

**AIR PERMIT APPLICATION**



**FLAIR CORPORATION (owned by SPX Corporation)  
4647 S.W. 40<sup>TH</sup> AVENUE  
OCALA, FLORIDA 34474  
Delta Project No. E005-411-2**

Prepared by:



**Delta**  
**Environmental**  
**Consultants, Inc.**

8008 Corporate Center Drive  
Charlotte, North Carolina 28226

May 2005

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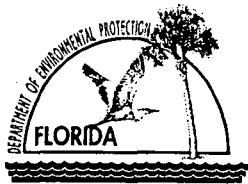
### Air Permit Application

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# Department of Environmental Protection

## Division of Air Resources Management

### APPLICATION FOR AIR PERMIT - NON-TITLE V SOURCE

See Instructions for Form No. 62-210.900(3)

#### I. APPLICATION INFORMATION

##### Identification of Facility

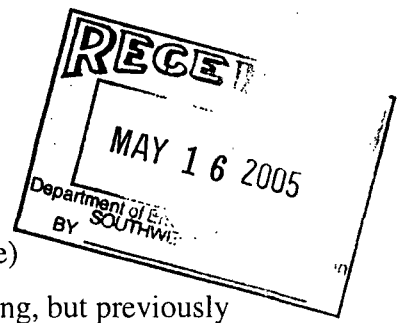
1. Facility Owner/Company Name: <i>Flair Corporation (owned by SPX Corporation)</i>	
2. Site Name: <i>Flair Corporation</i>	
3. Facility Identification Number: <i>0830084</i> [ ] Unknown	
4. Facility Location: <i>Flair Corporation</i> Street Address or Other Locator: <i>4647 S. W. 40<sup>th</sup> Avenue</i> City: <i>Ocala</i> County: <i>Marion</i> Zip Code: <i>34474-5722</i>	
5. Relocatable Facility? [ ] Yes [X] No	6. Existing Permitted Facility? [X] Yes [ ] No

##### Application Contact

1. Name and Title of Application Contact:  <i>Tom Brady</i> <i>Safety Environmental Manager</i>	
2. Application Contact Mailing Address: Organization/Firm: <i>Flair Corporation (owned by SPX Corporation)</i> Street Address: <i>4647 S. W. 40<sup>th</sup> Avenue</i> City: <i>Ocala</i> State: <i>Florida</i> Zip Code: <i>34474-5722</i>	
3. Application Contact Telephone Numbers: Telephone: <i>(352) 873 - 5706</i> Fax: <i>(352) 873 - 5755</i>	

##### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	<i>5-16-05</i>
2. Permit Number:	<i>0830084-006-AF</i>



**Purpose of Application**

**Air Operation Permit Application**

This Application for Air Permit is submitted to obtain: (Check one)

- Initial non-Title V air operation permit for one or more existing, but previously unpermitted, emissions units.
- Initial non-Title V air operation permit for one or more newly constructed or modified emissions units.

Current construction permit number: \_\_\_\_\_

- Non-Title V air operation permit revision to address one or more newly constructed or modified emissions units.

Current construction permit number: 0830084-005-AC

Operation permit number to be revised: 0830084-004-AF

- Initial non-Title V 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):  
\_\_\_\_\_

- Non-Title V air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g., to address one or more newly constructed or modified emissions units.

Operation permit number to be revised: \_\_\_\_\_

Reason for revision: \_\_\_\_\_

**Air Construction Permit Application**

This Application for Air Permit is submitted to obtain: (Check one)

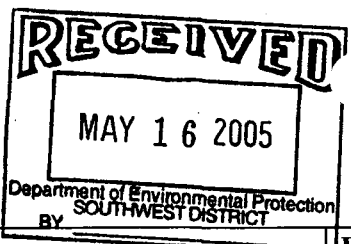
- Air construction permit to construct or modify one or more emissions units.
- Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.
- Air construction permit for one or more existing, but unpermitted, emissions units.



**Owner/Authorized Representative**

1. Name and Title of Owner/Authorized Representative: <p style="text-align: center;"><i>Tom Brady</i> <i>Safety Environmental Manager</i></p>		
2. Owner/Authorized Representative Mailing Address: Organization/Firm: <i>Flair Corporation</i> Street Address: <i>4647 S. W. 40<sup>th</sup> Avenue</i> City: <i>Ocala</i> State: <i>Florida</i> Zip Code: <i>34474-5722</i>		
3. Owner/Authorized Representative Telephone Numbers: Telephone: <i>(352) 873 - 5706</i> Fax: <i>(352) 873 - 5755</i>		
4. Owner/Authorized Representative Statement: <p><i>I, the undersigned, am the owner or authorized representative* of the facility addressed in this application. 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 unit</i></p> <p><i>Tom Brady</i>                                      <i>5/13/05</i> _____ Signature                                      Date</p>		

\* Attach letter of authorization if not currently on file.



**Scope of Application**

<b>Emissions Unit ID</b>	<b>Description of Emissions Unit</b>	<b>Permit Type</b>	<b>Processing Fee</b>
001	Modify E.U.-001 (Large and Small Spray Paint Areas) by adding a spray paint booth to the Large Area	AF2C	\$ 750

**Application Processing Fee**

Check one:  Attached - Amount: : \$ 750 \_\_\_\_\_  Not Applicable

**Construction/Modification Information**

1. Description of Proposed Project or Alterations:

Modification of E.U.-001 by adding a Binks SpraCure Really Clean AARC-50-630, 16' X 24' Spray paint booth as listed in the construction Permit No. 0830084-005-AC

2. Projected or Actual Date of Commencement of Construction: *09/2004*

3. Projected Date of Completion of Construction: *04/15/2005*

**Application Comment**

This operation permit application requests the addition of the above source to E.U. 001 – Spray Painting Booths. Potential emissions will not increase above the current permitted limits of 37.1 Tons VOC per 12-month period and <5.0 tons total HAPs per 12-month period.

## II. FACILITY INFORMATION

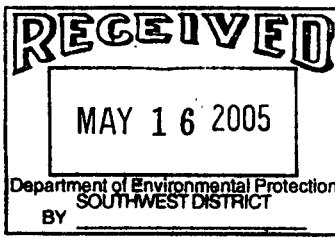
### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1. Facility UTM Coordinates:			
Zone: 17		East (km): 384444.717	North (km): 3224375.635
2. Facility Latitude/Longitude:			
Latitude (DD/MM/SS): 29: 08: 33.605N		Longitude (DD/MM/SS): 82: 11: 16.764W	
3. Governmental Facility Code:	4. Facility Status Code: A	5. Facility Major Group SIC Code: 35	6. Facility SIC(s): 3564
7. Facility Comment (limit to 500 characters):			

#### Facility Contact

1. Name and Title of Facility Contact: Tom Brady, Environmental Manager		
2. Facility Contact Mailing Address: Organization/Firm: Flair Corporation Street Address: 4647 S. W. 40 <sup>th</sup> Ave. City: Ocala                                  State: Florida                                  Zip Code: 34474		
3. Facility Contact Telephone Numbers: Telephone: (352) 873-5706                                  Fax: (352) 873-5755		



**Facility Regulatory Classifications**

Check all that apply:

1. <input type="checkbox"/> Small Business Stationary Source?	<input type="checkbox"/> Unknown
2. <input type="checkbox"/> * Synthetic Non-Title V Source?	
3. <input type="checkbox"/> Synthetic Minor Source of Pollutants Other than HAPs?	
4. <input type="checkbox"/> Synthetic Minor Source of HAPs?	
5. <input type="checkbox"/> One or More Emissions Units Subject to NSPS?	
6. <input type="checkbox"/> One or More Emission Units Subject to NESHAP Recordkeeping or Reporting?	
7. Facility Regulatory Classifications Comment (limit to 200 characters):	
*Based on the level of potential VOC and HAP emissions from worse case (i.e. 8760 hours per year) operation, this facility is considered a natural minor, non-Title V source, per Operating Permit No. 0830084-004-AF	

**Rule Applicability Analysis**

F.A.C. 62-212.300 – Preconstruction Review Requirements.  
62-212.300(3)(b) This facility will not be subject to 40 CFR 63, Subpart Mmmm: Surface Coating of miscellaneous metal parts and products since the facility is not a major source for HAPs.

F.A.C. 62-210.200: Total emissions of HAPs shall not exceed 5.0 tons per any 12 consecutive month period (Air Operation Permit No. 0830084-004-AF)

**B. FACILITY POLLUTANTS**

**List of Pollutants Emitted**

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap		4. Basis for Emissions Cap	5. Pollutant Comment
		lb/hour	tons/year		
VOC	SM	No Change	No Change		37.1 ton/yr of VOC per Operating Permit No. 0830084-004-AF
HAP	SM	No Change	No Change		< 5.0 tons/yr per Operating Permit No. 0830084-004-AF

### C. FACILITY SUPPLEMENTAL INFORMATION

#### Supplemental Requirements

1. Area Map Showing Facility Location: [X] Attached, Document ID: <u>Figure 1</u> [ ] Not Applicable [ ] Waiver Requested
2. Facility Plot Plan: [X] Attached, Document ID: <u>Figure 2</u> [ ] Not Applicable [ ] Waiver Requested
3. Process Flow Diagram(s): [X] Attached, Document ID: <u>Figure 3</u> [ ] Not Applicable [ ] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
5. Supplemental Information for Construction Permit Application: [ ] Attached, Document ID: _____ [X] Not Applicable
6. Supplemental Requirements Comment:  All Supplemental Requirements are submitted as attachments to this application.

**III. EMISSIONS UNIT INFORMATION**

A separate Emissions Unit Information Section (including subsections A through G as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

**A. GENERAL EMISSIONS UNIT INFORMATION**

**Emissions Unit Description and Status**

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input type="checkbox"/> 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).</p> <p><input checked="" type="checkbox"/> 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.</p> <p><input type="checkbox"/> 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.</p>		
<p>1. Description of Emissions Unit Addressed in This Section (limit to 60 characters):</p> <p style="text-align: center;">Large Paint Spray Booth (LPSB) &amp; Small Paint Spray Booth (SPSB) Area (Modification)</p>		
<p>3. Emissions Unit Identification Number: <span style="float: right;"><input type="checkbox"/> No ID</span></p> <p>ID: E.U. 001 <span style="float: right;"><input type="checkbox"/> ID Unknown</span></p>		
<p>4. Emissions Unit Status Code: A</p>	<p>5. Initial Startup Date: *</p>	<p>6. Emissions Unit Major Group SIC Code: 3564</p>
<p>5. Emissions Unit Comment: (Limit to 500 Characters)</p> <p>This Emissions Unit is currently permitted to operate 8,760 hrs per yr with a VOC emissions limit of 37.1 tons/yr and a total HAPs emissions limit of &lt; 5.0 tons/yr per Operating Permit No. 0830084-004-AF. The facility requests the addition of a Binks SpraCure Really Clean AARC-50-630 to the LPSB Area of E.U. 001. Emissions calculations are attached that include the additional spray booth. The facility will remain well below its permitted limit therefore is not requesting an increase. The facility requests that the AARC-50-630 be added to the permit as part of LPSB area.</p> <p>* LPSB is in operation. Binks SpraCure Really Clean paint booth began operation 4/18/2005 an additional source in LPSB.</p>		



**Emissions Unit Control Equipment**

8. Control Equipment/Method Description (limit to 200 characters per device or method):  The Spray Paint booths have dry filter arrestors which are an integral part of the booths.
2. Control Device or Method Code(s): NA

**Emissions Unit Details**

1. Package Unit: Manufacturer: Various Model Number:
2. Generator Nameplate Rating: MW
3. Incinerator Information: Dwell Temperature: NA °F Dwell Time: seconds Incinerator Afterburner Temperature: °F

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Heat Input Rate: NA mmBtu/hr
2. Maximum Incineration Rate: NA lb/hr tons/day
3. Maximum Process or Throughput Rate: See Comment
4. Maximum Production Rate: See Comment
5. Requested Maximum Operating Schedule: 24 hours/day 7 days/week 52 weeks/year 8760 hours/year
5. Operating Capacity/Schedule Comment (limit to 200 characters):  This Emissions Unit is currently permitted to operate 8,760 hrs per yr with a VOC emissions limit of 37.1 tons/yr and a total HAPs emissions limit of < 5.0 tons/yr per Operating permit No. 0830084-004-AF. There has been no change to operating hours and the VOC tons/yr increase is well below the permitted level. The facility is considered by FL-DEP to be a natural minor non-Title V source.

**B. EMISSION POINT (STACK/VENT) INFORMATION**

**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram? Large Paint Booth Area		2. Emission Point Type Code: 2	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): NA			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: E.U. -001			
5. Discharge Type Code: W	6. Stack Height: 45' feet	7. Exit Diameter: 2 feet	
8. Exit Temperature: Ambient °F	9. Actual Volumetric Flow Rate: 25,200 acfm	10. Water Vapor: Unknown %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: NA feet	
13. Emission Point UTM Coordinates: Zone:17 East (km): 3224375.635 North (km): 384444.717			
14. Emission Point Comment (limit to 200 characters):  E.U. -001 - The booths are equipped with filter arrestors to collect overspray and fans to exhaust fumes through a common 45' tall exhaust stack.			

**C. SEGMENT (PROCESS/FUEL) INFORMATION**

**Segment Description and Rate:** Segment \_\_\_\_\_ of \_\_\_\_\_

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Surface Coating (Painting) Operations.		
8. Source Classification Code (SCC): 3654		3. SCC Units: 1
4. Maximum Hourly Rate: 0.20 gal/hr	5. Maximum Annual Rate: 2,726 gal/yr*	6. Estimated Annual Activity Factor: NA
7. Maximum % Sulfur: NA	8. Maximum % Ash: NA	9. Million Btu per SCC Unit: NA
10. Segment Comment (limit to 200 characters):  *Maximum gallons per year are calculated using worst case paint HAPs wt% and max cleaning solvent HAP wt% to equal < 5.0 tons of total HAPs per year [Permit 0830084-002-AC total HAP limit], to establish the facility as a "non-Title V" source. See attached calculations in Appendix A.		

**Segment Description and Rate:** Segment \_\_\_\_\_ of \_\_\_\_\_

1. Segment Description (Process/Fuel Type ) (limit to 500 characters):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

**D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**

**Potential Emissions**

1. Pollutant Emitted: VOC		2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code: NA	4. Secondary Control Device Code: NA	5. Total Percent Efficiency of Control: NA	
6. Potential Emissions: 5.10 lb/hour 22 tons/year		7. Synthetically Limited? [ X ]	
8. Emission Factor: Reference: Mass Balance		9. Emissions Method Code: 2	
10. Calculation of Emissions (limit to 600 characters): VOC Emissions = (Assume) 100% VOC emissions from Worst Case paint Actual Emission(lbs/hr) = [Paint usage (gal) X Pollutant content (lbs/gal) / Operation hours] + (Cleaner usage (gal) X Pollutant content (lbs/gal) / Operation hours). Potential Emissions = Actual Emissions (lb/hr) X 8760 hrs.			
Pollutant Potential Emissions Comment (limit to 200 characters): This Emissions Unit is currently permitted to operate 8,760 hrs per yr with a VOC emissions limit of 37.1 tons/yr and a total HAPs emissions limit of < 5.0 tons/yr per Operating Permit No. 0830084-004-AF. The facility requests the addition of a Binks SpraCure AARC-50-630 to the LPSB Area of E.U. 001. Emissions calculations are attached that include the additional booth. The facility will remain well below its permitted limit therefore is not requesting an increase. The facility requests that the AARC-50-630 be added to the permit as part of LPSB area.			

**Allowable Emissions** Allowable Emissions \_\_\_\_\_ of \_\_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

**E. VISIBLE EMISSIONS INFORMATION**  
**(Only Emissions Units Subject to a VE Limitation)**

**Visible Emissions Limitation:** Visible Emissions Limitation \_\_\_\_\_ of \_\_\_\_\_

1. Visible Emissions Subtype: NA	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

**F. CONTINUOUS MONITOR INFORMATION**  
**(Only Emissions Units Subject to Continuous Monitoring)**

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_\_ of \_\_\_\_\_

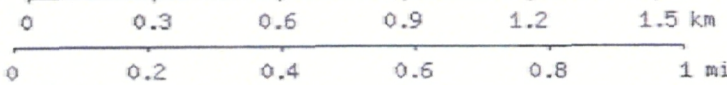
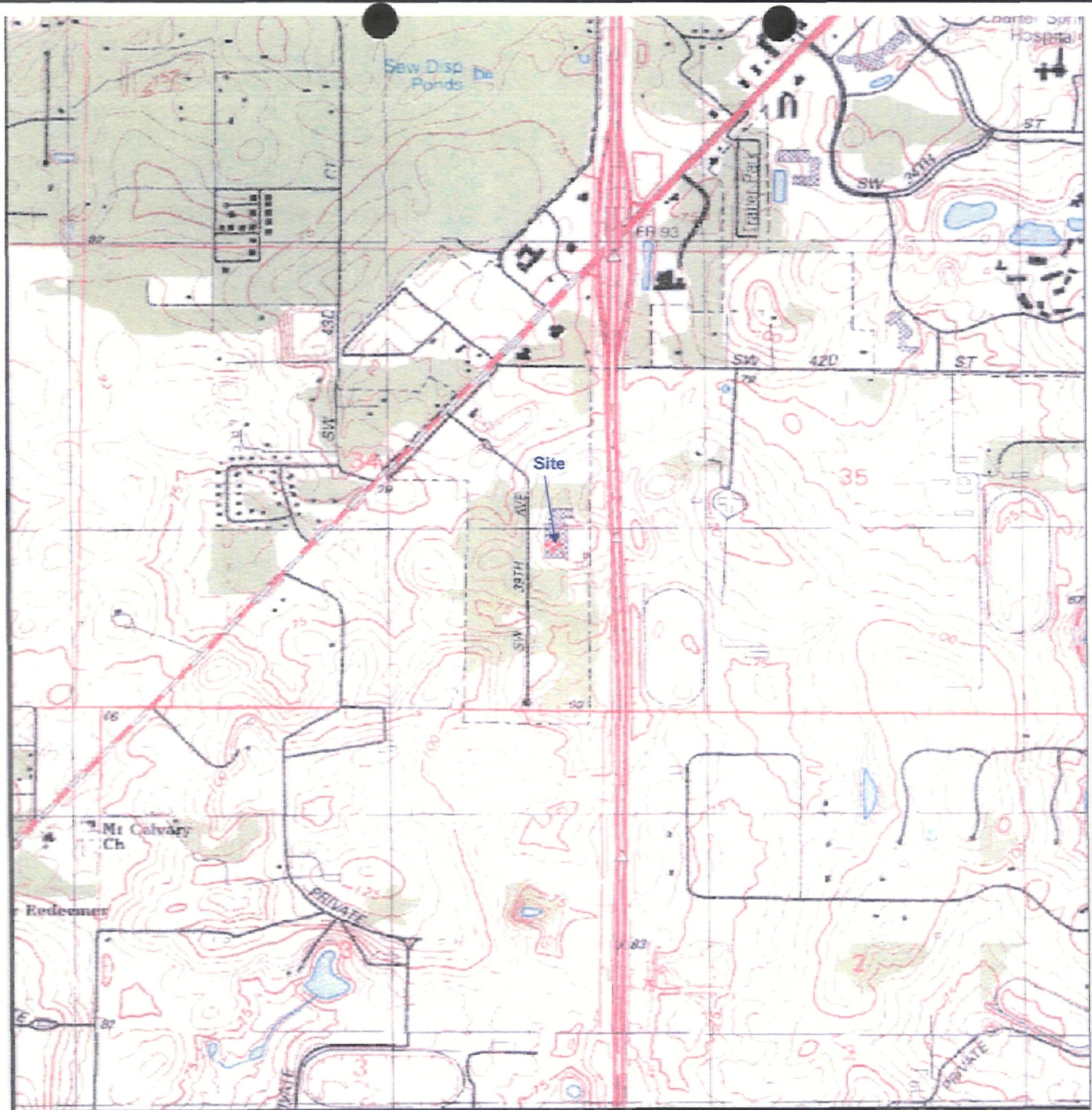
1. Parameter Code: NA	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

## G. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

### Supplemental Requirements

1. Process Flow Diagram <input checked="checked" type="checkbox"/> Attached, Document ID: <u>Figure 3</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment:





Map center is 29.1408°N, 82.1871°W (WGS84/NAD83)  
**Ocala West** quadrangle  
 Projection is UTM Zone 17 NAD83 Datum

M=-4.888  
 G=-0.578

**FIGURE 1 - TOPOGRAPHIC MAP**

Flair Corporation  
 4647 SW 40th Street  
 Ocala, Florida

PROJECT NO: E005-411-2  
 DATE: 4/18/2005  
 SCALE: NTS  
 DRAWN BY: TR

**Delta**  
 Environmental  
 Consultants, Inc.  
 8008 Corporate Center Drive, Suite 100  
 Charlotte, North Carolina 28226



Environmental  
Consultants, Inc.

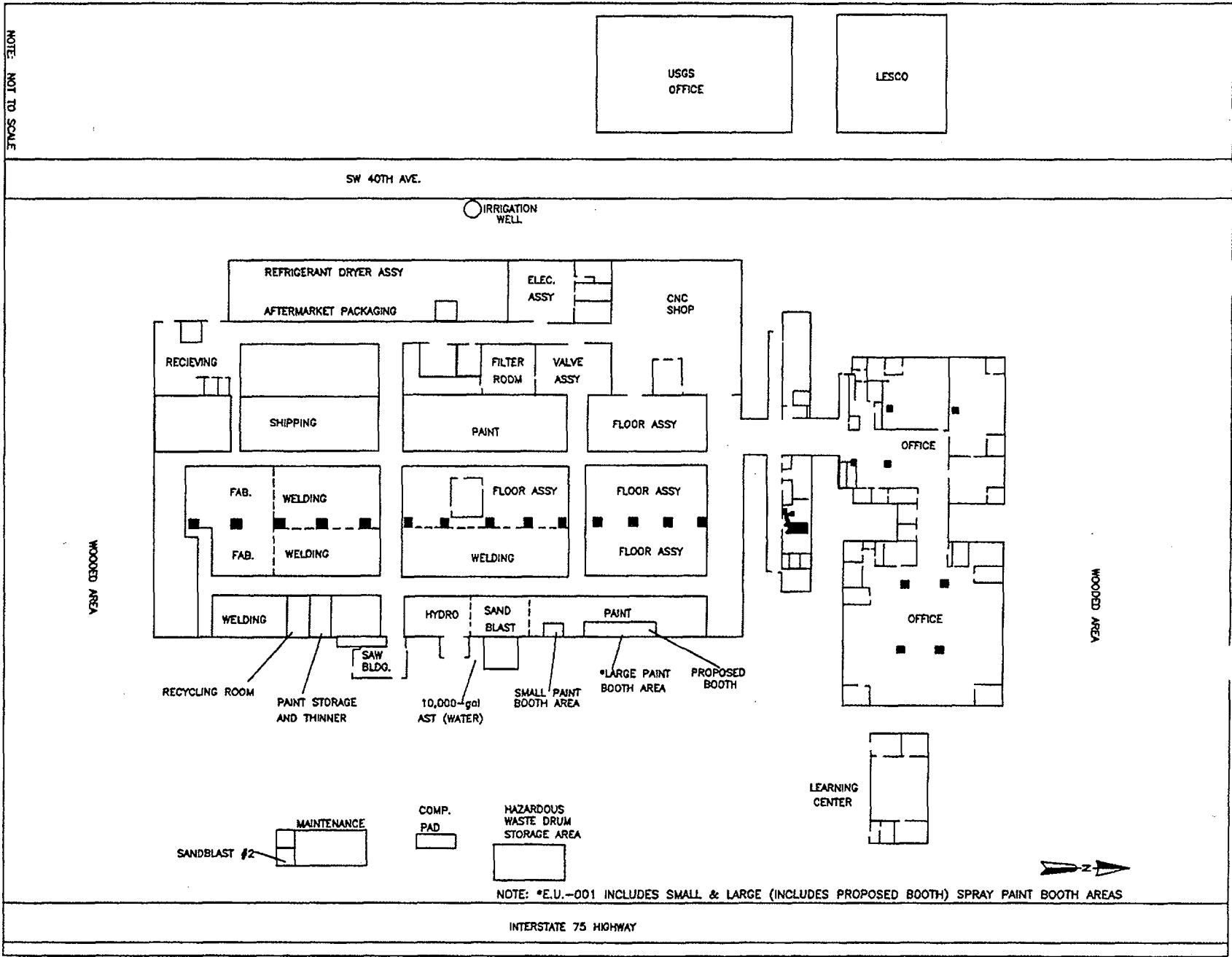
TITLE:  
**FLAIR CORPORATION**  
4647 SW 40TH AVE.  
OCALA, FLA.

DWR: MRC  
CHKD: TR  
DATE: 04/06/03

DES.: EJS  
APFD: DPC  
REV.:

PROJECT NO.: E005-411-2  
FIGURE NO.: 2

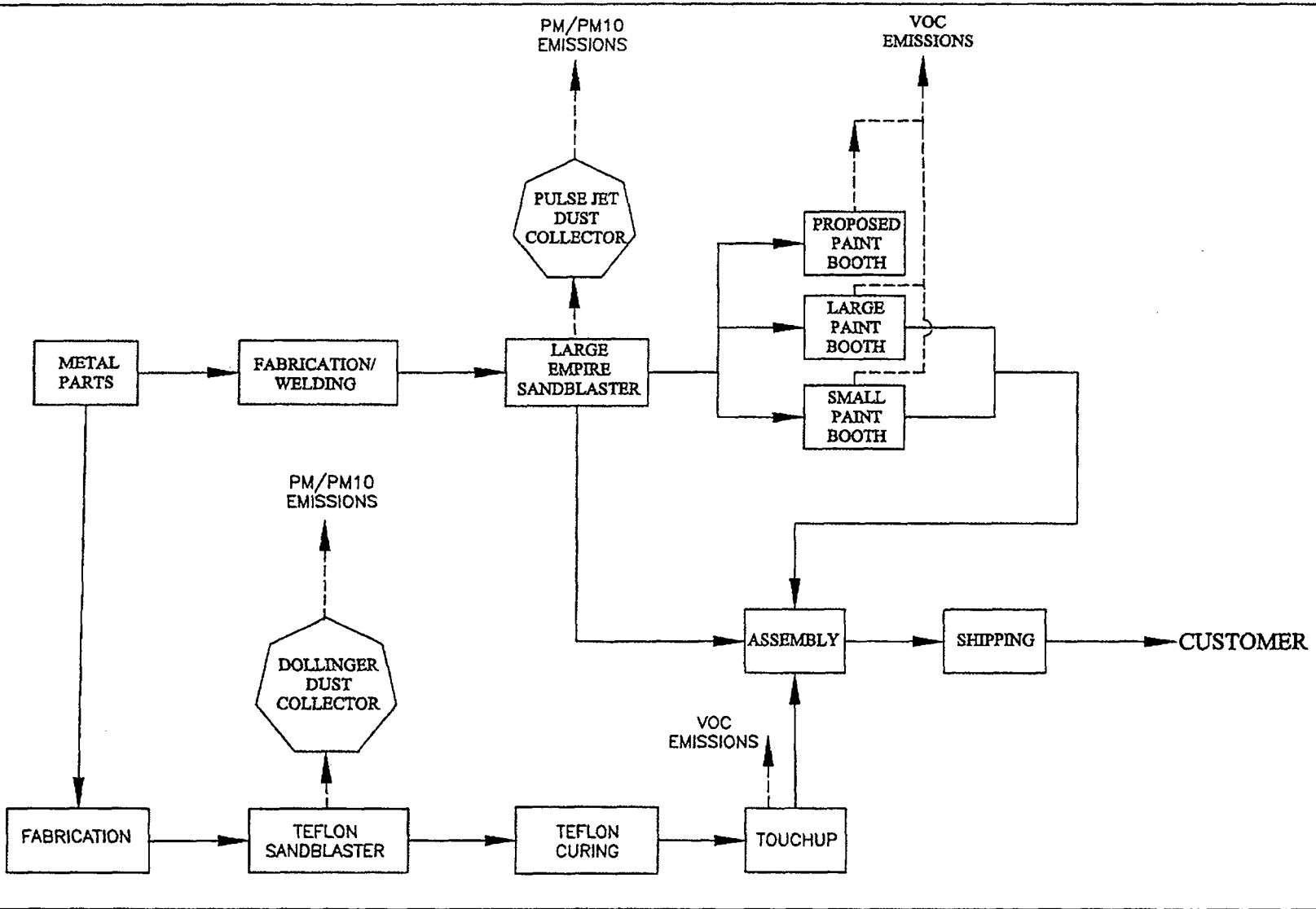
NOTE: NOT TO SCALE



NOTE: \*E.U.-001 INCLUDES SMALL & LARGE (INCLUDES PROPOSED BOOTH) SPRAY PAINT BOOTH AREAS

INTERSTATE 75 HIGHWAY





TITLE:  
 PROCESS FLOW DIAGRAM  
 FLAIR CORPORATION  
 OCALA, FLORIDA

DWN: NTH	DES.:
CHKD: TR	APPD: DPC
DATE: 10/09/02	REV.:

PROJECT NO.:  
E005-411-2

FIGURE NO.:  
3

**Proposed Spray Paint Booths Emissions Data**  
**Flair Corporation**  
**Ocala, Florida**  
**Delta Project No. E005- 411**

**Paint:**

Kem Flash Ultra-Bond Primers*	Density	11.73 lb/gal	
	VOCs	3.29 lb/gal	(per MSDS by Method 24)
	MIBK	1.17 lb/gal	(inclusive in VOC amount)
	n- Butyl Acetate	1.88 lb/gal	(inclusive in VOC amount)
Cleaning Solvent**	Density	7.19 lb/gal	
	VOCs	7.19 lb/gal	
	Xylene	7.19 lb/gal	(inclusive in VOC amount)

\* Worst case paint - per facility

\*\* Xylene solvent used for cleaning -per facility

**Proposed Paint Booth (Actual Paint) Throughput (per facility info)**

4 op hrs/day - 2.5 paint and 1.5 prep. Approximately .5 gal/day paint usage  
 paint usage/hr = (.5 gal X 1hr) / 2.5hrs per day = .20 gal/hr

**Potential Paint Booth (Maximum Paint & Cleaner) Throughput (per facility info)**

*Based on actual paint and cleaner usage, 71% of the total HAP emissions are derived from paint usage and 29% of total HAP emissions are derived from cleaning. Maximum throughput is calculated so total HAP emissions from cleaning and painting will not exceed 5.0 tons/yr, per Operating Permit No. 0830084-004-AF.*

$$\text{Maximum HAP Emissions (from Operating Permit)} = 4.99 \text{ tons/yr} = 9,980 \text{ lbs/yr}$$

$$\begin{aligned} \text{Maximum Allowable Paint Throughput (gal/yr)} &= [\% \text{ of Total HAP Emissions from Paint} \times \text{Maximum HAP Emissions (lb/yr)}] / \\ &\quad \text{Total HAPS in Paint (lb/gal)} \\ &= [0.71 \times 9,980 \text{ (lbs/yr)}] / [1.17 \text{ MIBK (lb/gal)} + 1.88 \text{ n-Butyl Acetate (lb/gal)}] \\ &= 2,323 \text{ gal/yr} \end{aligned}$$

$$\begin{aligned} \text{Maximum Allowable Cleaner Throughput (gal/yr)} &= [\% \text{ of Total HAP Emissions from Cleaner} \times \text{Maximum HAP Emissions (lb/yr)}] / \\ &\quad \text{Total HAPS in Cleaner (lb/gal)} \\ &= [0.29 \times 9,980 \text{ (lbs/yr)}] / [7.19 \text{ xylene (lb/gal)}] \\ &= 403 \text{ gal/yr} \end{aligned}$$

$$\text{Total Maximum Allowable Throughput (Paint and Cleaners)} = 2,726 \text{ gal/yr}$$

VOC and HAP Emissions Calculations - Spray Paint Booths (E.U. 001)  
 Flair Corporation  
 Ocala, Florida  
 Delta Project No. E005- 411

## Emissions Calculations

### VOC

#### Existing Paint Booths

Emission Point	Process Description	Actual Paint Usage (gal)*	Total Operation Hours		VOC Emissions <sup>1</sup>					
			Actual (hr/yr)	Potential (hr/yr)	Actual			Potential		
					lb/yr	lb/hr	tons/yr	lb/yr	lb/hr	tons/yr
Paint Booth Stack	Painting Metal	462.63	550.29	8,760	1,456	2.65	0.73	23,182	2.65	11.59
	Cleaning <sup>2</sup>	32.5	260	8,760	234	0.90	0.12	7,872	0.90	3.94
<b>Totals</b>					1,690	3.54	0.84	31,054	3.54	15.53

#### Proposed Paint Booth

Emission Point	Process Description	Proposed Actual Paint Usage (gal)*	Total Operation Hours		VOC Emissions					
			Proposed Actual (hr/yr)	Potential (hr/yr)	Proposed Actual			Potential		
					lb/yr	lb/hr	tons/yr	lb/yr	lb/hr	tons/yr
Paint Booth Stack	Painting Metal	111.06	550.29	8,760	362	0.66	0.18	5,764	0.66	2.88
	Cleaning	32.5	260	8,760	234	0.90	0.12	7,872	0.90	3.94
<b>Totals</b>					595.74	1.56	0.30	13,636	1.56	6.82

\* Data estimated from facility information

### Xylene

#### Existing Paint Booths

Emission Point	Process Description	Actual Cleaner Usage (gal)*	Total Operation Hours		Xylene Emissions					
			Actual (hr/yr)	Potential (hr/yr)	Actual			Potential		
					lb/yr	lb/hr	tons/yr	lb/yr	lb/hr	tons/yr
Paint Booth Stack	Cleaning	32.5	260	8,760	234	0.90	0.12	7,872	0.90	3.94
<b>Totals</b>					233.65	0.90	0.12	7,872	0.90	3.94

#### Proposed Paint Booth

Emission Point	Process Description	Proposed Actual Cleaner Usage (gal)*	Total Operation Hours		Xylene Emissions					
			Proposed Actual (hr/yr)	Potential (hr/yr)	Proposed Actual			Potential		
					lb/yr	lb/hr	tons/yr	lb/yr	lb/hr	tons/yr
Paint Booth Stack	Cleaning	32.5	260	8,760	234	0.90	0.12	7,872	0.90	3.94
<b>Totals</b>					233.65	0.90	0.12	7,872	0.90	3.94

\* Data estimated from facility information



VOC and HAP Emissions Calculations - Spray Paint Booths (E.U. 001)  
 Flair Corporation  
 Ocala, Florida  
 Delta Project No. E005- 411

MIBK

Existing Paint Booths<sup>3</sup>

Emission Point	Process Description	Actual Paint Usage (gal)*	Total Operation Hours		MIBK Emissions					
			Actual (hr/yr)	Potential (hr/yr)	Actual			Potential		
					lb/yr	lb/hr	tons/yr	lb/yr	lb/hr	tons/yr
Paint Booth Stack	Painting Metal	462.63	550.29	8,760	543	0.99	0.27	8,639	0.99	4.32
Totals					542.66	0.99	0.27	8,639	0.99	4.32

Proposed Paint Booth

Emission Point	Process Description	Proposed Actual Paint Usage (gal)*	Total Operation Hours		MIBK Emissions					
			Proposed Actual (hr/yr)	Potential (hr/yr)	Proposed Actual			Potential		
					lb/yr	lb/hr	tons/yr	lb/yr	lb/hr	tons/yr
Paint Booth Stack	Painting Metal	111.06	550.29	8,760	130	0.24	0.07	2,074	0.24	1.04
Totals					130.27	0.24	0.07	2,074	0.24	1.04

\* Data estimated from facility information

n- Butyl Acetate

Existing Paint Booths<sup>3</sup>

Emission Point	Process Description	Actual Paint Usage (gal)*	Total Operation Hours		n- Butyl Acetate Emissions					
			Actual (hr/yr)	Potential (hr/yr)	Actual			Potential		
					lb/yr	lb/hr	tons/yr	lb/yr	lb/hr	tons/yr
Paint Booth Stack	Painting Metal	462.63	550.29	8,760	868	1.58	0.43	13,822	1.58	6.91
Totals					868.26	1.58	0.43	13,822	1.58	6.91

Proposed Paint Booth

Emission Point	Process Description	Proposed Actual Paint Usage (gal)*	Total Operation Hours		n- Butyl Acetate Emissions					
			Proposed Actual (hr/yr)	Potential (hr/yr)	Proposed Actual			Potential		
					lb/yr	lb/hr	tons/yr	lb/yr	lb/hr	tons/yr
Paint Booth Stack	Painting Metal	111.06	550.29	8,760	208	0.38	0.10	3,318	0.38	1.66
Totals					208.44	0.38	0.10	3,318	0.38	1.66

\* Data estimated from facility information

**VOC and HAP Emissions Calculations - Spray Paint Booths (E.U. 001)**

**Flair Corporation**

**Ocala, Florida**

**Delta Project No. E005- 411**

**Summary**

Emissions	Existing Paint Booths		Proposed Paint Booth		Total Emissions After Modification		Current Limit (tons/yr) per Operating Permit No. 0830084-004-AF
	Potential lbs/hr	Potential tons/yr	Potential lbs/hr	Potential tons/yr	Potential lbs/hr	Potential tons/yr	
<b>VOC</b>	3.54	15.53	1.56	6.82	5.10	22.34	<b>37.10</b>
<b>Total Haps<sup>3</sup></b>	3.46	4.99 **	1.51	4.99 **	4.98	4.99 **	<b>5.00</b>

\*\* Total Haps not to exceed 5.0 tons/yr per Operating Permit No. 0830084-004-AF

**Notes:**

- Assume 100% VOCs and HAPs are emitted. Assume cleaning of paint equipment takes 1 hour.  

$$\text{Actual Paint Annual usage (gal/yr)} = [\text{Actual \# gals used in 12 month span (10/01 - 10/02)}]$$
- Paint Cleaner Annual VOC (lb/yr) =  $[\text{Actual \# (pints/hr)} / 8 \text{ (pints/gal)}] \times \text{Cleaner Density (lbs/gal)} \times \text{Paint Booth Operation (hrs/yr)}$
- Existing & Proposed Haps figures calculated using worst case paint (VOC) at approximately .50 gals/day
  - Potential Paint usage (lb/yr) =  $[\text{Actual Paint Usage (lb/yr)} / \text{Actual Paint (hr/yr)}] \times 8,760 \text{ hr/yr}$
  - Potential Paint Cleaner usage (lb/yr) =  $[\text{Actual Paint Cleaner Usage (lb/yr)} / \text{Actual Paint Booth Operation (hr/yr)}] \times 8,760 \text{ hr/yr}$
  - Actual Emissions (lb/yr) =  $\text{Actual Annual Usage (lb/yr)} \times [\text{Wt. Pollutant (lb/gal)} / \text{Product Density (lb/gal)}]$
  - Actual Emissions (lb/hr) =  $\text{Actual Emissions (lb/yr)} / \text{Actual Operation Hours (hr/yr)}$
  - Potential Emissions (lb/hr) =  $\text{Actual Emissions (lb/hr)} \times 8,760 \text{ hr/yr}$
- Per facility, Paint booth uses approximately 1 to 2 pints of paint per day in 2.5 hours of operation time, and uses xylene to clean paint reservoir (approximately 1 pint per cleaning). No paint thinner is utilized.  
 Facility operates: 8 hrs/day, 5 days/wk, 50 wks/yr

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— Section 1 —  
Product Identification



# Material Safety Data Sheet

The Sherwin-Williams Co.  
101 Prospect Ave. N.W.  
Cleveland, OH 44115

Emergency telephone number  
information telephone number  
Date of preparation

(216) 566-2917  
(216) 566-2902  
March 21, 2000

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## KEM FLASH® ULTRA-BOND™ Primers

## E61-KFU

— Section 2 —		ACGIH	OSHA	Vapor	E61A705	E61B707	E61R708	E61W708	% B Y W E I G H T
CAS No.	Hazardous Ingredients (percent by weight)	TLV <STEL>	PEL <STEL>	Pressure (mm Hg)	Gray	Black	Red Oxide	White	
108-10-1 §	Methyl Isobutyl Ketone.	50 <75>	50 <75>	PPM	16.0	10	11	10	11
123-86-4	n-Butyl Acetate.	150 <200>	150 <200>	PPM	10.0	16	16	16	15
112926-00-8	Amorphous Precipitated Silica	10	6	Mg/M3 as Dust		1	1	1	1
471-34-1	Calcium Carbonate.	10	16[5]	Mg/M3 as Dust (Resp. Fraction)		33	38	34	28
13463-67-7	Titanium Dioxide.	10	10[5]	Mg/M3 as Dust (Resp. Fraction)		10			15
1314-13-2	Zinc Oxide	10	10[5]	Mg/M3 as Dust (Resp. Fraction)		3	3	3	3
1339-86-4	Carbon Black.	3.5	3.5	Mg/M3		0.1	2	0.2	
§	Zinc Compound. [% Zinc]					5 [3.4]	5 [3.5]	5 [3.4]	5 [3.3]
	Weight per Gallon (lbs.)					11.73	11.26	11.82	11.93
	Solids by Weight (%)					71.9	70.7	72.1	72.3
	Solids by Volume (%)					63.9	53.1	53.3	53.1
	Volatile Organic Compounds (VOC - lbs./gal.)					3.29	3.80	3.29	3.29
	Photochemically Reactive					Yes	Yes	Yes	Yes
	Flash Point (°F)					60	60	60	60
	HMIS (NFPA) Rating (health - flammability - reactivity)					2* - 3 - 0	2* - 3 - 0	2* - 3 - 0	2 - 3 - 0

§ Ingredient subject to the reporting requirements of the Superfund Amendments and Reauthorization Act (SARA) Section 313, 40 CFR 372.65 C

→→→ MSDS Text Page Follows →→→

## Section 3 — Physical Data

PRODUCT WEIGHT	See TABLE	EVAPORATION RATE	Slower than ether
SPECIFIC GRAVITY	1.35-1.44	VAPOR DENSITY	Heavier than Air
BOILING RANGE	217-264 °F	MELTING POINT	N.A.
VOLATILE VOLUME	45 %	SOLUBILITY IN WATER	N.A.

## Section 4 — Fire And Explosion Hazard Data

FLAMMABILITY CLASSIFICATION FLASH POINT See TABLE LEL 1.4 UEL 7.6  
 RED LABEL - Flammable, Flash below 100 °F

### EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam  
**UNUSUAL FIRE AND EXPLOSION HAZARDS**

Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, and open flame. Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

### SPECIAL FIRE FIGHTING PROCEDURES

All protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

## Section 5 — Health Hazard Data

### ROUTES OF EXPOSURE

Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

### ACUTE Health Hazards

#### EFFECTS OF OVEREXPOSURE

Irritation of eyes, skin and respiratory system. May cause nervous system depression. Extremes overexposure may result in unconsciousness and possibly death.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

#### MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

#### EMERGENCY AND FIRST AID PROCEDURES

**IF INHALED:** If affected, remove from exposure. Restore breathing. Keep warm and quiet.

**IF ON SKIN:** Wash affected area thoroughly with soap and water.

Remove contaminated clothing and launder before re-use.

**IF IN EYES:** Flush eyes with large amounts of water for 15 minutes. Get medical attention.

**IF SWALLOWED:** Get medical attention.

#### CHRONIC Health Hazards

Carbon black is classified by IARC as possibly carcinogenic to humans (group 2B) based on experimental animal data, however, there is insufficient evidence in humans for its carcinogenicity.

Prolonged overexposure to solvent ingredients in Section 2 may cause adverse effects to the urinary and blood forming systems.

Rats exposed to titanium dioxide dust at 250 mg./m<sup>3</sup> developed lung cancer, however, such exposure levels are not attainable in the workplace.

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

## Section 6 — Reactivity Data

### STABILITY - Stable

### CONDITIONS TO AVOID

None known.

### INCOMPATIBILITY

None known.

### HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide, Oxides of Metals in Section 2

HAZARDOUS POLYMERIZATION - Will Not Occur

## Section 7 — Spill Or Leak Procedures

### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate and remove with inert absorbent.

### WASTE DISPOSAL METHOD

Waste from these products may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 241. Waste must be tested for ignitability and to determine the applicable EPA hazardous waste numbers.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

## Section 8 — Protection Information

### PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation. Avoid breathing vapor or spray mist. Avoid contact with skin and eyes.

These coatings may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg./m<sup>3</sup> (total dust), 3 mg./m<sup>3</sup> (respirable fraction), OSHA PEL 15 mg./m<sup>3</sup> (total dust), 5 mg./m<sup>3</sup> (respirable fraction).

### VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

### RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding, wirebrushing, abrading, burning or welding the dried film, wear a particulate respirator approved by NIOSH/MSHA for protection against non-volatile materials in Section 2.

### PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

### EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

## Section 9 — Precautions

### DOL STORAGE CATEGORY - 1B

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Contents are FLAMMABLE. Keep away from heat, sparks, and open flame.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

### OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

## Section 10 — Other Regulatory Information

### CALIFORNIA PROPOSITION 65

WARNING: These products contain a chemical known to the State of California to cause cancer.

### TSCA CERTIFICATION

All chemicals in these products are listed, or are exempt from listing, on the TSCA Inventory.

The above information pertains to these products as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to these products may substantially alter the composition and hazards of the products. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.