8	34-3/16	↓	↓	↓	↓	↓	↓	↓	184T	175	136
150	13-1/4	37-1/8	↓	↓	↓	↓	↓	↓	↓	184T	200	153
165	14-7/16	39-7/8	↓	•	↓	↓	↓	•	↓	184T	250	183
180	15-5/8	43-1/8	↓	1-3/16	↓	↓	↓	9-1/16	↓	215T	305	204
195	16-13/16	46-3/8	•	1-3/16	↓	↓	↓	9-1/16	•	215T	345	230
210	17-15/16	49-3/4	4	1-7/16	↓	↓	↓	10-1/16	5-1/16	215T	385	264
225	19-1/8	53	↓	1-7/16	•	•	•	10-9/16	↓	215T	430	319
245	21-1/8	58-1/4	↓	1-11/16	11/16	1	2	11-9/16	↓	215T	540	408
270	23	63-3/4	↓	1-11/16	↓	↓	↓	12-9/16	↓	256T	625	451
300	25-15/16	71-1/4	↓	1-15/16	•	↓	↓	13-9/16	↓	256T	733	587
330	27-11/16	76-3/4	•	1-15/16	13/16	↓	↓	15-1/16	•	256T	1030	676
365	30-1/4	84-1/2	5	2-3/16	↓	↓	↓	16-1/16	6-1/16	324T	1135	820
402	34-1/8	92-1/2	↓	2-3/16	↓	↓	↓	18-1/16	↓	324T	1405	1054
445	37-3/8	101-3/4	↓	2-7/16	↓	↓	↓	20-1/16	↓	326T	1740	1288
490	41-3/16	111-1/2	•	2-7/16	•	•	•	22-1/16	•	326T	1989	1522



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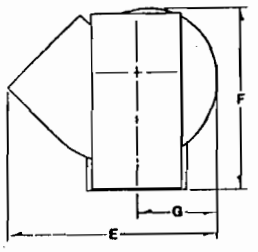

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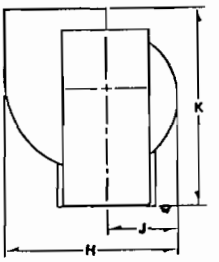

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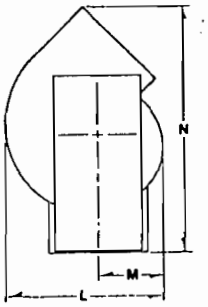

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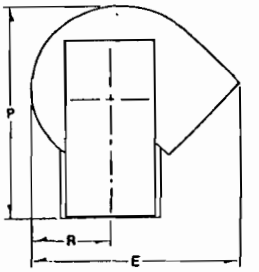

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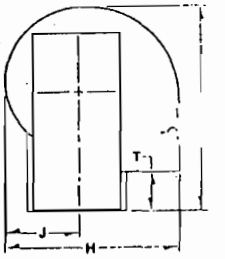

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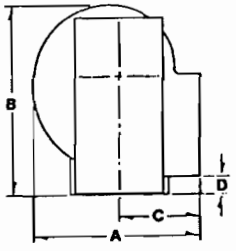

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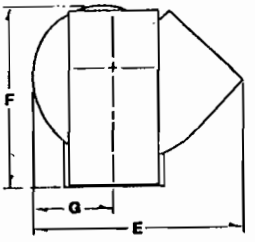

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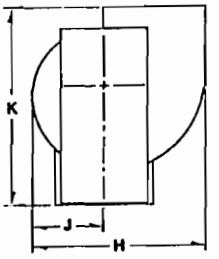

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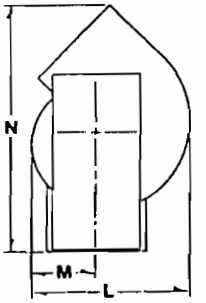

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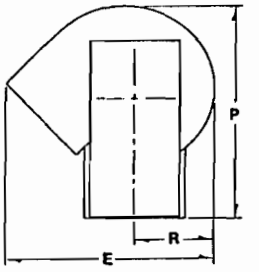

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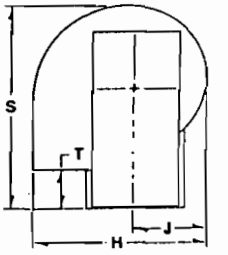
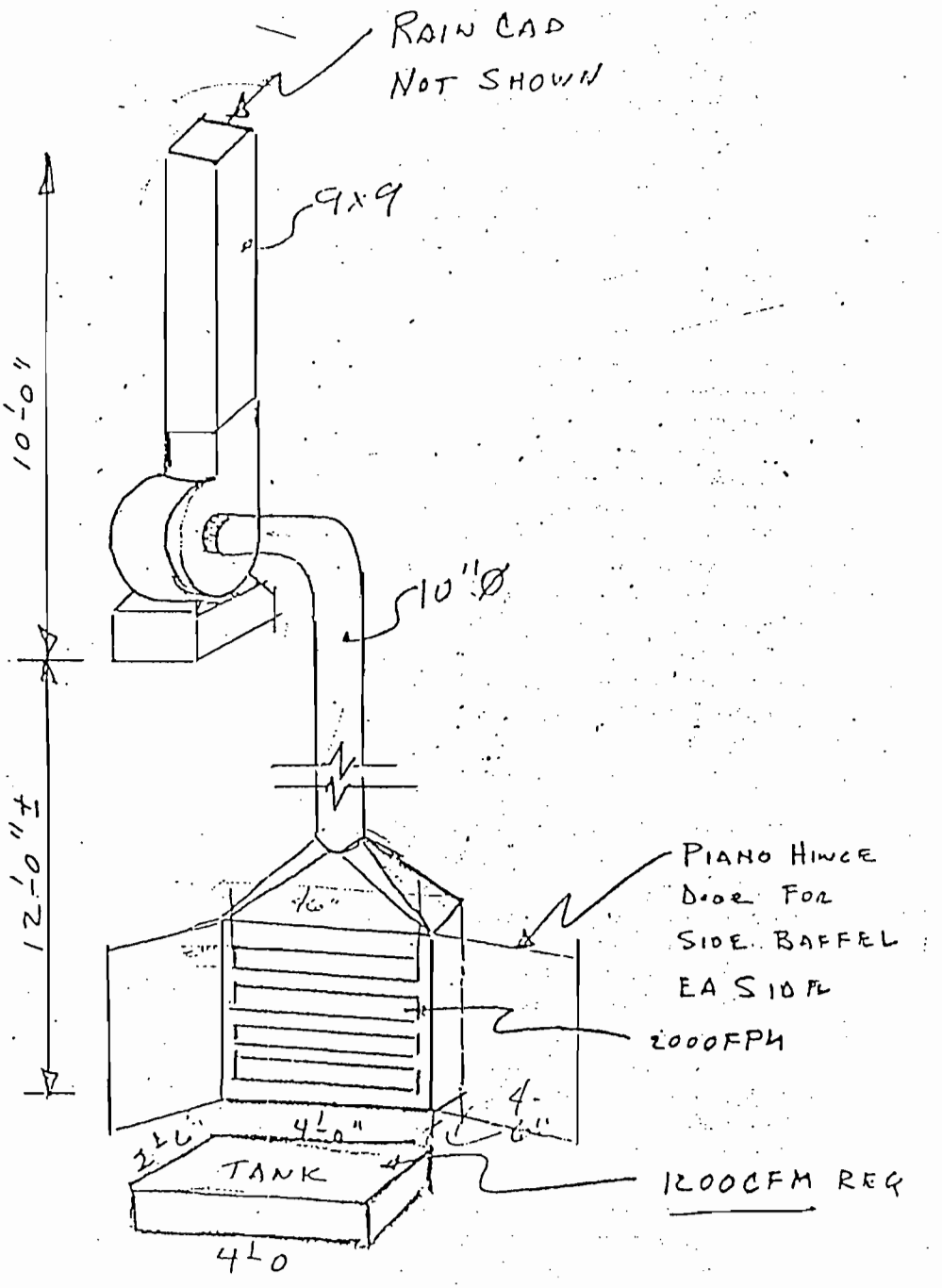


CCW DBD

CPV DIMENSION DATA

SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T
100	20-1/4	26-1/8	10-3/4	7-1/8	24-1/8	25-1/2	8-13/16	19	8-1/8	28-3/4	17-11/16	7-1/2	33-5/16	28-1/4	8-13/16	27-1/2	4-3/4
120	23-9/16	27-3/4	12-1/8	4-15/16	28-7/16	27	10-5/8	22-13/16	9-3/4	30-1/8	21-5/16	9	35-13/16	30-5/16	10-5/8	29-7/16	5-7/8
135	25-15/16	28-15/16	13-1/8	3-5/16	31-3/16	27-1/8	11-15/16	25-11/16	11	31-1/8	22-15/16	9-1/8	37-1/4	31-3/4	11-15/16	30-7/8	6-5/8
150	28-1/16	31-1/4	13-13/16	2-1/2	34-5/8	30-5/16	13-1/4	28-1/2	12-3/16	32-7/8	26-5/8	11-1/4	40-3/8	34-3/8	13-1/4	33-5/16	8-3/16
165	30-9/16	33-7/8	14-7/8		37-13/16	32-13/16	14-5/8	31-5/16	13-3/8	35-5/16	29-3/16	12-3/8	40-5/8	37-1/4	14-5/8	36-1/8	10-1/8
180	32-3/4	36-11/16	15-5/8		40-3/4	35-5/8	15-7/8	34-3/16	14-5/8	37-11/16	31-15/16	13-9/16	46-15/16	40-7/16	15-7/8	39-3/16	9-7/8
195	35-5/16	32	16-3/16		43-11/16	38-5/16	17-1/4	37	15-13/16	39-7/8	34-1/2	14-5/8	50-1/8	43-1/2	17-1/4	42-3/16	10-13/16
210	39-15/16	42-7/16	20		48-13/16	41-1/8	18-1/2	39-15/16	17-1/8	45-3/8	37-3/16	15-3/4	55-11/16	46-13/16	18-1/2	45-5/16	11
225	42	45-5/16	20-5/8		51-3/4	43-7/8	19-7/8	42-3/4	18-5/16	47-5/8	39-7/8	16-7/8	58-7/8	49-15/16	19-7/8	48-3/8	[illegible]
245	45-1/16	49-1/2	21-3/4	3	55-13/16	48	21-5/8	46-1/2	19-7/8	51-3/8	43-3/8	18-3/8	63-13/16	53-5/8	21-5/8	52-15/16	13-[illegible]
270	49-1/16	54-5/16	23-3/8		61-3/16	52-5/8	23-7/8	51-5/16	22-1/16	55-3/4	47-7/8	20-1/4	69-11/16	60	23-7/8	58-1/16	13-5/8
300	54-3/8	60	25-7/8		68-7/8	58-1/8	26-1/2	57	24-3/8	61-1/2	53-1/8	22-1/2	78	66-1/4	26-1/2	64-1/8	16-1/8
330	59-13/16	65-11/16	28-7/16		74-5/8	63-5/8	29-1/8	62-3/4	26-7/8	67-5/16	58-1/2	24-3/4	84-3/8	72-5/8	29-1/8	70-1/4	18-5/8
365	66-1/8	72-7/16	31-7/16		82-5/8	70-1/8	32-1/4	69-5/16	29-5/8	74-3/16	64-9/16	27-3/8	93-1/16	80	32-1/4	77-7/16	20-5/8
402	72-15/16	79-1/2	34-11/16		91	77-1/16	35-1/2	76-5/8	32-13/16	81-7/16	71-3/8	30-5/16	102-1/4	87-13/16	35-1/2	82	22-5/16
445	80-9/16	87-1/2	38-5/16		100-5/8	84-3/4	39-5/16	84-5/8	36-1/8	89-11/16	78-3/8	33-5/8	112-3/4	96-3/4	39-5/16	93-5/8	24-11/16
490	88-3/4	96-1/16	42-3/16		110-3/4	93	43-5/16	93-1/16	39-3/4	98-7/16	86-3/4	36-3/4	123-11/16	106-1/4	43-5/16	102-13/16	29-13/16


RAIN CAP
NOT SHOWN
9x9
10'-0"
10"Ø
12'-0" ±
PIANO HINGE
DOOR FOR
SIDE BAFFEL
EA SIDE
2000FPM
4'-0"
2'-6"
TANK
4'-0
1200CFM REG

ATTACHMENT E

MATERIAL SAFETY DATA SHEETS

MATERIAL SAFETY DATA SHEET	BJB ENTERPRISES, INC. 14791 FRANKLIN AVENUE TUSTIN, CA 92780 (714)734-8450
Emergency Phone: 1(800)424-9300 *** CHEMTREC ***	

TC-960 PART A

REVISION DATE:.....09/01/95 PRINT DATE:.....02/04/97

SECTION 1 PRODUCT IDENTIFICATION

PRODUCT NAME.. TC-960 PART A
PRODUCT CLASS. POLYURETHANE (RESIN)
CHEMICAL TYPE. POLYPROPYLENE GLYCOL, DIISOCYANATOMETHYLBENZENE TERMINATED

SECTION 2 HAZARDOUS INGREDIENTS

SUBSTANCE NAME/CAS NUMBER	OSHA TWA	ACGIH TWA	OTHER LIMITS	% (OPTIONAL)
Aromatic diisocyanate terminated polyoxypropylene glycol CAS# 9057-91-4	N/E	N/E	0.02 ppm	(100)
(2,4)(2,6) Toluene Diisocyanate CAS#'s 584-84-9, 91-08-7	.005 ppm	.005 ppm	OSHA STEL	1-2

SECTION 3 U.S. REGULATORY INFORMATION

TSCA..... All compents of this product are registered under the regulations of the Toxic Substance Control Act

SARA TITLE III, SECTION 313. Applicable Sec.313, (2,4)(2,6) Toluene Diisocyanate CAS#'s 584-84-9, 91-08-7, (TDI) 1-2%

SECTION 4 PHYSICAL/CHEMICAL PROPERTIES

APPEARANCE/ODOR..... Clear viscous liquid/Slight pungent
SPECIFIC GRAVITY (DENSITY). 1.04
BOILING POINT..... >400° F
VAPOR PRESSURE..... <0.025 @ 25° C
% VOLATILE..... Trace
SOLUBILITY IN WATER..... Slightly soluble reacts and foams
V.O.C..... None per EPA Ref Meth 24

SECTION 5 EMERGENCY AND FIRST AID PROCEDURES

IF IN EYE..... Flush eyes with running water for 15 minutes, seek medical attention.
IF ON SKIN..... Wash immediately with soap and water, remove and launder clothing before re-use
INHALATION..... Remove to fresh air, administer oxygen ifdifficulty breathing
INGESTION..... Induce vomiting or gastric suction
IN CASE OF FIRE..... Wear self contained breathing apparatus
SPILL OR LEAK..... Provide adequate ventilation-neutralize with decontamination solution in water. Absorb in sand and dispose of in unsealed drums. Washarea with strong detergent
DECONTAMINATION SOLUTION. Solution 1 -5% ammonia 10% isopropyl alcohol in water

SECTION 6 OCCUPATIONAL CONTROL RECOMMENDATIONS

EYE PROTECTION..... Splash goggles or chemical safety glasses
SKIN PROTECTION..... Rubber or neoprene gloves. Approved barrier cream.

TC-960 PART A

SECTION 6 OCCUPATIONAL CONTROL RECOMMENDATIONS CONT'D

RESPIRATORY PROTECTION. Self contained breathing apparatus in closed room or area. NIOSH approved cartridge face masks for chemical vapors

VENTILATION..... Mechanical preferred

SECTION 7 FIRE HAZARD AND PROTECTION DATA

FLASH POINT..... >350° F (closed cup)

EXTINGUISHING MEDIA..... Water, CO2, or dry chemical

SPECIAL FIRE FIGHTING PROCEDUR. Wear self-contained breathing apparatus

UNUSUAL FIRE/EXPLOSION HAZARD.. Avoid contact with strong oxidizers, strong acids, as sudden reaction may result in fire and toxic fumes, containing reduced oxides of carbon and nitrogen

SECTION 8 REACTIVITY DATA

STABILITY..... Stable

INCOMPATIBILITY-MATRLS TO AVOID... Moisture, acids, and amines. Moisture contamination, excessive heating, heavy metal catalysts.

POLYMERIZATION..... May occur

SECTION 9 HEALTH AND HAZARD DATA

EYES..... May cause irritation, redness, soreness, tearing

SKIN..... May cause irritation and possible allergic sensitivity with repeated contact

INHALATION/INGESTION..... Excessive vapors caused by heat or spray mist may cause respiratory problems and esthma like sensitization in some individuals

EXISTING MEDICAL CONDITIONS. Asthma or respiratory

SECTION 10 SPECIAL PRECAUTIONS, HANDLING, AND STORAGE DATA

HANDLING PRECAUTIONS..... Avoid skin contact. Keep containers tightly closed

STORAGE TEMPERATURE(MIN/MAX). (Not Applicable)

SHELF LIFE..... 6 months under mfg. recommended storage conditions

STORAGE..... Store indoors and preferably in a dry place. Keep containers tightly closed. Purge with inert gas before reclosing

SECTION 11 SPILL, LEAK, AND DISPOSAL PROCEDURES

SPILL OR LEAK PROCEDURLS. Provide adequate ventilation neutralize with solution 1-5% ammonia 10% isopropyl alcohol and the rest water. Absorb in sand and dispose of in unsealed drums. Wash area wth strong detergent and water

WASTE DISPOSAL..... Landfill burial unless prohibited

SECTION 12 SHIPPING INFORMATION

DOT SHIPPING NAME..... Non-restricted, N.O.I

TECHNICAL SHIPPING NAME... Plastic Material

DOT HAZARD CLASSIFICATION. Non-restricted

UN/NA NUMBER..... None

IATA CLASSIFICATION..... Non-restricted

DOT LABELS REQUIRED..... None

SECTION 13 EMERGENCY NOTICE

Contact CHEMTREC only in event of chemical emergencies of spills, leaks, fires, exposures, or accidents involving chemicals.

MATERIAL SAFETY DATA SHEET	BJB ENTERPRISES, INC. 13912 NAUTILUS DR. GARDEN GROVE, CA 92643 (714)554-4640
Emergency Phone: 1(800)424-9300 *** CHEMTREC ***	

TC-960 B-10 FLESH

REVISION DATE:.....07/18/96 PRINT DATE:.....07/18/96

SECTION 1 PRODUCT IDENTIFICATION

PRODUCT NAME.. TC-960 B-10 FLESH
PRODUCT CLASS. POLYURETHANE CURING AGENT
CHEMICAL TYPE. AROMATIC DIAMINE-GLYCOL MIXTURE

SECTION 2 HAZARDOUS INGREDIENTS

SUBSTANCE NAME/CAS NUMBER	OSHA TWA	ACGIH TWA	OTHER LIMITS	% (OPTIONAL)
AROMATIC DIAMINE CAS # 106264-79-3	N/E	N/E		5-10%
ARYL MERCURIC CARBOXYLATE CAS # 27236-65-3	0.1mg/m3	0.1mg/m3		<0.10

SECTION 3 U.S. REGULATORY INFORMATION

TSCA..... All compents of this product are registered under the regulations of the Toxic Substance Control Act
SARA TITLE III, (APPLICABLE). NA

SECTION 4 PHYSICAL/CHEMICAL PROPERTIES

APPEARANCE/ODOR..... Pink/Flesh/Slight Amine
SPECIFIC GRAVITY (DENSITY). 1.03
BOILING POINT..... N/A
VAPOR PRESSURE..... Low, <.01 mm Hg @ 20° C
% VOLATILE..... NIL
SOLUBILITY IN WATER..... Slightly soluble
V.O.C..... 10 gm/l per EPA Ref Meth 24

SECTION 5 EMERGENCY AND FIRST AID PROCEDURES

IF IN EYE..... Flush with water for 15 minutes. Seek medical follow-up
IF ON SKIN..... Wash with soap and water
INHALATION..... Not likely. Remove to fresh air
INGESTION..... Immediately drink water to dilute. Seek medical attention
IN CASE OF FIRE..... NFPA ratings not established
SPILL OR LEAK..... Absorb with sand, diatomaceous earth; contain spill; clean up with detergent and water
DECONTAMINATION SOLUTION. N/A

SECTION 6 OCCUPATIONAL CONTROL RECOMMENDATIONS

EYE PROTECTION..... Splash goggles or chemical safety glasses with side wings
SKIN PROTECTION..... Rubber or latex gloves
RESPIRATORY PROTECTION. Not normally required. Remove to fresh air
VENTILATION..... Exhaust any curing ovens to outside. Normal shop ventilation in work areas

MATERIAL SAFETY DATA SHEET

Ashland Chemical Co.

Date Prepared: 05/28/97
Date Printed: 08/19/97
MSDS No: 0000736-011.001

METHYLENE CHLORIDE TECH/INDUSTRIAL

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity
Product Name: METHYLENE CHLORIDE TECH/INDUSTRIAL
General or Generic ID: CHLORINATED HYDROCARBON

Company
Ashland Chemical Co.
P.O. Box 2219
Columbus, OH 43216
614-790-3333

Emergency Telephone Number:
1-800-ASHLAND (1-800-274-5263)
24 hours everyday

Regulatory Information Number:
1-800-325-3751

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)
METHYLENE CHLORIDE	75-09-2	100.0

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin

Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns and other skin damage. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Continued on next page

Other Health Effects
No data

Primary Route(s) of Entry
Inhalation, Skin absorption, Skin contact, Eye contact.

4. FIRST AID MEASURES

Eyes
If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin
Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing
Do not induce vomiting. This material is an aspiration hazard. If individual is drowsy or unconscious, place on left side with the head down. Seek medical attention. If possible, do not leave individual unattended.

Inhalation
If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Note to Physicians
Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material.

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Large Spill

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

Storage

Aluminum equipment should not be used for storage and/or transfer, e.g. pumps, mixers, fittings, storage tanks, etc. Contact with aluminum parts in a pressurizable fluid system may cause violent reactions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin Protection

Wear resistant gloves (consult your safety equipment supplier)., To prevent skin contact, wear impervious clothing and boots..

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Liquid Density
10.970 lbs/gal @ 77.00 F
1.320 kg/l @ 25.00 C

Percent Volatiles
100.0 %

Volatile Organic Compounds (VOC)
.000 %
> 999.000 g/l
10.970 lbs/gal

Evaporation Rate
1.80 (ETHYL ETHER)

Appearance
CLEAR COLORLESS LIQUID

State
LIQUID

Physical Form
NEAT

Color
CLEAR, PT-CO COLOR 10 MAX

Odor
MILDLY SWEET ODOR

pH
No data

Freezing Point
-142.1 F (-96.7 C)

Molecular Weight
83.9

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ATTACHMENT F

EMISSIONS CALCULATIONS

Material Composition and usage data

Class	Manufacturer	Material Name	Annual Usage, gal	density, lb/gal	lb VOC/gal	% VOC	Annual VOC Emissions, tons	Hourly potential Emissions, lb/hr
Solvent	Ashland Chemical Co.	Methylene Chloride (MC) Tech/Industrial	1000	10.97	10.97	100.0%	5.4850	27.4250
Urethane Resin	BJB	TC-960 A	2000	8.67	0.00	0.0%	0.0000	0.0000
Urethane Curing Agent	BJB	TC-960 B	1000	8.59	0.08	0.97%*	0.0417	0.2083
		Totals	**4000**				**5.53**	**27.6**

Material ratio, MC:A:B = 1:2:1

Assume 100% VOC losses from urethane during layup

Assume 100% MC losses during layup

Maximum usage rate: **10** gal/hr - based on production capacity

Maximum usage rate: **4000** gal/yr - based on production capacity

Emissions factor calculation:

formula = evaporation loss x Σ[lb VOC/gal x material ratio contribution] ÷ Σ[material ratio]

100% evaporation x [(10.97 x 1) + (0.00 x 2) + (.08 x 1)] ÷ 4 = **2.76** lb VOC/gal mixed adhesive

Existing emissions points' VOC emissions limits:

NSACSB Emissions Unit (E.U.)

(E.U.) ID No.	*Description*	*Permitted VOC Limit, tpy*
-007 (NSA-1)	NSA Paint Spray Booth (PSB) #1	2.82
-008 (NSA-2)	NSA PSB #2	5.65
-009 (NSA-3)	NSA PSB #3	5.65
-010 (NSA-5)	NSA Staff Shop PSB #1	0.08
-011 (NSA-6)	NSA Staff Shop PSB #2	0.63
-012 (NSA-7)	NSA Water Wash Plastisol PSB #1; includes a natural gas fired curing oven	0.53
-017 (NSA-11)	NSA Character Head Spray Box	0.94
-019 (NSA-12)	NSA Artist's Preparation Shop PSB	1.02
-025 (NSA-14)	NSA Paint Shop PSB #6	2.20
-027 (NSA-15)	NSA Central Shop Paint Mixing Stations (7)	1.19
Total existing VOC tpy		**20.7 tpy from existing E.U.**
		+ 5.5 tpy from urethane adhesive

New limit with Methylene chloride layup operation: **26.2** **tpy VOC**