

TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

Florida Production Engineering, Inc.
Volusia County

DEP File No. 1270102-004-AC
MACT-FL-003

Department of Environmental Protection
Division of Air Resources Management
Southeast District Office
Air Program

June 8, 1999

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. GENERAL INFORMATION

1.1 APPLICANT NAME AND ADDRESS

Florida Production Engineering, Inc.
2 Tower Circle West
Ormond Beach, FL 32171-8759

Authorized Representative: Mark E. Kirby, Plant Manager

1.2 REVIEWING AND PROCESS SCHEDULE

December 2, 1998	Received permit application
December 31, 1998	Department's request for additional information
January 25, 1999	Received response to request for additional information
February 19, 1999	Department's request for additional information
February 25, 1999	Received response to request for additional information
March 9, 1999	Department's request for additional information
March 19, 1999	Received response to request for additional information
	Application complete

2. FACILITY INFORMATION

2.1 FACILITY LOCATION

The facility is located at 2 Tower Circle West Ormond Beach, Volusia County. The UTM coordinates are Zone 17; 488.3 km E; 3240.3 km N.

2.2 STANDARD INDUSTRIAL CLASSIFICATION CODES (SIC)

Industry Group No.	30	Rubber and Miscellaneous Plastics Products
Industry No.	3089	Plastic Products not Elsewhere Classified

2.3 FACILITY CATEGORY

It is classified as a Major Title V Source of air pollution because emissions of at least one regulated hazardous air pollutant (HAP), such as xylene, exceeds 10 tons per year (TPY). Because emissions are greater than 10 TPY for at least one HAP and construction will begin after July 1, 1997, the facility is also major with respect to Florida Administrative Code Rule 62-204.800(10)(d)2, Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Sections 112(g) and 112(j).

B. PROJECT DESCRIPTION

This project addresses the following emissions unit:

EMISSIONS UNIT NO.	EMISSIONS UNIT DESCRIPTION
001	Four Identical Cells, each containing two promoter and topcoat spray booths and a gas fired curing oven

This permitting action is to allow the construction of four manufacturing cells (B, C, D, and E) for coating automobile airbag covers. The applicant proposes an annual production rate of 3,528,000 coated airbag covers. Through this permitting

Florida Production Engineering, Inc.
Construction of Four Manufacturing Cells: B,C, D, E

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action, the Maximum Available Control Technology (MACT) floor for new sources will be set for similar manufacturing cells, nationwide.

4. PROJECT EMISSIONS

The emissions associated with this project are primarily HAPs and VOCs. The applicant estimated total HAPs at 118 TPY and VOCs at 164 TPY.

The following table summarizes the potential maximum emissions in TPY:

Pollutant	Potential Maximum Emissions	HAP Threshold Limit ¹	Subject to 112(g) Review?
MEK	65.4	10	yes
Toluene	21.1	10	yes
Xylene	31.3	10	yes

¹ Rule 62-210.200(178)(a)

The proposed project results in emission increases for a single HAP that are greater than the HAP threshold limit of 10 TPY and each cell does produce a final product. Therefore, the construction of the proposed manufacturing cells is subject to review under 112(g).

5. RULE APPLICABILITY

The proposed project is subject to preconstruction review requirements under the provisions of Chapter 403, Florida Statutes, and Chapters 62-4, 62-204, 62-210, 62-213, 62-297 of the Florida Administrative Code (F.A.C) and 40 CFR 63.

5.1 STATE REGULATIONS

Chapter 62-4	Permits
Rule 62-204.800	Federal Regulations Adopted by Reference
Rule 62-210.200	Definitions
Rule 62-210.300	Permits Required
Rule 62-210.350	Public Notice and Comments
Rule 62-210.370	Reports
Rule 62-210.650	Circumvention
Rule 62-210.900	Forms and Instructions
Rule 62-296.320	General Pollutant Emission Limiting Standards
Rule 62-297.310	General Test Requirements
Rule 62-297.401	Compliance Test Methods

5.2 FEDERAL RULES

40 CFR 63 National Emission Standards for Hazardous Air Pollutants for Source Categories

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

6. AIR POLLUTION CONTROL TECHNIQUES

For new sources, MACT means: *the emission limitation which is not less stringent than the emission limitation achieved by the best controlled similar source and which reflects the maximum degree of reduction in emissions that the permitting authority, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirement, determines is achievable ...*¹ Similar source is defined at 40 CFR 63.41 as an emissions unit that has comparable emissions and is structurally similar in design and capacity to other emission units such that the emission units could be controlled using the same control technology. *For the purposes of Section 112(g), two criteria should be used to determine if a source is similar: (1) whether the two sources have similar emission types, and (2) whether the sources can be controlled with the same type of control technology. For new sources, permitting authorities and operator/owner of sources are expected to consider controls on sources across the United States as opposed to considering just the controls used on sources in a particular state.*²

The best controlled similar source within the source category of plastic products not elsewhere classified (SIC 3089) is Mayco Plastic (MP), a manufacturer of airbag covers, located in Sterling Heights, Michigan. This facility meets the criteria mentioned above for a similar source. *If fact, MP in 1998 coated 3.72 million airbags covers. In addition, MP uses robotics to apply coatings with High Volume Low Pressure (HVLP) spray guns. The VOC contents in lbs/gal are: topcoat (G52AV68) at 3.55, catalyst (V66VM100) at 3.79 and promoter (E75BR900) at 6.44*^{3,4} For MP, the two component system application of topcoat with catalyst yields a VOC content of 3.61 lbs/gal as applied. The mixing ratio for polymerization is 3.5 parts topcoat to 1 part catalyst (3.5:1). The applicant, on the other hand, proposes to coat 3.53 million parts per year with VOC contents (in lbs/gal) for topcoat at 4.69, catalyst at 4.07 and promoter at 6.73. The two component system for the applicant yields a VOC content of 4.61 lbs/gal as applied. The mixing ratio for polymerization is 6 parts topcoat to 1 part catalyst (6:1). All VOC contents for the applicant exceed MP's VOC contents.

According to Sherwin Williams, coating/catalyst manufacturer for MP, the VOC content for the two component system consisting of topcoat (G52AV68) and catalyst can be as low as 3.22 lbs/gal as applied, provided the topcoat is mixed with a 100 percent catalyst (V66VC151) for polymerization. The mixing ratio for polymerization is 7 parts topcoat to 1 part catalyst (7:1); the VOC contents in lbs/gal for topcoat (G52AV68) and catalyst (V66VC151) are 3.55 and 0.917, respectively.⁵

The state of California has Rule 1145 in place which limits the VOC content of two component systems to 3.5 lbs/gal. No surface coating company for airbag covers was found. However, California Hi-Tech Finishing, does coat plastic parts for the interior and exterior of automobiles and is complying with the 3.5 lbs/gal limit according to the company president.

7. CONCLUSION

Based on the foregoing technical evaluation of the application and additional information submitted by the applicant and other available information, the Department has made a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations, provided the applicant complies with MACT as listed below:

- VOC coating content limit of 3.22 lbs/gal (maximum) as applied for topcoat spraybooths.
- VOC coating content limit of 6.44 lbs/gal (maximum) as applied for promoter spraybooths.
- Use HVLP spray guns with robotics in all spraybooths.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

This technical evaluation and preliminary determination was drafted by:

Lennon Anderson, EIT
Department of Environmental Protection
Southeast District
400 North Congress Avenue
West Palm Beach, FL 33416
561/681-6632

REFERENCES

¹ 40 CFR 63.41, definition of MACT.

² Federal Register / Vol. 61, No. 250 / Friday, December 27, 1996, p. 68394.

³ Conversation with company environmental engineer at Mayco on May 13, 1999.

⁴ MSDS from Sherwin Williams

⁵ MSDS from Bayer Corporation and Sherwin Williams

MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT)
DETERMINATION

Florida Production Engineering
Plastic Products not elsewhere Classified (SIC 3089)
Volusia County

DEP File No. 1270102-004-AC
MACT-FL-003

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

June 7, 1999

Florida Production Engineering Inc., the applicant, proposes to operate four manufacturing cells for coating automobile airbag covers at 2 Tower Circle West, Ormond Beach, Volusia County, Florida.

The applicant states the maximum annual production of airbag covers is 3,528,000 units. The applicant has indicated the maximum annual tonnage of regulated hazardous air pollutants (HAPs) emitted from the facility to be as follows:

Pollutant	Potential Maximum Emissions	HAP Threshold Limit ¹	Subject to 112(g) Review?
MEK	65.4	10	yes
Toluene	21.1	10	yes
Xylene	31.3	10	yes

¹ Rule 62-210.200(178)(a)

Florida Administrative Code Rule 62-204.800(10)(d)2 requires a MACT review for all major sources of HAPs that are to be constructed or reconstructed, unless:

1. The source is specifically regulated or exempted from regulation under a standard issued pursuant to Section 112(d) "Emission Standards," Section 112(h) "Work Practice Standards and Other Requirements," or Section 112(j) "Equivalent Emission Limitation by Permit," and incorporated in another subpart of 40 CFR Part 63; or
2. The owner or operator of the major source received an air construction permit for the construction or reconstruction project before July 1, 1997, or the source was constructed or reconstructed before July 1, 1997.

The MACT applies to HAPs emitted in an amount equal to or greater than 10 tons/year for a single HAP and/or 25 tons/year for a combination of HAPs. As shown in the table above, MACT applies to all pollutant listed.

Date of Receipt of MACT Proposal

December 2, 1998

MACT Determination Requested by the Applicant

Pollutant	Proposed Determination
MEK	VOC content of 4.63 lbs/gal for topcoat w/ catalyst
Toluene	VOC content of 6.73 lbs/gal for promoter
Xylene	VOC content of 4.63 and 6.73 lbs/gal for topcoat w/cat. and promoter, respectively

MACT Determination Procedure

In accordance with 40 CFR 63, Subpart B, which was adopted in Florida Administrative Code Chapter 62-204, this MACT Determination is based on the maximum degree of reduction in emissions of each HAP taking into account, on a case by case basis, the cost of achieving such emission reduction, and any non-air quality health impacts, environmental impacts, and energy requirements. In addition, the regulations state that in making the MACT Determination, the Department should give consideration to:

- (a) Any Environmental Protection Agency proposed relevant emission standard pursuant to section 112(d) or section 112(h) of the Act or an adopted presumptive MACT determination for the source category which includes the constructed or reconstructed major source.
- (b) Available information as defined in 40 CFR 63.41.

The EPA stresses that MACT should be determined by using the two step approach. Step 1 is "Establishing the MACT floor" and step 2 is "Going beyond the MACT floor".

For new and reconstructed facilities, the MACT standard must be at least as stringent as the emission control achieved in practice by the single best controlled similar facility within the category or subcategory. Thus, a single plant's level of control appears to establish the "floor" for new sources, regardless of whether this control level can be met by other companies with different economic circumstances.

Step one

The MACT floor using VOC contents (in lbs/gal) to limit HAPs for new and reconstructed airbag-cover manufacturing facilities that are similar to the subject facility is 3.55 for topcoat, 3.79 for catalyst and 6.44 for promoter. The materials are applied using robotics with high volume low pressure (HVLV) spray systems. The VOC content as applied in the topcoat and promoter spraybooths are 3.61 and 6.44 lbs/gal., respectively (see Technical Evaluation and Preliminary Determination).

3.61?

Step two

Going beyond the MACT floor in step one is recommended based on information provided by one of the manufacturers of coatings, Sherwin Williams (SW). According to SW the VOC content for a two component system can be as low as 3.22 lbs/gal as applied (see Technical Evaluation and Preliminary Determination).

MACT Determination

Based on the information presented by the applicant and the studies conducted, MACT for the subject facility is listed below:

- VOC coating content limit of 3.22 lbs/gal (maximum) as applied for topcoat spraybooths.
- VOC coating content limit of 6.44 lbs/gal (maximum) as applied for promoter spraybooths.
- Use HVLV spray guns with robotics in all spraybooths.

Details of the Analysis may be Obtained by Contacting:

4, 2

Lennon Anderson, MACT Coordinator
Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

Recommended by:

Cindy L. Phillips 6-9-99
Cindy L. Phillips, P.E. Date
Air Toxics/Title III Section
Bureau of Air Regulation


Approved by:

Howard L. Rhodes 6/10/99
Howard L. Rhodes, Director Date
Division of Air Resources Management

C. H. Fancy 6/10/99
C. H. Fancy, P.E. Date
Chief
Bureau of Air Regulation

P.E. Certification Statement

I HEREBY CERTIFY that the engineering features described in the above referenced application, and subject to the proposed MACT, provide reasonable assurance of compliance with applicable provisions of Florida Administrative Code, Rule 62-204.800(10)(d)2. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).

 (Seal)
C. L. Phillips 6-9-99
Date
Registration Number: 50246



Department of Environmental Protection

RECEIVED

JAN 06 1999

BUREAU OF
AIR REGULATION

Lawton Chiles
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Virginia B. Wetherell
Secretary

AIR RESOURCES COMPLETENESS REVIEW

SOURCE NAME: Air Bag Production, Cells B,C,D,E DATE RECEIVED: 12/02/98
APPLICANT: Mark Kirby, Plant Manager DATE REVIEWED: 12/31/98

ADDRESS: Florida Production Engineering, Inc. FILE: 1270102-004-AC
2 Tower Circle West
Ormond Beach, Florida 32174-8759

Your application for this project has been received and reviewed for completeness. The following items are needed from a professional engineer to complete your application.

The following issues were developed by the permitting section in Tallahassee. Provide answers to these comments and copy this office with the response.

1. Transfer efficiency is defined as the ratio of solids adhering to solids sprayed. Please elaborate on how a 40% transfer efficiency was determined.

2. The EPA in its September 1998 Preliminary Industry Characterization report indicated that there are 396 facilities in 33 states performing plastic coating. Are any of these facilities similar in operation/production to Florida Production Engineering proposed project? If yes, did operation or production begin after July 1, 1997? If yes, what are the actual emissions?

3. In the proposed case-by-case MACT Determination, an "original" and "modified" process was described. Please provide a detailed list of the materials used in the "original" process and the materials substituted to reduce overall HAP constituents.

4. The proposed MACT attributes a 20% overall reduction in coating consumption to the replacement of four (4) spray guns with a programmable robotic arm. In order to receive credit, the comparison in combined coating usage should be based on the same amount of parts coated with both processes. With the "modified" process, what would be the combined coating usage for 3,528,000 parts?

5. Figure 4, "Materials Flow Diagram" does not appear to be consistent with the narrative description regarding the topcoat spray booth. It states that the topcoat with catalyst usage is 20.2 gals/day. However, the narrative description on page 2 states that the topcoat by itself is 20.2 gallons/day/cell and the catalyst usage is 3.37 gallons/day/cell. Therefore, it appears that Figure 4 should list topcoat w/catalyst at 23.37 gallons/day. If this interpretation is correct, please resubmit the potential emissions, including the pertinent pages of the application.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Florida Production Engineering, Inc.

FILE: 1270102-004-AC

page two

6. In the application at Section H, please elaborate on the origin of the following emission factors: 5.035, 1.77, .076 and 0.814 lbs/gal.

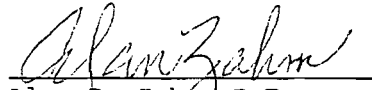
7. The "modified" process states that the coating formulation is 5.02 lbs of VOC per gallon of coating. Please explain why 5.5 lbs/gallon is being requested as MACT?

8. The proposed case-by-case MACT Determination indicated that studies were conducted on add-on controls. Please provide a copy of those studies.

Pursuant to Rule 62-4.055, the applicant shall have ninety days after the Department mails a timely request for additional information to submit that information to the Department. If an applicant requires more than ninety days in which to respond to a request for additional information, the applicant may notify the Department in writing of the circumstances, at which time the application shall be held in active status for one additional period of up to ninety days. Additional extensions shall be granted for good cause shown by the applicant. A showing that the applicant is making a diligent effort to obtain the requested additional information shall constitute good cause. Failure of an applicant to provide the timely requested information by the applicable deadline shall result in denial of the application.

If you have any questions, please fax me at 407/897-5963 or write to me at the above address.

Sincerely,


Alan D. Zahm, P.E.
Permitting Supervisor

31 Dec 98
date

AZ/az

cc:William Cummings, PE
Cindy Phillips, DARM
Lennon Anderson

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

RECEIVED

JUN 16 1999

**BUREAU OF
AIR REGULATION**

CERTIFIED MAIL
P 183 853 405

In the Matter of an
Application for Permit by:

Florida Production Engineering, Inc.
2 Tower Circle West
Ormond Beach, Florida 32174-8759

Volusia County - AP
Manufacturing Cells 1, 2, 3, 4, 5, 12, A, B,
C, D, E, and Research Cell R

File Number: 1270102-004-AC
Modification of Permit: 1270102-003-AC

Attention: Mark Kirby, Plant Manager

INTENT TO ISSUE

The Department of Environmental Protection gives notice of its intent to issue a permit (copy attached) for the proposed project as detailed in the application specified above. The Central District is issuing this Intent to Issue for the reasons stated below.

The applicant, Florida Production Engineering, Incorporated, applied on December 2, 1998, to the Department for a construction permit to construct four airbag cover manufacturing cells. This facility is located at 2 Tower Circle West, Ormond Beach, Volusia County, Florida.

The Department has permitting jurisdiction under Section 403 Florida Statutes (F.S.) and Chapter 62-4.210 and Chapter 62-210.300 Florida Administrative Code (F.A.C.) The project is not exempt from permitting procedures. The Department has determined that a construction permit is required for the proposed work.

Pursuant to Section 403.815, F.S. and DEP Rule 62-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The Notice shall be published one time only within thirty (30) days, in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department, at 3319 Maguire Boulevard, Suite 232, Orlando, FL 32803-3767 within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The Department will issue the permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of "PUBLIC NOTICE OF INTENT TO ISSUE CONSTRUCTION PERMIT." Written comments should be provided to the Central District office at 3319 Maguire Boulevard, Orlando, Florida 32803. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received in the Office of General Counsel to the Department at 3900 Commonwealth Boulevard, Mail Stop 35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.60(3), F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the department's action is based must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
- (c) A statement of how and when petitioner received notice of the agency action or proposed action;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and
- (f) A demand for relief.

A petition that does not dispute the material upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under section 120.542 of the Florida Statutes. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. The petition must specify the following information:

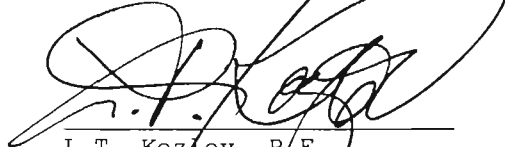
- (a) The name, address, and telephone number of the petitioner;
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
- (c) Each rule or portion of a rule from which a variance or waiver is requested;
- (d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
- (e) The type of action requested;
- (f) The specific facts that would justify a variance or waiver for the petitioner;
- (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and
- (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in section 120.542(2) of the Florida Statutes, and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



L.T. Kozlov, P.E.
Program Administrator
Air Resources Management
3319 Maguire Boulevard
Suite 232
Orlando, Florida 32803-3767

DATE:

6-14-99

FILING AND ACKNOWLEDGMENT FILED, on
this date, pursuant to Section 120.52(7),
Florida Statutes, with the designated
Department Clerk, receipt of which is hereby
acknowledged.

Dina Jones June 15, 1999
Clerk Date

ab

LTK/wje

Enclosures: Draft Permit
Notice of Intent

Copies furnished to:
William Kinnell - CHMM Project Manager
Lennon Anderson - FDEP Southeast District
Cindy L. Phillips, P.E. - FDEP Tallahassee

CERTIFICATE OF SERVICE

This is to certify that this INTENT TO ISSUE and all copies were mailed before the
close of business on June 15, 1999 to the listed persons by

Mary Lou Edwards

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
PUBLIC NOTICE OF INTENT TO ISSUE CONSTRUCTION PERMIT

The Department of Environmental Protection gives notice of its intent to issue a permit to Florida Production Engineering, Incorporated, 2 Tower Circle West, Ormond Beach, Florida, 32174-8759, to construct operations of four airbag cover manufacturing cells, which are sources of air emissions and subject to a maximum achievable control technology (MACT) review. These operations are part of an expansion of the existing Title V facility which is located at 2 Tower Circle West, Ormond Beach, Volusia County, Florida. The Department has assigned File Number 1270102-004-AC to the project.

The Department will issue the permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 days from the date of publication of "PUBLIC NOTICE OF INTENT TO ISSUE CONSTRUCTION PERMIT." Written comments should be provided to the District office at 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 Florida Statutes (F.S.), before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3) of the Florida Statutes must be filed within 14 days of publication of the public notice or within 14 days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Department for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code (F.A.C.).

A petition that disputes the material facts on which the Department's action is based must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
- (c) A statement of how and when petitioner received notice of the agency action or proposed action;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301 F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation under Section 120.573 of the Florida Statutes is not available in this proceeding.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at: the Department of Environmental Protection, 3319 Maguire Boulevard, Suite 232, Orlando, Florida.



Jeb Bush
Governor

Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

NOTICE OF PERMIT

CERTIFIED MAIL
P 183 853 411

Florida Production Engineering, Incorporated
2 Tower Circle West
Ormond Beach, Florida 32174-8759

Attention: Mark Kirby, Plant Manager

Volusia County - AP
Manufacturing Cells 1, 2, 3, 4, 5, 12, A, B, C, D, E,
And Research Cell R

DRAFT

Dear Mr. Kirby:

Enclosed is Permit Number 1270102-003-AC, as amended by file number 1270102-004-AC, to construct the above referenced source issued pursuant to Section(s) 403.087, Florida Statutes.

Any party to the Order has the right to seek judicial review of the Order 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, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000; 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 the Final Order is filed with the Clerk of the Department.

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

L.T. Kozlov, P.E.
Program Administrator
Air Resources Management

Date: _____

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk

DRAFT
Date

LTK/wje

Copies furnished to:

William Kinnell - CHMM Project Manager
Lennon Anderson - FDEP Southeast District
Cindy L. Phillips, P.E. - FDEP Tallahassee

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT ISSUANCE and all copies were mailed before the close of business on _____ to the listed persons, by _____

DRAFT



Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

DRAFT

David B. Struhs
Secretary

Permittee:
Florida Production Engineering,
Incorporated
2 Tower Circle West
Ormond Beach, Florida 32174-8759

Attention: Mark Kirby, Plant Manager

I.D. Number: 1270102
File Number: 1270102-004-AC
Modification of Permit: 1270102-003-AC
Expiration Date: June 30, 2004
County: Volusia
Latitude/Longitude: 29°17'36"N/81°7'14"W
UTM: 17-488.29 KmE; 3240.31 KmN
Project: Manufacturing Cells 1,2,3,4,5,12,
A,B,C,D,E and Research Cell R

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-210. 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:

The permittee may construct the following wheel cover manufacturing cells:

Cells 1, 2, 3, 4, 5, 12, and Research Cell R, which consist of six color coat spray booths, six clear coat spray booths, one color and clear coat spray booth, three surface preparation spray booths, one basecoat spray booth, one topcoat spray booth, one powder coating spray booth, ten infrared drying ovens, seven propane-fired drying ovens, one electric curing oven, six cooling tunnels, one aqueous washer tank, two aqueous mask washer tanks, two alkaline cleaner tanks, one deoxidizer tank, one conversion coating tank, and one sealer tank.

The permittee may also construct the following airbag cover manufacturing cells:

Cell A, which consists two promoter spray booths, two topcoat spray booths, and one gas-fired curing oven.

Cells B, C, D, and E, which consist of eight promoter spray booths, eight topcoat spray booths, and four gas-fired curing ovens. These cells are subject to maximum achievable control technology (MACT) requirements.

Each emission point is approximately 40 feet in height above grade. Each paint spray booth is equipped with paint filters which provide a particulate reduction efficiency of approximately 99 percent. This facility will be subject to Title V due to HAP emissions.

Pursuant to Rule 62-210.300(1), F.A.C., permit number 1270102-003-AC is being amended by file number 1270102-0040AC to add manufacturing cells B, C, D, and E and replaces all previously issued air pollution construction permits at the facility.

These sources are located at 2 Tower Circle West in Ormond Beach, Volusia County, Florida.

General Conditions, which are pages 2 and 3, are mailed only to the permittee.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

DRAFT

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, Florida Statutes (F.S.) The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup and auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (a) Have access to and copy any records that must be kept under conditions of this permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (a) A description of and cause of noncompliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

GENERAL CONDITIONS:

DRAFT

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data, and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and '62-30.300, Florida Administrative Code (F.A.C.), as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - () Determination of Best Available Control Technology (BACT)
 - () Determination of Prevention of Significant Deterioration (PSD)
 - () Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
 - () Compliance with New Source Performance Standards
14. The permittee shall comply with the following:
 - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring information) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 1. the date, exact place, and time of sampling or measurements;
 2. the person responsible for performing the sampling or measurements;
 3. the dates analyses were performed;
 4. the person responsible for performing the analyses;
 5. the analytical techniques or methods used;
 6. the results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

Permittee:
Florida Production Engineering,
Incorporated
Attn: Mark Kirby, Plant Manager

I.D. Number: 1270102
File Number: 1270102-004-AC
Modification of Permit: 1270102-003-AC
Expiration Date: June 30, 2004
County: Volusia

SPECIFIC CONDITIONS:

OPERATING CONDITIONS

DRAFT

1. Each emission unit is permitted to operate 6120 hours per consecutive twelve months with the exception of Cells A, B, C, D and E, which are permitted to operate 6300 hours per consecutive 12 months.
[Rule 62-210.200, (PTE), F.A.C.]
2. Each oven utilized shall be fired by natural gas or propane only. The total oven maximum heat input rate is 74,079 MMBtu per consecutive twelve months.
[Rule 62-210.200, (PTE), F.A.C.]
3. Volatile Organic Compound (VOC) usage at the facility shall not exceed 249 tons per consecutive twelve months.
[Rule 62-210.200, (PTE), F.A.C.]
4. For manufacturing cells B, C, D and E, VOC coating content shall not exceed:
[MACT determination]
 - a) 3.22 lbs/gal, as applied, for topcoat spray booths, or
 - b) 6.44 lbs/gal, as applied, for promoter spray booths.
5. For manufacturing cells B, C, D and E, all spray booths shall use HVLP (high volume, low pressure) spray guns with programmable robotic arms as described in the MACT proposal received March 19, 1999 and the Department MACT determination [Construction permit application and MACT determination.]
6. No person shall circumvent any pollution control device or allow the emissions of air pollutants without the applicable air pollution control device operating properly [Rule 62-210.650, F.A.C.]
7. No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department [Rule 62-296.320(1)(a), F.A.C.]. To comply, procedures to minimize pollutant emissions should include but not be limited to the following:
 - a) tightly cover or close all VOC containers when they are not in use,
 - b) tightly cover, where possible, all open troughs, basins, baths, tanks, etc. when they are not in use,
 - c) maintain all piping, valves, fittings, etc. in good operating condition,
 - d) prevent excessive air turbulence across exposed VOC's,
 - e) immediately confine and clean up VOC spills and make sure certain wastes are placed in closed containers for reuse, recycling or proper disposal,
 - f) maintain appropriate recordkeeping practices to demonstrate compliance with VOC usage limits.

Permittee:
Florida Production Engineering,
Incorporated
Attn: Mark Kirby, Plant Manager

I.D. Number: 1270102
File Number: 1270102-004-AC
Modification of Permit: 1270102-003-AC
Expiration Date: June 30, 2004
County: Volusia

DRAFT

SPECIFIC CONDITIONS:

8. No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. An objectionable odor is defined as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.
[Rule 62-296.320(2)]

EMISSION LIMITS

9. The visible emissions from each emission unit must comply with Rule 62-296.320(4)(b)1., F.A.C. (limited to less than 20% opacity.)
10. The total VOC emission limit for these emission units is 249 tons per consecutive 12 months.
[Construction permit applications 1270102-003-AC and 1270102-004-AC.]

COMPLIANCE TESTING

11. Each emission unit must be tested for visible emissions in accordance with DEP Method 9 for 30 minutes or the length of the batch/cycle within 30 days after being placed in operation. For any other approved method to be utilized, the Department must give prior written approval.
[Rule 62-297.310(4)(a)2., F.A.C.]
12. At least 15 days prior to the date on which each formal compliance test is due to begin, the permittee shall provide written notification of the test to the Central District Office of the Department of Environmental Protection. The notification must include the following information: the date, time, and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and telephone number of the person conducting the test.
[Rule 62-297.310(7)(a)9., F.A.C.]
13. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rule 62-297.310(2), F.A.C.]
14. The owner or operator shall submit a copy of the compliance test results to the air compliance section of this office within 45 days after the last sampling run of each test is completed [Rule 62-297.310(8)(b), F.A.C.]

Permittee:
Florida Production Engineering,
Incorporated
Attn: Mark Kirby, Plant Manager

I.D. Number: 1270102
File Number: 1270102-004-AC
Modification of Permit: 1270102-003-AC
Expiration Date: June 30, 2004
County: Volusia

DRAFT

SPECIFIC CONDITIONS:

15. Pursuant to Rule 62-4.070(3), F.A.C., a monthly log shall be kept for this facility to document compliance with the limitations of Specific Conditions 3, 4 and 10. The log shall be completed by the end of the following month and retained on file at the facility for at least three years. At a minimum, the monthly log shall:
- a) Identify and quantify each material used at the facility that has an air pollution emission.
 - b) Quantify the consecutive 12 month period total of emissions from VOCs.
 - c) Quantify the VOC coating contents to document compliance with specific condition number 4.

Documentation of each chemical reclaimed will use a mass balance method to determine usage/emissions (amount used minus amount collected for disposal or recycle.) Supporting documentation (chemical usage tracking logs, MSDS sheets, purchase orders, EPA "As Supplied" data sheets, EPA Method 24, etc.) shall be kept for each chemical and associated products which includes sufficient information to determine usage rates and emissions. These records shall be made available to the Department upon request.

16. The owner or operator shall complete DEP Form No. 62-210.900(5), F.A.C. "Annual Operating Report for Air Pollutant Emitting Facility", including the Emissions Report, for each calendar year and submit to the air compliance section of this office on or before March 1 of the following year.
[Rule 62-210.370(3), F.A.C.]

PERMIT APPLICATION

17. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, he must notify the Department in writing at least 90 days prior to the expiration of the construction permit and submit an application for an extension of the construction permit.

The permittee shall update the Title V operating permit within 180 days after completion of construction or modification of the emission units covered by this construction permit. The permittee must demonstrate compliance with the conditions of the construction permit and submit the compliance test results along with an application for air permit to the Department's Central Florida District office [Rule 62-4.220 and Rule 62-4.090(1), F.A.C.]

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

L.T. Kozlov, P.E.
Program Administrator
Air Resources Management

Issued: _____



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

February 19, 1999

CERTIFIED MAIL

Mr. Mark E. Kirby
Plant Manager
Florida Production Engineering, Inc.
2 Tower Circle West
Ormond Beach, FL 32174-8759

RE: Status of Application Review -- Request for Additional Information
DEP File No. 1270102-004-AC

Dear Mr. Kirby:

The Air Toxic Permitting Unit has reviewed the response to the Department's request for additional information received on January 22, 1999. However, your application remains incomplete. Please provide the following information promptly. Evaluation of your proposed project will continue to be delayed until all requested information has been received.

Please provide the following information in order to complete review of your application pursuant to Chapters 120 and 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 62-4.070(1) and 62-204 through 62-297.

1. In item 2 of your response, it was indicated that representatives of Florida Production Engineering visited a facility that surface coats air bag covers, but was not listed in the EPA database. Please provide the address and telephone number for the facility.
2. In item 3 of your response, it was delineated clearly which constituents were replaced or decreased in quantity with the combined coating sprayed on 2,940 parts/day at 55,275 gals/yr for 3,528,000 parts/yr for the original process; however, the proposed MACT dated January 8 stated that the combined coating sprayed in the original process was 44,213 gallons. Please explain why it was necessary to increase the combined coating sprayed in the original process from 44,213 to 55,275 gallons.
3. In item 3 of your response, the emission factors for the original process were listed as 7.02 lbs VOC/gallon and 6.72 lbs HAPs/gallon of combined coating. In like manner, the emission factors for the modified process were listed as 5.06 lbs VOC/gallon and

3.40 lbs HAPs/gallon of combined coating. Please explain how the emission factors were derived.

4. In item 4 of your response, the constituents of the original process in the first table are identical to the modified process in item 3 of your response. Moreover, the constituents of the original process in the second table in item 4 of your response are identical to the modified process in the first table in item 4 of your response. The constituents of the original process and modified process should be consistent. Please explain the discrepancies.
5. In item 4 of your response, the emission factors from the original process and the modified process were listed as 5.06 lbs VOC/gallon and 3.40 lbs HAPs/gallon of combined coating. Please explain how the emission factors were derived.
6. In item 5 of your response, a corrected figure 4 was enclosed. The total VOC emissions reported went from 5.37 lbs/gal to 4.68 lbs/gal. Please explain why the emission factors decreased. Is the topcoat added separately from the catalyst?
7. In item 6 of your response, various calculation methodologies were used. Please submit those calculations.

Note that all submittals must be signed and sealed by a professional engineer registered in the state of Florida.

If you have any questions, please contact Lennon Anderson at 561/681-6632. When referring to this project, please use the file number indicated.

Sincerely,



Lennon Anderson
Air Permitting Engineer

cc: William Kinell, HH Management
Alan Zahm, P.E., CD
Cindy Phillips, P.E., DARM



H_M MANAGEMENT

PO Box 1172 Bunnell, Florida 32110-1172

RECEIVED

MAR 02 1999

BUREAU OF
AIR REGULATION

CERTIFIED MAIL # Z 455 211 819

February 25, 1999

Cindy L. Phillips, P.E.
Bureau of Air Regulation
Department of Environmental Protection
Mail Station # 5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: File Number 1270102-004-AC
Florida Production Engineering, Inc.
Ormond Beach, Florida
Facility ID # 1270102

Dear Ms. Phillips;

On behalf of the above referenced facility, enclosed you will find a response to your request for additional information, dated February 19, 1999.

1. The facility that was visited by FPE personnel is T.G. USA Corporation, located in Perryville, Missouri, the Plant Manager is Chuck Agers and the phone number is 573-547-1041, extension 356.
2. The 44,213 gallon figure, stated in the January 8th MACT proposal, is in error. That proposal failed to consider the fact that the process rate had to be slowed by approximately 20%, to accommodate the slower evaporation rate of the re-formulated volatile constituents of the coating. At the "original" process rate 55,275 gallons of combined coating were applied to 3,528,000 parts/yr (140 parts/hr/cell). The "modified" process rate was reduced to 2,822,400 parts/yr (112 parts/hr/cell), using 44,213 gallons of combined coating.
3. The addition of propylene glycol m.e.a. and the reduction of diluent mek and xylene reduced the VOC content of the coating from the "original" 7.02 lbs VOC/gallon to 5.06 lbs VOC/gallon in the "modified" formulation. Since mek and xylene are also HAPs, the HAP content was also reduced from the "original" 6.72 lbs VOC/gallon, to 3.40 lbs VOC/gallon in the "modified" formulation.
4. The three (3) tables shown in responses 3 and 4 of the January 22nd submission attempted to illustrate three (3) separate and distinct process changes that resulted in net annual VOC emission reductions.

- The first table showed formulation changes that reduced VOC and HAP constituents.
- The second table showed a reduction in overall coating consumption as a result of changes in the spray gun array and the use of robotics.
- The third table showed additional reduction in overall coating consumption as a result of slowing the process rate, to accommodate the formulation changes stated in the first table.

In this three (3) tiered approach, each table assumed the previous table's "modified" state to be the next table's "original" state. The following table shows the "original" process compared to the "modified" process, without the intermediate steps.

ORIGINAL PROCESS			MODIFIED PROCESS		
<u>Material</u>	<u>Constituent</u>	<u>Quantity</u>	<u>Material</u>	<u>Constituent</u>	<u>Quantity</u>
Promoter	VOC	248.1 lbs/day	Promoter	VOC	158.8 lbs/day
	toluene	139.8 lbs/day		toluene	89.4 lbs/day
	xylene	107.6 lbs/day		xylene	68.9 lbs/day
Topcoat	VOC	591.7 lbs/day	Topcoat	VOC	378.7 lbs/day
	mek	422.4 lbs/day		mek	162.9 lbs/day
	xylene	129.0 lbs/day		xylene	27.1 lbs/day
	butyl acetate	42.4 lbs/day		butyl acetate	27.1 lbs/day
Catalyst	VOC	86.4 lbs/day	Catalyst	p. glycol m.e.a.	162.9 lbs/day
	mek	71.4 lbs/day		VOC	55.3 lbs/day
	butyl acetate	10.8 lbs/day		mek	45.9 lbs/day
	naphtha	2.7 lbs/day		butyl acetate	6.9 lbs/day
Added diluent	mek	243.3 lbs/day		naphtha	1.8 lbs/day
Added diluent	xylene	125.3 lbs/day	Added diluent	mek	5.0 lbs/day
Process rate		2,940 parts/day	Process rate		2,352 parts/day
VOC per gallon (combined)		7.02 lbs	VOC per gallon (combined)		5.06 lbs
HAP per gallon (combined)		6.72 lbs	HAP per gallon (combined)		3.40 lbs
Annual VOC emission		194.2 tons	Annual VOC emission		89.6 tons

5. The stated figures consider the VOC and HAP content based on the average constituents of all coatings, i.e., catalyst, topcoat and promoter combined. As stated in Figure 4, 23.37 gals/day of topcoat w/catalyst, with an average VOC content of 4.68 lbs/gal is applied. In addition, 5.9 gals/day of promoter, with a VOC content of 6.73 lbs/gal is also applied. When this information is factored together, the following results are derived. The term combined coating assumes the application of all coatings, averaged together, as if one (1) coating is applied to the parts.

$$\begin{array}{rclclcl} \text{VOC} & 23.37 \text{ gals} & \times & 4.68 \text{ lbs/gal} & = & 109.37 \text{ lbs VOC} \\ & 5.9 \text{ gals} & \times & 6.73 \text{ lbs/gal} & = & 39.71 \text{ lbs VOC} \end{array}$$

When added together, the combined parameters are;

29.27 gals of coating, containing 149.08 lbs of VOC

Or, an average **VOC** content of **5.09 lbs/gal**

$$\begin{array}{rclclcl} \text{HAP} & 23.37 \text{ gals} & \times & 2.53 \text{ lbs/gal} & = & 59.13 \text{ lbs HAP} \\ & 5.9 \text{ gals} & \times & 6.73 \text{ lbs/gal} & = & 39.71 \text{ lbs HAP} \end{array}$$

When added together, the combined parameters are;

29.27 gals of coating, containing 98.84 lbs of HAP

Or, an average **HAP** content of **3.38 lbs/gal**

6. The topcoat and catalyst are combined prior to application. The Figure 4 that was originally submitted failed to include the amount of catalyst (34.37 gals/day) in the calculation, the constituent amounts however were included, this resulted in erroneous values. The corrected Figure 4, submitted on January 22nd corrected the oversight and adjusted the constituent quantities accordingly.
7. The reference to various calculation methodologies simply refers to the fact that the submitted constituent and emissions data were evaluated in several ways, i.e. the coatings were evaluated individually, the coatings were evaluated as one (1) combined coating and conversions back and forth, from lbs/gal to percentage of constituents and coatings may result in minor number rounding errors. The statement was intended to account for the minor variation in the 10ths and 100ths places in submitted numerical data. All pertinent calculation information has been included with this, and previous submissions.

February 22, 1999

Page 4

The technical contact for information regarding this response is Bill Kinell, he can be reached at (904) 437-5888.

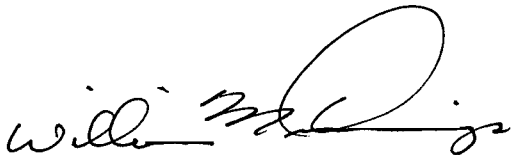
Should you have any questions regarding the response, or require additional information, please do not hesitate to contact us.

Sincerely,

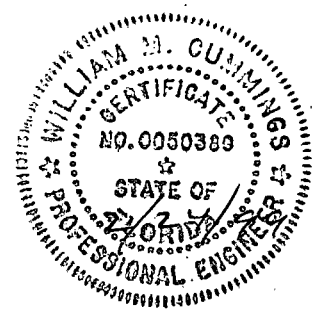
H M MANAGEMENT



William Kinell, CHMM
Project Manager



William M. Cummings, P.E.
Project Engineer
Florida Registration # 50389



cc: Mark Kirby - FPE, Inc.
Charlie Corbiel - FPE, Inc.

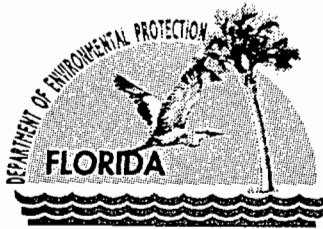
f0529dep.doc

This document has been forwarded to:

**Lennon Anderson, Permitting Engineer
Department of Environmental Protection
PO Box 15425
West Palm Beach, Florida 33416**

**Allan D. Zahm, P.E.
Department of Environmental Protection
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767**

**Cindy L. Phillips, P.E.
Bureau of Air Regulation
Department of Environmental Protection
Mail Station # 5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400**



Jeb Bush
Governor

Department of Environmental Protection

Southeast District
P.O. Box 15425
West Palm Beach, Florida 33416

RECEIVED
David E. Staub
Secretary

MAR 10 1999

BUREAU OF
AIR REGULATION

March 9, 1999

CERTIFIED MAIL

Mr. Mark E. Kirby
Plant Manager
Florida Production Engineering, Inc.
2 Tower Circle West
Ormond Beach, FL 32174-8759

RE: Status of Application Review -- Request for Additional Information
DEP File No. 1270102-004-AC

Dear Mr. Kirby:

The Air Toxic Permitting Unit has reviewed the response to the Department's second request for additional information received on February 25, 1999. However, your application remains incomplete per our March 2nd teleconference. Please provide the following information promptly. Evaluation of your proposed project will continue to be delayed until all requested information has been received.

Please provide the following information in order to complete review of your application pursuant to Chapters 120 and 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 62-4.070(1) and 62-204 through 62-297.

1. In items 2 and 4 of your response, the information provided still is not consistent with the application submitted on November 30, 1998. The MACT proposal stated that the original process consumes 44,213 gallons/yr and the modified process consumes 35,370 gallons/yr. However, the February 25, 1999 submittal stated that 55,275 gallons/yr is the correct amount for the original process and 44,213 gallons/yr for the modified process. Please resubmit the pertinent parts of the application to reflect 44,213 gallons as the total combined coating for the modified process: Section II, Subsection D, "Facility Pollutant Detail Information" for pages 'II. Part 4b-1' through 'II. Part 4b-6'; Section III, Subsection F, "Segment (Process/fuel) Information" for page 'III. Part 8-1'; Section III, Subsection H, "Emissions Unit Pollutant Detail Information" for pages 'III. Part 9b-1' through 'III. Part 9b-11'. Also, please resubmit a revised MACT proposal.

2. In item 3 of your response, the information provided did not provide any calculations. Please submit calculations addressing how the emission factors went from 7.02 to 5.06 lbs VOC/gallon and 6.72 to 3.40 lbs HAP/gallon.
3. In item 4 of your response, using the rates for the constituents and the emission factor (5.06) as specified in the table, the total combined coating used for the modified process is not consistent with 44,213 gallons as claimed in item 2 of your response. Please resubmit the modified constituent rates or provide an explanation why the rates as specified in the table should be used.
4. In item 4 of your response, what are the VOC contents of the diluent MEK and xylene?
5. In item 4 of your response, is the proposed reduction in total combined coating usage from the original process to the modified process 64 percent?
6. In item 4 of your response, what would be the amount of combined coating used in the original process for 2,822,400 parts?
7. In item 5 of your response, it does not appear that this methodology is appropriate because the calculations implies that all materials are combined before spraying when in reality the materials are applied in two steps: "promoter" then "topcoat with catalyst". The methodology used appears to yield lower emission factors. Please resubmit emission factors per cell considering the two step process.
8. In item 6 of your response, an explanation still was not given why the reported VOC emission factors in the corrected figure 4 (submitted on January 8th) for the topcoat with catalyst decreased from 5.37 lbs/gallon to 4.68 lbs/gallon. Please provide and explanation with calculations.

Note that all submittals must be signed and sealed by a professional engineer registered in the state of Florida.

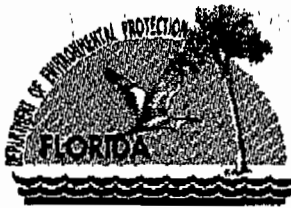
If you have any questions, please contact me at 561/681-6632. When referring to this project, please use the file number indicated.

Sincerely,



Lennon Anderson
Air Permitting Engineer

cc: William Kinell, HH Management
Alan Zahm, CD



Jeb Bush
Governor

Department of Environmental Protection

Southeast District
P.O. Box 15425
West Palm Beach, Florida 33416

David B. Struhs
Secretary

April 9, 1999
CERTIFIED MAIL

Mr. Mark E. Kirby
Plant Manager
Florida Production Engineering, Inc.
2 Tower Circle West
Ormond Beach, FL 32171-8759

DEP File No. 1270102-004-AC
Volusia County
Project: Construction of four Cells

RE: Status of Application Review/Application Complete

Dear Kirby:

We have reviewed your application for a permit to construct four manufacturing cells for airbag coating, received on December 2, 1998 and additional information received on January 22, 1999; March 1, 1999; and March 22, 1999.

Your application for permit from a MACT (Maximum Achievable Control Technology) perspective is complete as of April 9, 1999 and processing has begun. Note that the Department, under Chapter 120, Florida Statutes (F.S.), must take final action on your application within ninety days unless the time is tolled by an administrative hearing.

If you have any questions, please contact me at 561/681-6632. When referring to this project, please use the file number indicated.

Sincerely,

Lennon Anderson
Air Permitting Engineer

cc: Charlie Corbier - FPE (fax)
William Kinell - HHM (fax)
Alan Zahn, P.E. - CD (fax)
Cindy Phillips, P.E. - DARM (fax)

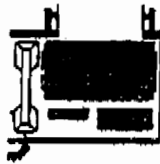
"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.



FLORIDA PRODUCTION ENGINEERING
2 EAST TOWER CIRCLE
ORMOND BEACH, FL 32174

904-677-2566 FAX 904-673-1130



FACSIMILE TRANSMISSION

COMPANY NAME: FL - EPA

ATTENTION: CINDY PHILLIPS

FROM: CHARLES CORBEIL

RE: MACT

DATE: 7-6-99

NUMBER CALLING: 850-922-6979

MESSAGE: INFO AS DISCUSSED WITH
LENNON A1

Morton International
Specialty Chemicals Group
Automotive and Industrial Finishes
Andrew Cooper, Director of Sales and Marketing
2700 East 170th Street
Lansing, IL 60438

FAX
708 868 7490
FIXED
6/24

Dear Mr. Cooper:

We are in the process of facilitating for future air bag manufacture. In doing so, we applied to the State of Florida, Department of Environmental Protection for a Permit to Construct and a Permit to Operate the paint facilities.

The State of Florida responded by issuing a MACT (Maximum Achievable Control Technology) determination that limits the VOC content of the topcoat and promoter. The MACT limits set are:

Topcoat (as applied)	3.22 lbs./gal.
Promoter (as applied)	6.44 lbs./gal.

The State of Florida set these limits because they identified a supplier that indicated that these materials are available.

Can you furnish materials that will comply with the MACT requirements? They must be compatible with our manufacturing system and produce a quality product. We would appreciate your response by June 25, 1999.

Sincerely,

Rick Hall, Operations Manager

Cc. Jim Tonges
Dean Busler

f. z

C.C.



June 28, 1999

Mr. Rick Hall
Operations Manager
FPE
2 Tower Circle East
Ormond Beach, FL 32174

Dear Rick:

In response to your memo of July 17, 1999, we would like to present the information below relative to Morton's coatings for airbag covers.

ADHESION PROMOTERS:

Due to the unique composition of the plastic substrate used to manufacture airbags, Morton designed a special adhesion promoter - ABP695. As currently used in your facility, the VOC is 6.71#/gal. Based on some preliminary laboratory work, we are confident that a formulation can be developed to meet the MACT limit of 6.44#/gal. It is anticipated that this change will result in an approximate increase in cost of 25%, however, since the product will be almost double in volume solids, your applied cost per part should be lower. Only on line trials will determine the exact cost impact.

SOFTOUCH COLOR COATS:

As you are aware before any coating can be applied to airbag covers, extensive testing and approval by the automobile and airbag manufacturers is required.

Morton's ST696 Softouch product line meets all these necessary approvals for the airbag covers you produce. As currently applied, the average VOC of this product is 4.6 - 4.8#/gal. Depending upon how the state of Florida categorizes Acetone, a solvent revision could be made to lower the applied VOC to a range of 4.0 to 4.2.

Beyond this, Morton feels FPE would be required to move to waterbase technology. Currently we have no approvals of Softouch type waterbase airbag paints. Our estimate is that it would take at least 1 year to obtain these approvals with the Domestic car manufacturers and most likely 1 1/2 - 2 years for transplant car manufacturers.

Morton Automotive Coatings

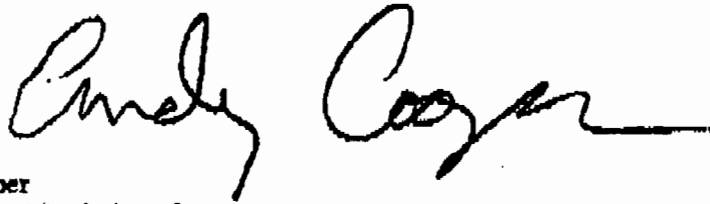
Morton International, Inc., 2701 East 170th Street, Lansing, IL 60438 708/474-7000 Fax 708/868-7490
Bee Chemical Company (Morton Automotive Coatings) is a wholly-owned subsidiary of Morton International, Inc.

Mr. Rick Hall
FPE
Page Two

Based on raw material costs and change in volume solids, it is estimated that switching to a waterbase Softouch color coat will increase your per part paint cost by 75 to 80%.

If we can provide you further information on this issue, please call.

Regards,



Andrew R. Cooper
Vice President for North American
Sales & Technical Service

ARC:sr

Cc: J. Tonges
D. Busler

**AUTOMOTIVE FINISHES**

Sherwin-Williams Automotive Finishes Corp.
388 Robbins Drive
Troy, Michigan 48063
Phone: (248) 548-2600
Facsimile: (248) 588-8398

June 30, 1999

Florida Production Engineering, Inc.
2 Tower Circle East
Ormond Beach, FL 32174
ATTN: Mr. Rick Hall, Operations Mgr.

Dear Mr. Hall:

In response to your letter of June 18, 1999, Sherwin-Williams does have products that meet MACT requirements; however, these products are at various stages of development and approval.

Our current, fully approved G52 solventborne system will require some reduction to meet the needs of your application system. The V.O.C. of this system is 4.19 as applied at FPE. The V.O.C. will change with each color.

Our waterborne topcoat is fully developed, however, we have limited OEM approvals with no approvals on your substrate. The product does not perform as well as our solvent system over all air bag substrates. There is also an approximately 50% higher cost per part using waterborne products. We also have concerns with the ability to process on your equipment.

Our waterborne adhesion promoter is still under development and we do not have any approvals yet. Our clear adhesion promoter, E75CR910, has a V.O.C. of 6.5.

Sherwin-Williams will work with FPE to continue to reduce emissions. If you need additional information, please let me know.

Sincerely,

A handwritten signature in cursive script that reads "Dennis Paulauski".

Dennis Paulauski
Sales Manager

DP/dee/fpe

Cc: B. Ciranna



Quality
By
Design™

CLEAR ADHESION PROMOTER
E75CR910

Product Information

PRODUCT DESCRIPTION

E75CR910 is a single component, clear adhesion promoter designed to provide good adhesion to TPO and other low surface energy substrates.

TECHNICAL DATA

Color:	Clear	% Weight Solids:	11% Approx.
Viscosity Zahn #1 Cup:	22-30 seconds	Recommended Dry Film Thickness:	.2 to .4 mils
Weight per Gal.:	.074 lbs./gal.	Theoretical Coverage:	700 sq. ft./gal. @ 0.2 mil approx.
% Volume Solids:	9% Approx.	Sprayable VOC:	6.5 pounds per gallon

SPECIFICATIONS

Ford:	ESB-M16J6A	GM:	Pending
	WSS-M15J-13A		
Chrysler:	MSPP6-3	CLUB CAR:	

APPLICATION EQUIPMENT

Conventional
HVLP
Electrostatic
Bell

SUITABLE SUBSTRATES

Thermoplastic air bag substrates
TPO, Tekron 88, Teknor Apex, Mullibase, Hytrel (DYM)

Exterior Grade Thermoplastic
Polyolefin - TPO

Clean substrate is essential to product performance. It must be clean and free of mold release. Any changes in substrate composition will necessitate re-qualification for coatings.

APPLICATION

E75 CR910 PAGE 2

SURFACE PREPARATION

Power wash to fully remove mold release agent or use an isopropyl alcohol wipe.

APPLICATION

1. Apply adhesion promoter to 0.2 - 0.4 mils dry film thickness. Reduction is usually not necessary, but if conditions require, 10-25% xylene, toluene or SC150 may be added.
2. Flash dry for 10 minutes.
3. Apply topcoat to manufacturer's instructions.
4. Flash topcoat per manufacturer's instructions.

DRYING SCHEDULE

Minimum bake: 30 minutes at 180° F.

The Spectrum of Technology

PRODUCT NAME:

SOFT SWADE® MED. DARK GRAPHITE

REX NUMBER:

G52AC36

PRODUCT DESCRIPTION

G52AC36 is a two component urethane system designed for automotive interior usage. It gives a suede feel to the plastic substrates and has mar resistance properties for use on interior trim components.

ADVANTAGES

- Permits the use of existing equipment
- Eliminates the expense of priming, applying directly to most substrates
- Reduces energy consumption with a low temperature cure
- Demonstrates excellent adhesion
- Exhibits high resistance to abrasion, cracking and peeling, enhancing product life and quality

CHARACTERISTICS (Package)

Wt/Gallon (lbs)	8.86 ± 0.3
Volume Solids %	47.2 ± 0.2
Weight Solids %	56.9 ± 0.3
Viscosity	12-18 Sec. #5 Zahn
Gloss (60°)	1.8-2.4 Units*
VOC Package	3.82 lb/gal. 458 Gm/Liter

* Customer Substrate

CHARACTERISTICS

(As Applied)	
Catalyst	V68VC151
Mixing Ratio	G52AC36
7 parts	V68VC151
1 part	by volume
Reducer	R-8K18 - 5%
Application	8-14 Seconds
Viscosity	#5 Zahn
Wet Film	3.8-4.7 Mile
Dry Film	2.0-2.5 Mile
VOC	3.45 lb/gal
as applied	414 Gm/Liter
Theoretical	
Coverage	420 Sq Ft/Gallon
Catalyzed	at 2.0 Mil DFT

CHARACTERISTICS (cont.)

Volume Solids	52.34
Working Potlife	1/2 hour

APPLICATION

DeVilbiss or equivalent	
Tip	FF (.065)
Air Cap	785
Atomizing Air	60-70 PSI
Pot Pressure	10-15 PSI

CURE

Cure cycles as low as 30 minutes at 160° F have been shown.

PRETREATMENT

Clean substrate is essential to product performance. It must be clean and free of mold release. Any changes in substrate composition or process will necessitate requalification for coating.

PERFORMANCE

If used according to directions, G52AC36 meets the requirements of Ford specification ESB-M15J2-A.

STORAGE

Inside, no freeze hazard
Shelf life - 12 months

SAFETY PRECAUTIONS

Two package urethane coatings contain isocyanates. These materials may sensitize certain individuals. In spray application where overspray is not controlled, air-supplied respirators are recommended to prevent exposure. Where air-supplied respirators are not available, a chemical cartridge particulate combination respirator recommended by the manufacturer for protection against isocyanate spray paint should be used.

MB/cs 2/2/96

NOTE: The information, ratings and opinions stated above pertain to the material currently offered and represent the results of test believed to be reliable. However, due to variations in customer handling and methods of application which are not known or under our control. The Sherwin-Williams Company cannot make any warranties or guarantees as to the end results.



AUTOMOTIVE DIVISION

FLORIDA PRODUCTION ENGINEERING**INTERNAL MEMO**

DATE: 6-15-99

TO: Charlie Corbeil

FROM: Keith Lawrence

REF.: Sherwin Williams Paint Test Data

C.C.: Rick Hall, Paul Blair, Mark Kirby

Charlie,

The following is a brief history on the paint development of Sherwin Williams. Our initial trials with Sherwin Williams coatings were conducted with:

G52A H36 Dark Graphite (Unreduced Top Coat)

VCLVC 151 Catalyst (Unreduced Catalyst) mixed at 7:1 (paint to catalyst)

Adhesion Promoter wasn't required due to the type of substrate used with the U204 program

Sherwin Williams recommended Mix ratios unreduced for the initial testing

The paint and catalyst were loaded into our Graco Precision Mix lab unit and was to be sprayed in simulated production. Due to the heavy body nature of the coating and the mixed viscosity of the coating, we were not able to flow material through the fluid lines to supply the spray guns.

We then increased the size of the fluid lines to accommodate the paint in its mixed state to improve the flow to the spray guns. We found that we couldn't provide a sufficient pot life for the paint due to the process running at 90 sec. In conjunction with the increased line size causing us to end the paint trial.

We scheduled a second paint trial with Sherwin Williams with the same condition and parameters required for our process using a reduced Catalyst (V66V M 100 @ 3.5:1) at Sherwin Williams request.

The trial results were the same as the previous trial.

At the third trial we reduced the paint (G52AP3699 Dark Graphite) by 15% with M.E.K. and changed the paint to catalyst (V66V M 100) ratio to 4:1.

At this configuration we were able to complete the 24 hour trial with a 15% reduction in paint usage's (mixed paint at the gun) as compared to our current coating used in production resulting in completion of a successful trial.

SPOKE W/LENNON ON 7/8/99

FPE NEEDS TO SHOW WHEN EQUIPMENT
WAS DESIGNED WITH WHAT PAINT SPECS
(i.e. before or after construction permit
was issued.)

**TRANSPORTATION COATINGS**

Sherwin-Williams Automotive Finishes Corp.
388 Kobbline Drive
Troy, Michigan 48063
Phone: (248) 588-3500
Facsimile: (248) 588-8398

June 21, 1999

Keith Lawrence
Florida Production Engineering
Ormond Beach, FL

Dear Keith,

It was necessary to reduce the G52 series paint by 15% to meet the flow, atomization, pot life, and coverage requirements for the new Ford air bag covers. It is also necessary to use the low viscosity V66VM100 catalyst for the same reason.

Please contact me if you have any further questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Dennis Paulauski".

Dennis Paulauski



H M MANAGEMENT

PO BOX 1172 BUNNELL, FL. 32110

Telephone 904-437-5888

RECEIVED

DEC 02 1998

BUREAU OF
AIR REGULATION

CERTIFIED MAIL # P 405 526 492

November 30, 1998

Attn: Cindy L. Phillips, P.E.
Department of Environmental Protection
MS 5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Florida Production Engineering, Inc.
Facility ID # 1270102
Construction Permit Application

Dear Administrator;

On behalf of the above referenced facility, enclosed you will find four (4) printed copies and four (4) ELSA diskette copies of a construction permit application and MACT proposal for the above referenced facility. In addition, a check for \$4,500.00, for the application fee, has been submitted to the Central District Air Section.

The technical contact for information regarding this application is Bill Kinell, who can be reached at (904) 437-5888.

Should you have any questions regarding the application or require additional information, please do not hesitate to contact me.

Sincerely,

H M MANAGEMENT

William Kinell, CHMM
Project Manager

cc: Mark Kirby - FPE, Inc.

Original

**Department of
Environmental Protection**

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

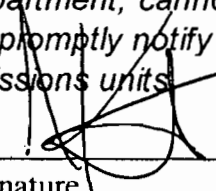
I. APPLICATION INFORMATION

Identification of Facility Addressed in This Application

1. Facility Owner/Company Name : Florida Production Engineering, Inc.		
2. Site Name : Ormond Beach Facility		
3. Facility Identification Number :	1270102	<input type="checkbox"/> Unknown
4. Facility Location : Florida Production Engineering, Inc. 2 Tower Circle West Ormond Beach, Florida 32174-8759		
Street Address or Other Locator :	2 Tower Circle West	
City : Ormond Beach	County : Volusia	Zip Code : 32174-8759
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

I. Part 1 - 1

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official :	
Name :	Mark E. Kirby
Title :	Plant Manager
2. Owner or Authorized Representative or Responsible Official Mailing Address :	
Organization/Firm :	Florida Production Engineering, Inc.
Street Address :	2 Tower Circle West
City :	Ormond Beach
State :	FL
Zip Code :	32174-8759
3. Owner/Authorized Representative or Responsible Official Telephone Numbers :	
Telephone :	(904)677-2566
Fax :	(904)673-1130
4. Owner/Authorized Representative or Responsible Official Statement :	
<p><i>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.</i></p>	
Signature	Date
	11/30/98

* Attach letter of authorization if not currently on file.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type
008	Manufacturing Cells B,C,D,E	AC1C

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 Rule 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).

I. Part 4 - 2

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

Current operation permit number(s), if any :
1270102-001-AV

- 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) :

- Air construction permit for one or more existing, but unpermitted, emissions units.

Application Processing Fee

Check one :

Attached - Amount : \$4500.00

Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations :	
Construction of 4 emission unit, identified as: Manufacturing Cell B,C,D,E Consisting of 2 promoter spray booths and 2 topcoat spraybooths each.	
2. Projected or Actual Date of Commencement of Construction :	01-Jan-1999
3. Projected Date of Completion of Construction :	01-Jun-1999

Professional Engineer Certification

1. Professional Engineer Name : William M. Cummings, P.E. Registration Number : 50389	
2. Professional Engineer Mailing Address :	
Organization/Firm : Cummings Associates, LTD Street Address : 12864 Squirrel Tree Court City : Jacksonville State : FL Zip Code : 32246	
3. Professional Engineer Telephone Numbers :	
Telephone : (904)220-0270	Fax : (904)220-7013

4. Professional Engineer Statement :

I, the undersigned, hereby certify, 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.

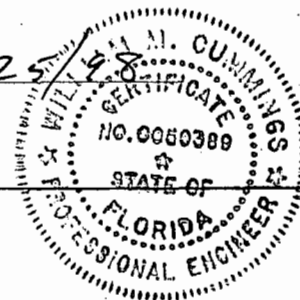
William M. Cummings

Signature

(seal)

Date

11/25/98



I. Part 6 - 1

Application Contact

1. Name and Title of Application Contact :
Name : William Kinell Title : Project Engineer
2. Application Contact Mailing Address :
Organization/Firm : HM Management Street Address : PO Box 1172 City : Bunnell State : FL Zip Code : 32110-1172
3. Application Contact Telephone Numbers :
Telephone : (904)437-5888 Fax : (904)437-8479

Application Comment

MACT Proposal included with application,

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility, Location, and Type

1. Facility UTM Coordinates :			
Zone :	17	East (km) :	488.30 North (km) : 3240.30
2. Facility Latitude/Longitude :			
Latitude (DD/MM/SS) : 29 17 36 Longitude (DD/MM/SS) : 81 7 14			
3. Governmental Facility Code :	4. Facility Status Code :	5. Facility Major Group SIC Code :	6. Facility SIC(s) :
0	A	30	3089
7. Facility Comment :			
This facility is a Title V facility as a result of HAP emissions.			

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Contact

1. Name and Title of Facility Contact :

Mark E. Kirby
Plant Manager

2. Facility Contact Mailing Address :

Organization/Firm : Florida Production Engineering, Inc

Street Address : 2 Tower Circle West

City : Ormond Beach

State : FL Zip Code : 32174-8759

3. Facility Contact Telephone Numbers :

Telephone : (904)677-2566

Fax : (904)673-1130

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)?	N
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?	N
10. Title V Source by EPA Designation?	N
11. Facility Regulatory Classifications Comment :	

II. Part 2 - 1

B. FACILITY REGULATIONS

Rule Applicability Analysis

CAA Section 112(g)

II, Part 3a - 1

DEP Form No. 62-210.900(1) - Form

Effective : 3-21-96

B. FACILITY REGULATIONS

List of Applicable Regulations

FDEP Title V Core List, dated 03/25/96

II. Part 3b - 1

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

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification
H169	A
H120	A
H186	A
VOC	A
PM	B
HAPS	A

II. Part 4 - 1

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

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 1

1. Pollutant Emitted :	H169	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :	Total Potential emission = 13.44 tons/yr	

II. Part 4b - 1

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 2

1. Pollutant Emitted :	H120	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :	Total Potential emission = 31.32 tons/yr	

II. Part 4b - 2

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 3

1. Pollutant Emitted :	H186	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :	Total Potential emission = 14.40 tons/yr	

II. Part 4b - 3

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 4

1. Pollutant Emitted :	VOC	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :	Total Potential Emission = 89.04 tons/yr	

II. Part 4b - 4

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 5

1. Pollutant Emitted :	PM	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :	Total Potential Emission = 0.66 ton/yr	

II. Part 4b - 5

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 6

1. Pollutant Emitted :	HAPS	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :	Total Potential Emission = 59.16 tons/yr	

II. Part 4b - 6

D. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location :	document # 002
2. Facility Plot Plan :	Waived
3. Process Flow Diagram(s) :	Figure 3
4. Precautions to Prevent Emissions of Unconfined Particulate Matter :	NA
5. Fugitive Emissions Identification :	NA
6. Supplemental Information for Construction Permit Applicat	NA

Additional Supplemental Requirements for Category I Applications Only

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

II. Part 5 - 1

DEP Form No. 62-210.900(1) - Form

Effective : 3-21-96

III. EMISSIONS UNIT INFORMATION

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

Emissions Unit Information Section 1

Manufacturing Cells B,C,D,E

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.

III. Part 1 - 1

DEP Form No. 62-210.900(1) - Form

Effective : 3-21-96

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Manufacturing Cells B,C,D,E		
2. Emissions Unit Identification Number : 008 [] No Corresponding ID [] Unknown		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? [] Yes [X] No	5. Emissions Unit Major Group SIC Code : 30
6. Emissions Unit Comment : 4 emission points per cell, identified as 1, 2, 3 and 4. Promoter spray booth 1 Topcoat spray booth 2 Promoter spray booth 3 Topcoat spray booth 4		

Emissions Unit Information Section 1

Manufacturing Cells B,C,D,E

Emissions Unit Control Equipment 1

1. Description :

High efficiency particulate filters on each paint spray booth.

Filter area = 69.4 sq. ft.

Filter face velocity = 180 fpm

Exit velocity = 42.4 ft/sec

Particulate removal efficiency = > 98%

2. Control Device or Method Code : 58

III. Part 3 - 1

DEP Form No. 62-210.900(1) - Form

Effective : 3-21-96

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

Emissions Unit Information Section 1
 Manufacturing Cells B,C,D,E

Emissions Unit Details

1. Initial Startup Date :	01-Jun-1999	
2. Long-term Reserve Shutdown Date :		
3. Package Unit :		
Manufacturer :		Model Number :
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 :	1	mmBtu/hr
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	118	gallons/day
4. Maximum Production Rate :		
5. Operating Capacity Comment :		
Promoter = 23.6 gallons/day		
topcoat = 80.8 gallons/day		
catalyst = 13.5 gallons/day		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
21 hours/day		6 days/week
50 weeks/year		6,300 hours/year

**D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)**

Emissions Unit Information Section 1
Manufacturing Cells B,C,D,E

Rule Applicability Analysis

General Pollutant Emission Limiting Standards
Rule 62-296.320(2)F.A.C.
Rule 62-296.320(4)(b)1.&4.F.A.C.
Rule 62-296.320(1)(a)F.A.C.
CAA Section 112(g)

III. Part 6a - 1

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

List of Applicable Regulations

Listed at Facility level.

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 1

Manufacturing Cells B,C,D,E

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	A
2. Emission Point Type Code :	3
3. Descriptions of Emission Points Comprising this Emissions Unit :	
1, 2, 3 and 4, each 30" diameter metal stack, wo/rain cap	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :	
Manufacturing Cells B, C, D, E	
5. Discharge Type Code :	V
6. Stack Height :	40 feet
7. Exit Diameter :	2.50 feet
8. Exit Temperature :	77 °F
9. Actual Volumetric Flow Rate :	12,500 acfm
10. Percent Water Vapor :	%
11. Maximum Dry Standard Flow Rate :	dscfm
12. Nonstack Emission Point Height :	feet
13. Emission Point UTM Coordinates :	
Zone :	East (km) :
	North (km) :
14. Emission Point Comment :	
None	

III. Part 7b - 1

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

Manufacturing Cells B,C,D,E

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) :	
Spray application of solvent based speciality coating.	
2. Source Classification Code (SCC) : 4-02-001-10	
3. SCC Units : Gallons Used	
4. Maximum Hourly Rate : 5.61	5. Maximum Annual Rate : 35,370.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	
Field 5 Promoter = 7,080 gals/yr Topcoat = 24,240 gals/yr Catalyst = 4,050 gals/yr	

III. Part 8 - 1

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

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

Manufacturing Cells B,C,D,E

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Propane or natural gas used in drying oven as an in-process fuel.	
2. Source Classification Code (SCC) : 3-90-006-99	
3. SCC Units : Million Cubic Feet Burned (all gaseous fuels)	
4. Maximum Hourly Rate : 0.00	5. Maximum Annual Rate : 25.20
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur : 0.00	8. Maximum Percent Ash : 0.00
9. Million Btu per SCC Unit : 1	
10. Segment Comment : Field 9 = 0.0042	

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

Emissions Unit Information Section 1
Manufacturing Cells B,C,D,E

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	058		EL
2 - VOC			EL
3 - H120			EL
4 - H169			EL
5 - H186			EL
6 - HAPS			EL

III. Part 9a - 1

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

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

Emissions Unit Information Section 1

Manufacturing Cells B,C,D,E

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : PM		
2. Total Percent Efficiency of Control :	98.00	%
3. Potential Emissions :	0.2100000 lb/hour	0.6600000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right; margin-right: 100px;">to</div> <div style="text-align: right;">tons/year</div>		
6. Emissions Factor	3	Units lbs/gal
Reference : Calculated average		
7. Emissions Method Code : 2		
8. Calculations of Emissions : (35,370 gal/yr) (3.11 lbs/gal) (1-0.4) (0.02) = 1,320 lbs/yr (0.66 tons/yr)		
9. Pollutant Potential/Estimated Emissions Comment : Particulate removal inefficiency = 0.02 (2 %) Coating transfer efficiency = 0.4 (40 %) See attached narrative.		

III. Part 9b - 1

DEP Form No. 62-210.900(1) - Form

Effective : 3-21-96

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

Emissions Unit Information Section 1

Manufacturing Cells B,C,D,E

III. Part 9b - 2

DEP Form No. 62-210.900(1) - Form

Effective : 3-21-96

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

Emissions Unit Information Section 1

Manufacturing Cells B,C,D,E

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : VOC		
2. Total Percent Efficiency of Control :	0.00	%
3. Potential Emissions :	28.2700000 lb/hour	89.0400000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right; margin-right: 100px;">to</div> <div style="text-align: right;">tons/year</div>		
6. Emissions Factor	5	Units lbs/gal
Reference : Calculated average		
7. Emissions Method Code : 2		
8. Calculations of Emissions : (35,370 gal/yr) (5.035 lbs/gal) = 178,088 lbs/yr (89.04 tons/yr)		
9. Pollutant Potential/Estimated Emissions Comment : VOC emission calculations include HAP emissions.		

III. Part 9b - 3

DEP Form No. 62-210.900(1) - Form

Effective : 3-21-96

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

Emissions Unit Information Section 1

Manufacturing Cells B,C,D,E

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted : H169		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
4.2700000 lb/hour		13.4400000 tons/year
4. Synthetically Limited?		
[] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions:		
to		tons/year
6. Emissions Factor 1 Units lb/gal		
Reference : calculated average		
7. Emissions Method Code : 2		
8. Calculations of Emissions :		
(35,370 gal/yr) (0.76 lb/gal) = 26,881 lbs/yr (13.44 tons/yr)		
9. Pollutant Potential/Estimated Emissions Comment :		
See attached narrative.		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Manufacturing Cells B,C,D,E

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	VE									
2. Basis for Allowable Opacity :	RULE									
3. Requested Allowable Opacity :	<table style="margin-left: 100px; border: none;"><tr><td style="padding: 0 20px;">Normal Conditions :</td><td style="padding: 0 20px;">20</td><td style="padding: 0 20px;">%</td></tr><tr><td style="padding: 0 20px;">Exceptional Conditions :</td><td style="padding: 0 20px;">20</td><td style="padding: 0 20px;">%</td></tr><tr><td style="padding: 0 20px;">Maximum Period of Excess Opacity Allowed :</td><td style="padding: 0 20px;">30</td><td style="padding: 0 20px;">min/hour</td></tr></table>	Normal Conditions :	20	%	Exceptional Conditions :	20	%	Maximum Period of Excess Opacity Allowed :	30	min/hour
Normal Conditions :	20	%								
Exceptional Conditions :	20	%								
Maximum Period of Excess Opacity Allowed :	30	min/hour								
4. Method of Compliance :	DEP Method 9									
5. Visible Emissions Comment :										

III. Part 10 - 1

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 1

Manufacturing Cells B,C,D,E

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Figure 3
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Waived
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 :	Narrative
9. Other Information Required by Rule or Statue :	MACT Proposal

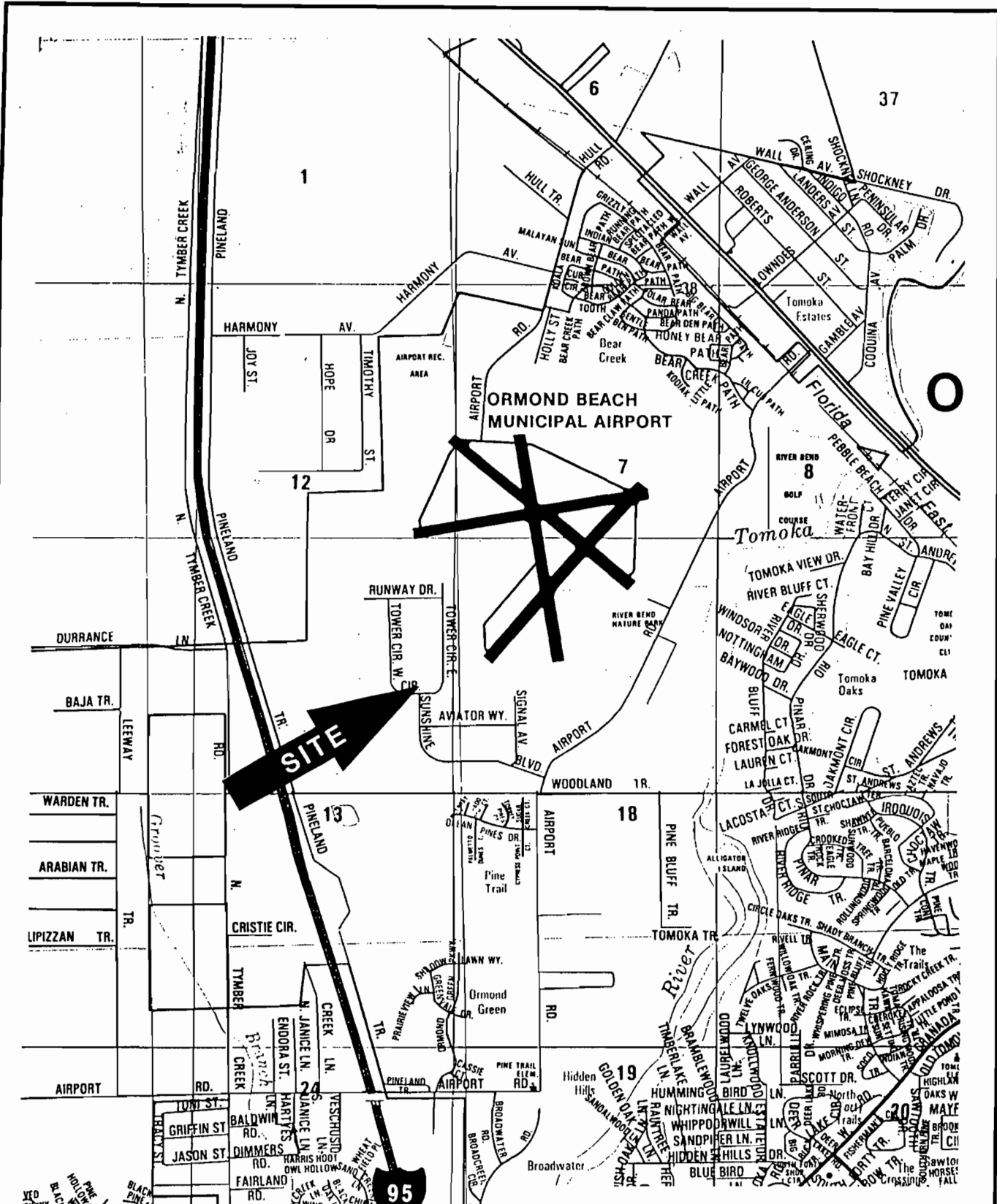
Additional Supplemental Requirements for Category I Applications Only

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

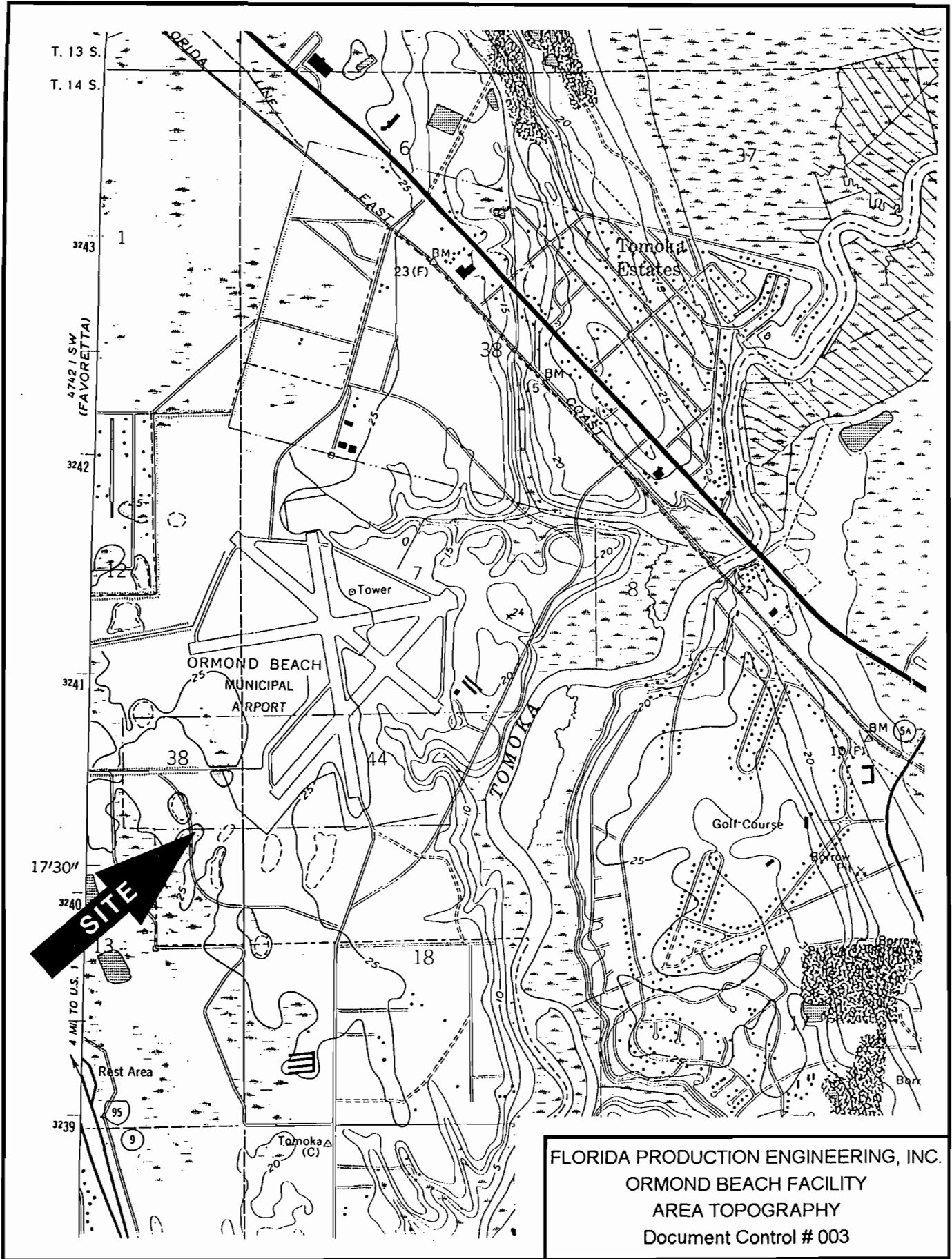
III. Part 13 - 1

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.)

III. Part 13 - 2



FLORIDA PRODUCTION ENGINEERING, INC.
 ORMOND BEACH FACILITY
 SITE LOCATION MAP
 Document Control # 002



FLORIDA PRODUCTION ENGINEERING, INC.
ORMOND BEACH FACILITY
AREA TOPOGRAPHY
Document Control # 003

NARRATIVE DESCRIPTION

Manufacturing Cells B,C,D,E

November 21, 1998

These manufacturing cells each contain an integrated process to manufacture air bag covers, from raw material to finished product. All production operations are located within each cell and each definable unit can operate independently from all other manufacturing cells and plant operations. Plastic resin pellets are molded to the desired shape using mild heat and pressure. There are no definable emissions associated with molding activities. The molded parts are placed onto a parts conveyor, at a loading/unloading station, for transportation through the remaining processes. Finished parts are removed from the conveyor at the loading/unloading station when manufacturing operations are completed.

Molded parts are transported through a totally enclosed spray booth, identified as the promoter booth, for spray application of a surface preparation coating, prior to application of a topcoat. The promoter coating is identified as **Morton International ABP 695** (see attached MSDS).

Following the promoter application, the part is transported to the topcoat spray booth where a flexible, soft touch specialty coating is applied. The soft touch coating is identified as **Morton International ST 696** (see attach MSDS). This topcoat is a plural component coating and requires the addition of a catalyst, at the rate of 6 parts topcoat to 1 part catalyst (**6:1**). The catalyst is identified as **Morton International C 694** (see attached MSDS).

Following the application of the topcoat, the part is transported through a gas fired curing oven to expedite polymerization of the coating and reduce processing time. The length and speed of the conveyor through the entire manufacturing process is optimized to provide the required curing time in the oven and to allow each part to flash-off in the spray booth. These factors dictate the production rate, which is a maximum of **56 parts/hr/cell**. Each manufacturing cell contains two (2) identical process lines and each line contains a promoter spray booth and a topcoat spray booth, for a total of four (4) identical spray booths, sharing a common, single curing oven. Since each manufacturing cell contains two (2) identical process lines, the total maximum production rate from each manufacturing cell is **112 parts/hr**.

The four (4) totally enclosed spray booths are custom manufactured, down draft type, each exhausted to the atmosphere through high efficiency filter panels at the rate of **12,500 CFM**, via thirty inch (30") diameter metal stacks. The filter pad area in each spray booth is **69.4 square feet** (100" x 100") and the manufacturer of the filter panels states a particulate removal efficiency of greater than 99%, for particulates down to ten (10) microns in size. Each spray booth applies the appropriate coating by using a single air assisted spray gun at the end of a single programmable robotic arm. For purposes of this construction permit application a **40% transfer efficiency** is assumed. Each spray booth serves as the flash-off area for each coated part.

Figure 3 illustrates the process flow diagram for each manufacturing cell.

OPERATING PARAMETERS

Largest part surface area = 117 square inches
Maximum production rate = 112 parts/hour/cell (2,352 parts/day/cell)
Coating transfer efficiency = 40%
Operating hours per day = 21 hours/day
Operating days per year = 300 days/year (6,300 hours/year)

MATERIALS USAGE

Promoter - Morton International ABP 695

It has been determined that a maximum of 0.08 milliliters of promoter per square inch is necessary to adequately wet the part and provide the required surface preparation prior to the application of the topcoat. Based on the surface area of 117 square inches for each part, this equates to approximately 9.5 milliliters per part. Since a maximum of 2,352 parts can be manufactured per day, per cell, the maximum promoter consumption is equal to 22.344 liters/day/cell (5.9 gallons/day/cell) or **23.6 total gallons/day** for four (4) manufacturing cells. Given that solids build is not a function of the promoter coating, transfer efficiency plays no part in calculating the consumption of this promoter coating.

Topcoat - Morton International ST 696 (solids = 44.2%)

Since one to three (1-3) mils (0.001-0.003 inches) of solids are required on each part and the largest part surface area is 117 square inches, topcoat consumption can be determined using the amount of solids present and the transfer efficiency. The volume of solids on each part is equal to 117 square inches multiplied by 0.003 inch, or 0.351 cubic inch of solids. Given that there are 231 cubic inches in one (1) gallon, 0.00152 gallon of solids is required on each part. Considering that a gallon of this coating contains 44.2% solids, the amount of coating required by each part (at 100% transfer efficiency) can be determined by dividing 0.00152 gallon of solids by 0.442, or 0.00344 gallon of coating. When the transfer efficiency of 40% is considered, the actual amount of coating sprayed for each part is equal to 0.00344 gallon divided by 0.4, or 0.0086 gallon. Finally, multiplying the gallon per part by the maximum number of parts manufactured per day, per cell, results in a maximum coating consumption of 20.2 gallons/day/cell, or **80.8 total gallons/day** for four (4) manufacturing cells.

Catalyst - Morton International C 694

Since the catalyst is consumed at a mix ratio of six (6) parts topcoat to one (1) part catalyst (**6:1**), the maximum amount of catalyst consumed can be determined by dividing the amount of topcoat consumed, by six (6), or 3.37 gallons/day/cell. Therefore, four (4) manufacturing cells would consume a maximum of **13.5 total gallons/day**.

Raw Material Consumption (Manufacturing Cells B,C,D,E)

Promoter (ABP 695) consumption = 23.6 gallons/day
Topcoat (ST 696) consumption = 80.8 gallons/day
Catalyst (C 694) consumption = 13.5 gallons/day
Natural gas consumption = 5,000 cubic feet/hour (5.25 mbtu/hour)

POTENTIAL EMISSIONS (Manufacturing Cells B,C,D,E)

Promoter - Morton International ABP 695 (23.6 gallons/day)

Density = 7.3 lbs/gal
Non-volatile = 7.8% (0.57 lb/gal)
Total VOC = 92.2% (6.73 lbs/gal)
toluene = 52% (3.80 lbs/gal)
xylene = 40% (2.93 lbs/gal)

<u>CAS#</u>	<u>Chemical</u>	<u>lbs/day</u>	<u>tons/yr</u>
	Total VOC	158.8	23.82
000108-88-3	toluene	89.6	13.44
001330-20-7	xylene	69.2	10.38

Topcoat - Morton International ST 696 (80.8 gallons/day)

Density = 8.4 lbs/gal
Non-volatile = 44.2% (3.7 lbs/gal)
Total VOC = 55.8% (4.7 lbs/gal)
methyl ethyl ketone = 24% (2.02 lbs/gal)
xylene = 4% (0.33 lb/gal)
n-butyl acetate = 4% (0.33 lb/gal)
propylene glycol methyl ether acetate = 24% (2.02 lbs/gal)

<u>CAS#</u>	<u>Chemical</u>	<u>lbs/day</u>	<u>tons/yr</u>
	Total VOC	397.6	56.94
000078-93-3	methyl ethyl ketone	163.2	24.48
001330-20-7	xylene	26.8	4.02
000123-86-4	n-butyl acetate	26.8	4.02
000108-65-6	propylene glycol m.e.a.	163.2	24.48

Catalyst - Morton International C 694 (13.5 gallons/day)

Density = 8.1 lbs/gal
Non-volatile = 49.7% (4.0 lbs/gal)
Total VOC = 50.3% (4.1 lbs/gal)
methyl ethyl ketone = 41.6% (3.37 lbs/gal)
n-butyl acetate = 6.3% (0.51 lb/gal)
solvent naphtha = 1.6% (0.13 lb/gal)

<u>CAS#</u>	<u>Chemical</u>	<u>lbs/day</u>	<u>tons/yr</u>
	Total VOC	55.2	8.28
000078-93-3	methyl ethyl ketone	45.6	6.84
000123-86-4	n-butyl acetate	6.8	1.02
064742-95-6	solvent naphtha	1.76	0.26

Particulate Emissions (Manufacturing Cells B,C,D,E)

Each spray booth, in each manufacturing cell, is exhausted through a high efficiency filter panel that has a removal efficiency stated by the manufacturer to be 99.0%. For purposes of this permit application, the removal efficiency for particulate matter is assumed to be **98.0%**. The size of the filter panel in each spray booth is 100 inches by 100 inches, therefore the filter panel area is calculated to be **69.4 square feet**. Since each spray booth is exhausted by a **12,500 CFM** tube axial fan, through a **30 inch diameter** metal stack, the filter face velocity is calculated to be **180 feet/minute** and the exit velocity, vertically to the atmosphere is calculated to be **42.4 feet/second**.

Based on information extracted for material safety data sheets, the maximum amount of non-volatile solids sprayed in a day, from all four (4) cells, is calculated to be **366.4 lbs (54.96 tons/year)**, without controls. When the coating transfer efficiency of **40%** and the particulate removal efficiency of **98%** are considered, the potential emissions of particulates from manufacturing cells B,C,D,E is reduced to **0.66 ton per year**.

TOTAL POTENTIAL EMISSIONS Manufacturing Cells B,C,D,E

<u>CAS#</u>	<u>Chemical</u>	<u>lbs/day</u>	<u>tons/yr</u>	<u>HAP</u>
	Total VOC	593.6	89.04	
	Total HAPS	394.4	59.16	X
000078-93-3	methyl ethyl ketone	208.8	31.32	H120
000108-88-3	toluene	89.6	13.44	H169
001330-20-7	xylene	96.0	14.40	H186
000123-86-4	n-butyl acetate	33.6	5.04	
000108-65-6	propylene glycol m.e.a.	163.2	24.48	
064742-95-6	solvent naphtha	1.76	0.26	
	particulate matter *	4.4	0.66	

* After control

Figure 4 illustrates the materials flow diagram for each manufacturing cell.

CASE - BY- CASE MACT DETERMINATION

Manufacturing Cells B,C,D,E

November 23, 1998

INTRODUCTION

Section 112g of the Clean Air Act requires MACT level control be applied to any new major source of hazardous air pollutants (HAPS) that is constructed or re-constructed, if the EPA has not promulgated a final, applicable MACT standard for the source category. This facility can most closely be classified as Plastic Parts Coating. EPA is mandated to propose emission standards (NESHAPS) for this source category by November 15, 2000.

APPLICABILITY DETERMINATION

The four (4) air bag cover manufacturing cells proposed by Florida Production Engineering, Inc. will constitute a major source of hazardous air pollutants since the proposed potential emission of HAPS is greater than the 10/25 tons/yr threshold amounts. The proposed construction of these manufacturing cells represents new manufacturing process capacity and market driven requirements for latest and safest technological applications. On this basis, the proposed expansion is classified as new construction at this site and represents the build-out condition, due to physical space limitations.

MACT PROPOSAL

Manufacturing Cells B,C,D,E and calculated potential emissions are described in detail in the Construction Permit Application, Narrative Description and associated documentation, which is being submitted with this MACT Proposal.

The proposed control technologies are described as being either the "Original" process, or the "Modified" process. The difference between materials usage amounts in each process represents a measurable reduction in emissions that is proportionate to raw materials consumption. Technology advancements, in robotic control applications has resulted in a significant reduction in coating consumption when the "Original" application technology is compared to the "Modified" application technology. The use of a single, programmable robotic arm is responsible for a 20% overall reduction in coating usage.

In addition, process rate reduction, has allowed for coating reformulation, and has resulted in a measurable reduction in HAP emissions. The difference between the "Original" coating formulation and the "Modified" coating formulation serves as the basis for a 2 lbs/gallon reduction in HAP coating constituents.

"ORIGINAL" PROCESS

Existing permitted processes at this facility include spray booths that utilize four (4) fixed position spray guns. Coating application occurs while the part rotates on the conveyor system, passing through the spray gun array. This application method, requires that a total of 44,213 gallons/yr of combined coating, with an average VOC content of 7.01lbs/gal be applied to 3,528,000 parts/yr. The "Original" process would be responsible for 154.97 tons of VOC per year under these conditions.

At maximum production rates the flash-off time was dramatically reduced in each spray booth by the addition of 2 lbs of extremely volatile HAPS, to accelerate the flash-off time. The applicant has also been able to reduce overall HAP constituents in the average coating, by material substitution and reformulation. The amount of total VOC in the "Original" coating formulation is 7.01 lbs VOC/gallon, as applied.

As discussed above, the "Original" process consumes 44,213 gallons of combined coating per year, at an average VOC content of 7.01 lbs/gal, resulting in potential total VOC emissions of 154.97 tons of VOC/yr.

"MODIFIED" PROCESS

By slowing the manufacturing process rate to 2,352 parts/day/cell which increases the flash-off time in each spray booth, the applicant was able, by materials substitution, to reduce overall HAP constituents in the average coating. The amount of total VOC in the "Modified" coating formulation is 5.02 lbs of VOC per gallon of coating. Re-formulation and material substitution, as a result of reduced manufacturing process rates, is responsible for a net reduction of 2.01 lbs of VOC per gallon of average coating. This equates to approximately 44.2 tons less VOC emissions per year.

Replacing the four (4) fixed spray guns with a programmable robotic arm has been responsible for a 20% overall reduction in combined coating consumption. The "Modified" process paint application requires that a total of only 35,370 gallons/yr of combined coating, with an average VOC content of 5.02 lbs/gal be applied to 2,822,400 parts/yr. The "Modified" process would be responsible for a reduction in combined coating consumption of 8,843 gals/yr. This is equivalent to a reduction in VOC emissions of approximately 22 tons per year.

Since the "Original" process utilized 44,213 gallons of combined coating per year, with an average VOC content of 7.01 lbs/gallon and the "Modified" process is proposed to use a maximum of 35,370 gallons of combined coating per year, with an average VOC content of 5.01 lbs/gallon. Under the stated conditions, the "Original" process has potential VOC emissions of **154.97 tons/yr** and the "Modified" process has potential VOC emissions of 88.78 tons/yr, a net VOC emission reduction of **66.19 tons/yr**. It can be calculated that the equivalent of **42.7% removal efficiency** has been achieved by incorporating the "Modified" process.

OTHER CONTROLL TECHNOLOGIES

To compare the emissions reductions that would be achieved at Florida Production Engineering, Inc. using the "Modified" process, with other VOC reduction technologies, an extensive search of EPA (and other) web sites was conducted. No information was discovered regarding control technologies at other facilities in the United States. It is well known in the coating industry that very efficient add-on control devices, incorporating incineration technologies are available. Our studies have indicated that these type of add-on control devices could cost a minimum of \$750,000 in capital equipment costs and an additional \$100,000 per year in operating costs, primarily supplemental gaseous fuel. These costs are prohibitive and it is our position that these costs would constitute an undue hardship for Florida Production Engineering, Inc.

In September of 1998, the EPA issued it's final Characterization of the Plastic Parts Coating Category. Appendix F of that document, Summary of State Rules, Identifies four (4) states that have specifically established VOC limitations for the coatings used in airbag cover manufacture, as listed on the following page.

AIR BAG COVER COATING LIMITATIONS

<u>STATE</u>	<u>COMPONENT</u>	<u>VOC LIMIT</u>
Illinois	VOC	5.9 lbs/gallon
New Hampshire	VOC	5.5 lbs/gallon
Tennessee	VOC	5.9 lbs/gallon
Delaware	VOC	5.9 lbs/gallon

Additionally, many other states have established VOC limitations, for specialty type coatings, including soft touch, flexible coatings and extreme performance coatings. The coatings described for use on air bag covers, qualifies for inclusion in both of these categories, due to performance and safety requirements.

Finally, the Department has approved a MACT Proposal for a similar source category that achieves a quantifiable VOC emission reduction by incorporating process modification as a means of control technology and pollution prevention to reduce VOC emissions.

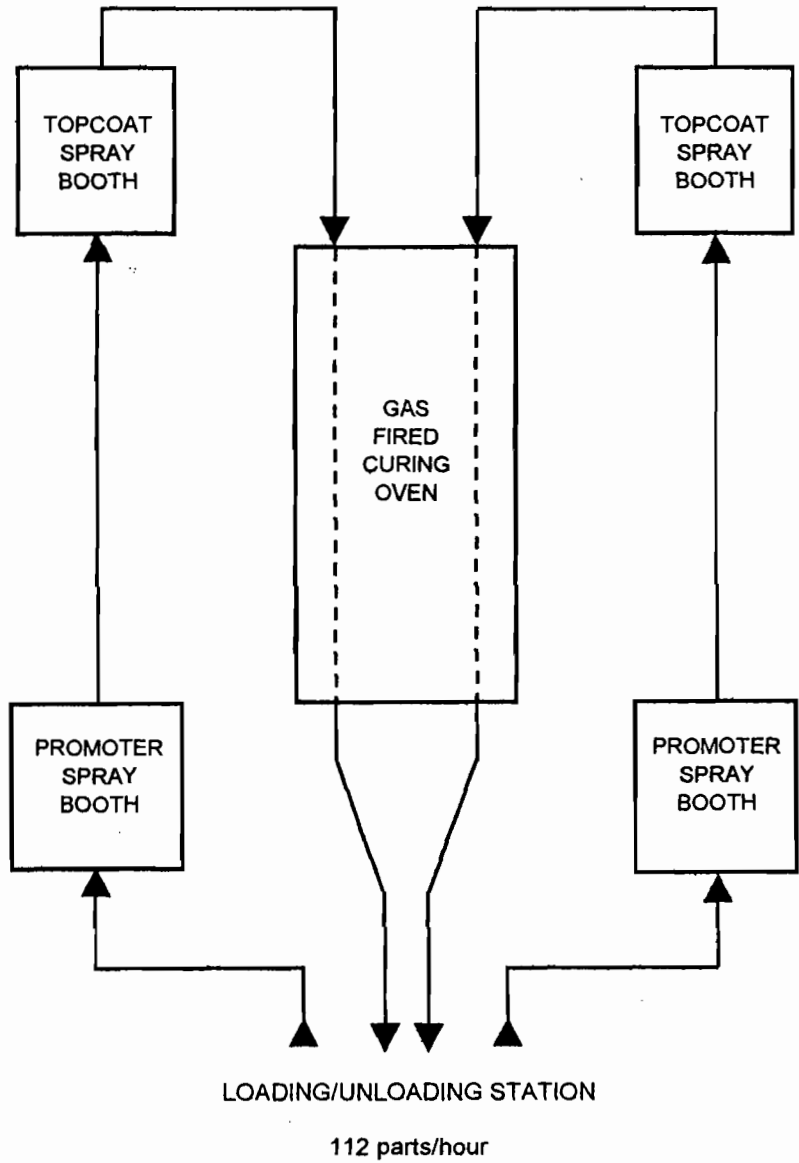
CONCLUSION

No other facilities were discovered to compare control technologies, however, this proposal does compare favorably with existing, more stringent state rules. The MACT proposal previously approved for a similar HAP emitting process, accepted the practice of incorporating process modification, coating reformulation, robotics and other cutting edge technologies to achieve, significant emissions reductions.

It is therefore proposed that the described process modifications, coating re-formulation, and an average coating VOC limit of 5.5 lbs/gal be approved as MACT for Florida Production Engineering, on the basis that an overall HAP emission reduction of 42.7% was demonstrated using the techniques stated. Additionally, the \$750,000 minimum cost for an add-on control device, in addition to \$100,000 per year in supplemental fuel costs and other operating costs would be detrimental to the growth of Florida Production Engineering, Inc and would represent an unjust financial burden.

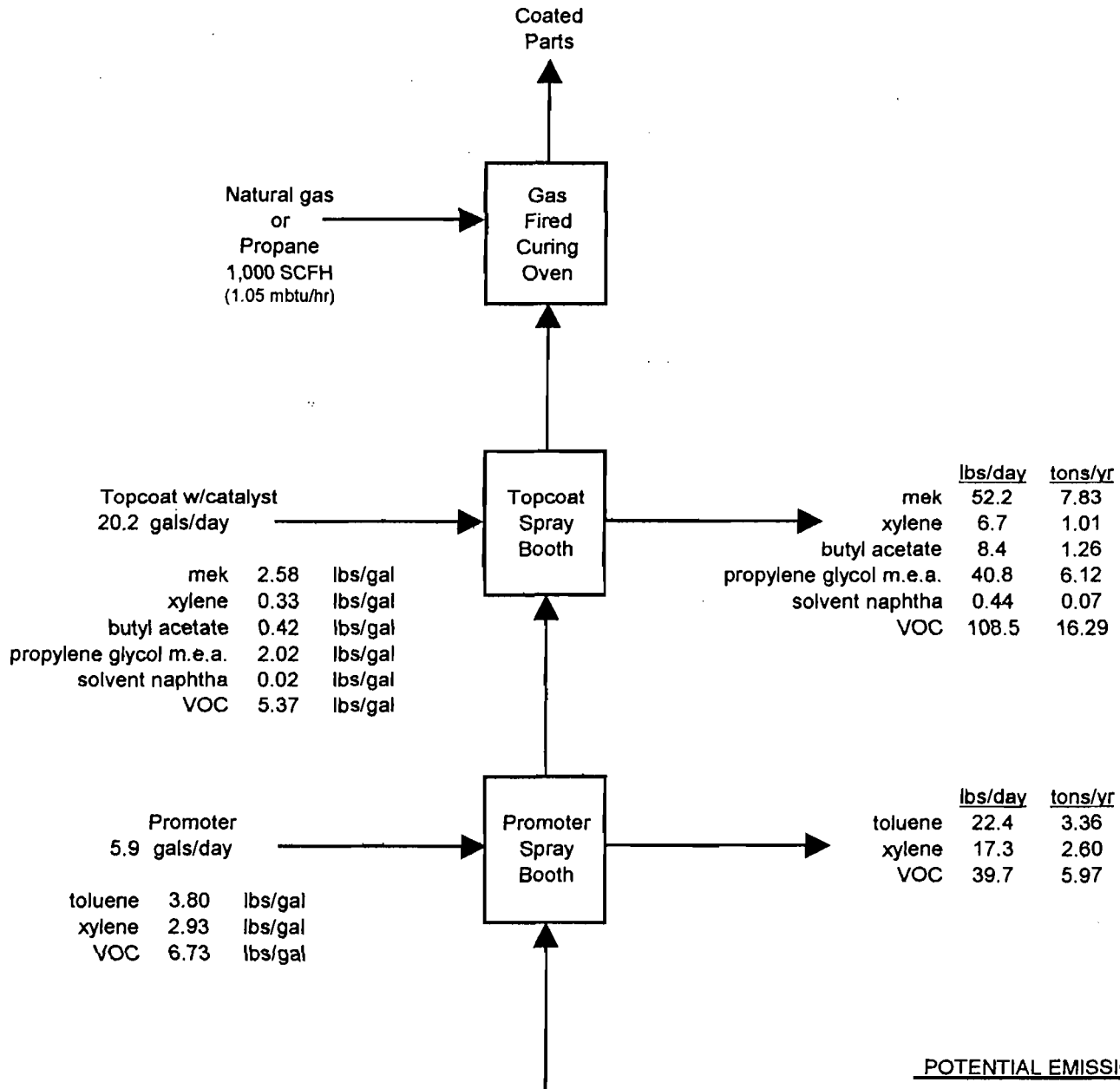
PROCESS FLOW DIAGRAM
MANUFACTURING CELLS B,C,D,E

FIGURE 3



**MATERIALS FLOW DIAGRAM
MANUFACTURING CELLS B,C,D,E**

FIGURE 4



112 parts/hr
(2,352 parts/day)

POTENTIAL EMISSIONS

	<u>EACH CELL</u>	<u>CELLS B,C,D,E</u>
mek	7.83 tons/yr	31.33 tons/yr
xylene	3.61 tons/yr	14.45 tons/yr
toluene	3.36 tons/yr	13.45 tons/yr
butyl acetate	1.26 tons/yr	5.03 tons/yr
propylene glycol m.e.a.	6.12 tons/yr	24.48 tons/yr
solvent naphtha	0.07 tons/yr	0.27 tons/yr
VOC	22.26 tons/yr	89.04 tons/yr

Annual emissions based on currently permitted operating parameters.

21 operating hours per day
300 days per year

MATERIAL SAFETY DATA SHEET

K# ~~1311~~ 1311

Date of Prep.
12/15/94

For Coatings, Resins and Related Materials

This MSDS Complies with 29 CFR 1910.1200 (The Hazard Communication Standard)

SECTION I

Manufacturer's Name MORTON INTERNATIONAL SAFETY/ENVIRONMENTAL DEPARTMENT

Street Address 2701 E. 170th STREET City, St. and Zip LANSING, IL 60438

Emergency Phone # (800) 424-9300 Non-Emergency Phone # (708) 474-7000

Product Class DECORATIVE COATING Manufacturer's #: ABP 695
FG19844

Appearance: ADHESION PROMOTER VOC = 6.73 lbs/gal

SECTION II - INGREDIENTS

Hazardous Ingredients	Percent By Wt	TLV PPM	PEL PPM	LEL	Vapor Pressure MM HG
TOLUENE * #					
CAS# 108-88-3	53+/-3	100.000	100.000	1.20	22.00
XYLENE *					
CAS# 1330-20-7	40+/-3	100.000	100.000	1.00	5.10

This chemical subject to reporting requirements of Section 313, SARA Title III
This chemical is listed under California Proposition 65.

SECTION III - PHYSICAL DATA

Boiling Range 232 - 279 F Vapor Density (X)Heavier ()Lighter, Than Air

Evaporation Rate ()Faster Percent Volatile Weight Per
(X)Slower, Than Ether by Volume 94+/-4 Gallon 7.3

-----SECTION IV - FIRE AND EXPLOSION HAZARD DATA

DOT Category FLAMMABLE LIQUID (3) Flash Point 45 F TCC LEL* See Sec. II
DOT Shipping Name: Paint UN1263 (PG II)

IATA/IMDG Category FLAMMABLE LIQUID (3)

IATA/IMDG Shipping Name: Paint UN1263 (PG II)

EXTINGUISHING MEDIA Use carbon dioxide or dry chemical extinguishers for small fires. Use foam for large fires.

SPECIAL FIRE FIGHTING PROCEDURE Cool closed containers with water spray.

UNUSUAL FIRE AND EXPLOSION HAZARDS Closed containers may build explosive pressure from heat. Vapors are heavier than air and may travel considerable distances to a source of ignition such as a spark, pilot light, cigarette or unprotected electrical device. Not sensitive to explosion upon mechanical impact.

HAZARDOUS DECOMPOSITION PRODUCTS Carbon dioxide, carbon monoxide.

SECTION V - HEALTH HAZARDS DATA

PERMISSIBLE LIMITS See Section II - Hazardous Ingredients

POTENTIAL EFFECTS OF OVEREXPOSURE

EYE CONTACT

CAN CAUSE EYE IRRITATION FROM VAPORS AND/OR LIQUID CONTACT, OBTAIN MEDICAL ATTENTION IMMEDIATELY

INHALATION

EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL & RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE, POSSIBLE UNCONSCIOUSNESS, & ASPHYXIATION.

CHRONIC EFFECTS: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE

SKIN CONTACT

REPEATED OR PROLONGED CONTACT CAUSES IRRITATION

REPEATED OR PROLONGED CONTACT MAY CAUSE DEFATTING AND DERMATITIS

INGESTION

CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITTING, AND DIARRHEA
ASPIRATION OF MATERIAL INTO LUNGS MAY CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL

OTHER

ROUTES OF ENTRY: Skin contact, eye contact, inhalation, ingestion.

Toxicity testing on the product has not been conducted. See SECTION X for further toxicity information on the components of the product.

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SECTION VI - EMERGENCY AND FIRST AID PROCEDURES

EYES: Flush immediately with large amounts of water for at least 15 minutes.
Obtain immediate medical attention.

SKIN: Wash thoroughly with soap and water. Remove contaminated clothing.
CONSULT PHYSICIAN IF IRRITATION PERSISTS

INGESTION: Thoroughly wash mouth with water.
Give two glasses of water if conscious.

DO NOT INDUCE VOMITING

INHALATION: Remove to fresh air. If breathing has stopped, give artificial
respiration. Obtain immediate medical attention.

SECTION VII - REACTIVITY DATA

STABILITY

STABLE

INCOMPATIBILITY (Materials to Avoid)

OXIDIZERS

HAZARDOUS POLYMERIZATION

WILL NOT OCCUR

EXPLOSION HAZARD

VAPORS MAY TRAVEL ALONG GROUND OR BE MOVED BY VENTILATION & IGNITED BY HEAT,
PILOT LIGHTS, FLAMES & IGNITION SOURCES AT LOCATIONS DISTANT FROM MATERIAL
VOID STATIC CHARGE, GROUND AND BOND EQUIPMENT AGAINST STATIC BUILDUP WHEN
POURING, DISPENSING AND MIXING.

CONDITIONS TO AVOID

HIGH TEMPERATURE

IGNITION SOURCES

SECTION VIII - SPILL OR LEAK PROCEDURES

RESPONSE TO SMALL SPILLS: Stop discharge and contain spill. Recover with explosion proof pumping equipment, commercial sorbents, vermiculite or other inert absorbent materials. Place in appropriate container(s) for further handling.

RESPONSE TO LARGE SPILLS: Stop discharge, contain spill or contaminated material using dike, barrier, or other means. Recover with vacuum truck, sorbents or other inert absorbent materials. Place in appropriate container(s) for further handling.

HAZARDS TO BE AVOIDED: Flammable liquid--avoid sources of ignition. Do not flush to stream, other bodies of water or sewer. Avoid contact with skin or clothing.

Other hazards see Section Nos. IV and V. Eliminate all ignition sources (FLARES, FLAMES including PILOT LIGHTS, ELECTRICAL SPARKS, and STATIC CHARGE BUILDUP). Evacuate area. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Wear appropriate protective equipment. Stop spill at source. Dike area to prevent spreading. Liquid may be taken up on absorbent material and shoveled into containers for disposal. Avoid breathing vapors.

- DISPOSAL METHODS:
- (1) Recycle, if feasible.
 - (2) Incinerate at authorized facility.
 - (3) Treatment at Industrial or Liquid waste treatment facility.
 - (4) Landfill after solidification in a facility authorized to receive waste in accordance with Federal, State, and Local regulations.

NOTE: THIS MATERIAL IF BEING DISCARDED WOULD BE CLASSIFIED A HAZARDOUS IGNITABLE WASTE AND SHOULD BE DISPOSED IN ACCORDANCE WITH LOCAL, STATE, & FEDERAL REGULATION

SECTION IX - SPECIAL PROTECTION INFORMATION

VENTILATION

Air pollution controls may be required. Check local and state regulations. PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW PEL TLV(S)

RESPIRATORY PROTECTION

APPLICATIONS USING ISOCYANATE CATALYST REQUIRE THE USE OF SUPPLIED AIR RESPIRATORS OR HOODS UNLESS EXPOSURES ARE KNOWN TO BE LOWER THAN ALLOWABLE EXPOSURE LIMITS.

NONE NEEDED IF ADEQUATE VENTILATION IS PROVIDED OTHERWISE A NIOSH APPROVED RESPIRATOR WITH ORGANIC VAPOR CARTRIGES IS RECOMMENDED WITHIN RESPIRATOR TYPE LIMITATIONS

RESPIRATOR USE MUST COMPLY WITH OSHA 1910.134 REGULATIONS. SINCE CONTAMINANT LEVELS WILL VARY DEPENDENT UPON OPERATION, INDUSTRIAL HYGIENE CONSULTATION IS RECOMMENDED

EYE PROTECTION

USE CHEMICAL GOGGLES. CONTACT LENSES SHOULD NOT BE WORN

GLOVES

USE CHEMICAL RESISTANT GLOVES

CLOTHES

TO PREVENT REPEATED OR PROLONGED SKIN CONTACT WEAR PROTECTIVE WORK CLOTHES

ADDITIONAL INFORMATION

HAVE EYE WASHES AND SAFETY SHOWERS READILY ACCESSIBLE
WASH CONTAMINATED CLOTHING BEFORE REUSE

SECTION X - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Keep away from heat, sparks and flame. Use with adequate ventilation. Keep containers closed. Ground and bond equipment against static buildup when pouring, dispensing, and mixing. OTHER PRECAUTIONS Avoid contact with skin or eyes. Avoid prolonged or repeated breathing of vapors. Do NOT take internally.

Overexposure to components has apparently been found to cause the following effects in laboratory animals:

LIVER ABNORMALITIES
KIDNEY DAMAGE
EYE DAMAGE
LUNG DAMAGE
SPLEEN DAMAGE
ANEMIA

Overexposure to components has been suggested as a cause of the following target organ effects in humans:

LIVER ABNORMALITIES
CARDIAC ABNORMALITY

Persons with pre-existing skin or respiratory disorders may be more susceptible to the effects of the product.

The California Safe Drinking Water and Toxic Enforcement Act of 1986, otherwise known as Proposition 65, requires that persons potentially exposed to certain substances be made aware of the chronic effects of the substances specified by the State of California. If noted # in Section II, this product contains substances known to the State of California to cause cancer, birth defects, or other reproductive harm.

The information contained herein is to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control we make no guarantee of results, and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical is the sole responsibility of the user. Users of any chemical should satisfy themselves that the conditions and methods of use assure that the chemical is used safely. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO THE INFORMATION CONTAINED HEREIN OR THE CHEMICAL TO WHICH THE INFORMATION REFERS. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.

Nothing contained herein is to be construed as a recommendation for use in violation of any patents or of applicable laws or regulations.

Toxic Inventory Status Listing of the Product or it's Raw Materials (if product is a mixture):

UNITED STATES TOXIC SUBSTANCE (TSCA)	Yes
CANADIAN TOXIC LIST (DSL)	No
EUROPEAN TOXIC LIST (EINECS)	No



C 694
MSDS NO: 17975-1-3
Effective: 4/12/96
Supersedes: 3/17/96

Code: FG20100
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MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product ID: C 694
Generic Description: SOFTOUCH CATALYST
Product Use: Catalyst

For general information, contact:
Morton Automotive Coatings
2701 E. 170th Street
Lansing IL 60438
708-474-7000

MSDS prepared by:
Toxicology and Regulated Substance Compliance
David Wienckowski, D.A.B.T.
100 N. Riverside Plaza
Chicago IL 60606
312-807-3422

ChemTrec Emergency
1-800-424-9300

HAZARD RATINGS		
	HMIS	NFPA
Health	2 *	2
Fire	3	3
Reactivity	0	0
* = Chronic		

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CAS #	Approximate % (w/w)
Hexamethylene diisocyanate homopolymer	28182-81-2	43.9
Methyl ethyl ketone	78-93-3	41.6
Butyl acetate, n-	123-86-4	6.3
Light aromatic solvent naphtha (C8-C10)	64742-95-6	1.6
Pseudocumene	95-63-6	0.5
Non-hazardous and other ingredients below reportable levels	Proprietary	Balance

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Flammable liquid and vapor. May cause eye and skin irritation. Harmful if inhaled, can cause central nervous system depression (dizziness, drowsiness) or respiratory system irritation. Harmful if swallowed, can cause digestive tract irritation, nausea, vomiting, diarrhea. See sections 3, 5, & 6.

PRIMARY ROUTES OF EXPOSURE: Eye. Skin. Inhalation (breathing).

EYE CONTACT: Causes severe irritation. Injury may persist for several days. May cause corneal opacity (clouding of the eye surface). Can cause burning sensation, tearing, and redness.

SKIN CONTACT: Causes severe irritation. Prolonged or repeated contact may defat the skin and lead to dermatitis. May cause allergic skin reactions. Can cause redness, itching, and burning sensation.

INHALATION (Breathing): Irritating to the eyes, nose, and respiratory tract.



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reactions and sensitization. Can cause redness, itching, and burning sensation.

INHALATION (Breathing): Irritating to the eyes, nose, and respiratory tract. Can cause dizziness, headaches, and incoordination. Nausea, vomiting, and stomach upset can occur. Can cause anesthetic and/or narcotic effects. Can cause wheezing, coughing, shortness of breath, and tightness in the chest. Can cause severe allergic respiratory reaction and sensitization.

INGESTION (Swallowing): Irritating to the mouth, throat, and stomach. May cause nausea, vomiting, pain, and stomach upset (e.g., diarrhea). Can cause dizziness, faintness, headache, and incoordination.

TARGET ORGANS/CHRONIC EFFECTS: Lungs and respiratory system. Eyes. Skin. Immune system (e.g, allergic reactions). Nervous system. Kidneys. Blood and/or blood-forming organs.

CONDITIONS AGGRAVATED BY EXPOSURE: Lungs and respiratory system. Skin. Immune systems and/or specific chemical allergies. Nervous system. Kidneys. Blood and/or blood-forming organs.

CARCINOGENICITY:

Table with 4 columns: Chemical Name, ACGIH, IARC, NTP, OSHA. Rows include Hexamethylene diisocyanate homopolymer, Methyl ethyl ketone, Butyl acetate, n-Light aromatic solvent naphtha (C8-C10), and 1,2,4-trimethylbenzene.

4. FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes. Get prompt medical attention.

SKIN CONTACT: Immediately flush with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get prompt medical attention. Professionally wash clothing before re-use.

INHALATION (Breathing): Remove to fresh air. If symptoms develop, seek immediate medical attention. If not breathing, give artificial respiration.

INGESTION (Swallowing): Seek medical attention. Immediately induce vomiting, as directed by medical personnel. Never give anything by mouth to an unconscious person.

NOTES TO PHYSICIANS: Bronchial constriction may develop after extensive exposure to isocyanates, even in individuals who have not been shown to be previously sensitized. Use bronchodilators.

5. FIRE FIGHTING METHODS

Flash Point...: 25F -3.8C Method.....: Tagliabue Closed Cup
Explosive Lmts: LEL(%) Not Determined UEL(%) Not Determined
Autoignition...: Not Determined

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Smoke, soot, and toxic/irritating fumes (i.e., carbon dioxide, carbon monoxide, etc.). Oxides of nitrogen. Amines.



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EXTINGUISHING MEDIA: SMALL FIRES: Dry chemical, carbon dioxide, halon, water spray, or foam. LARGE FIRES: Water spray, fog, or alcohol foam.

FIRE FIGHTING PROCEDURES/EQUIPMENT: Fire fighters and others who may be exposed to the products of combustion should be equipped with NIOSH-approved positive pressure self-contained breathing apparatus (SCBA) and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

EVACUATION: Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Eliminate all sources of ignition.

CONTAINMENT: Safely stop discharge. Contain material, as necessary, with a dike or barrier. Stop material from contaminating soil, or from entering sewers or bodies of water.

CLEAN-UP/PERSONAL PROTECTION EQUIPMENT: Appropriate safety measures and protective equipment should be used. Use supplied air respirator or self-contained breathing apparatus in enclosed spaces or if airborne exposure limits can be exceeded. See Section 8.

COLLECTION AND DISPOSAL: Stop discharge, if safe to do so. Use proper protective equipment. Use non-sparking tools and/or explosion-proof equipment. Stop ignition sources. Cover spills with absorbent clay or sawdust and place in closed chemical waste containers. Dispose of according to applicable local, state and federal regulations.

REPORTING: Spills of this material in excess of a component's RQ must be reported to the National Response Center (1-800-424-8802) and to the appropriate state and local emergency response organizations.

Methyl ethyl ketone

RQ = 5000 LB

7. HANDLING AND STORAGE

STORAGE CONDITIONS: Store in cool, dry, well ventilated area away from heat, ignition sources, and direct sunlight. Keep containers tightly closed.

WARNING: Hot organic chemical vapors or mists can suddenly and without warning combust when mixed with air. Ignition can occur at typical elevated temperature process conditions. Any use in such processes should be evaluated thoroughly to assure safe operating conditions.

TRANSFER: Containers should be supported and grounded before opening, dispensing, mixing, pouring, and emptying. Open with non-sparking tools. If container is warm, open bung slowly to release internal pressure.

PERSONAL HYGIENE: Wash thoroughly after handling, especially before eating, drinking, smoking, and using restroom facilities. Wash contaminated goggles, faceshield, and gloves. Professionally launder contaminated clothing before re-use.

EMPTY CONTAINER PRECAUTIONS: Attention! This container hazardous when empty. Follow label warnings even after container is emptied since empty containers may retain product residues. Do not use heat, sparks, open flames, torches, cigarettes on or near empty container. Do not reuse empty container without professional cleaning for food, clothing, or products for human or animal consumption or where skin contact can occur.



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may retain product residues. Do not use heat, sparks, open flames, torches, cigarettes on or near empty container. Do not reuse empty container without professional cleaning for food, clothing, or products for human or animal consumption or where skin contact can occur.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES:

ACGIH - TLV

Methyl ethyl ketone	200 ppm
Butyl acetate, n-	150 ppm
1,2,4-trimethylbenzene	25 ppm

ACGIH - STEL

Methyl ethyl ketone	300 ppm
Butyl acetate, n-	200 ppm

Manufacturer's PEL/TLV

Hexamethylene diisocyanate homopolymer	1 mg/M3
Light aromatic solvent naphtha (C8-C10)	50 ppm

OSHA - PEL

Methyl ethyl ketone	200 ppm
Butyl acetate, n-	150 ppm

OSHA - STEL

Methyl ethyl ketone	300 ppm
Butyl acetate, n-	200 ppm

ENGINEERING CONTROLS/VENTILATION: Local exhaust ventilation is recommended when vapors, mists, or dusts can be released in excess of established airborne exposure limits (TLVs or PELs).

EYE PROTECTION: Contact lenses should not be worn. An eye wash facility should be readily available. Wear chemical splash goggles.

SKIN PROTECTION: Wear protective clothing and appropriate impervious gloves. Because a variety of protective gloves exist, consult glove manufacturer to determine the proper type for a specific operation. Cover as much of exposed skin as possible.

RESPIRATORY PROTECTION: Avoid breathing vapor and/or mists. Industrial hygiene consultation is recommended because airborne exposure levels vary depending on the nature of the operation performed. Wear NIOSH/MSHA-approved equipment. Determine the appropriate type by consulting the respirator manufacturer. High airborne concentrations may necessitate the use of self-contained breathing apparatus (SCBA) or a supplied air respirator. Respiratory protection programs must be in compliance with 29 CFR 1910.134.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance....: See Section 1	Odor.....: Characteristic
Physical State: Liquid	Solubility....: Insoluble
pH.....: Not Applicable	Boiling Point.: 365F 185C
Vapor Density.: > 1 Air = 1	Evaporation Rt: < 1 (Butyl acetate)
VOC Material...: Not Applicable	VOC Coating...: 491.4 g/L 4.1 lbs/gal
Specific Grvty: 0.968	%Non-Vol(w/w)..: 49.7
%Volatile(v/v): 60	Wt(lbs)/gal...: 8.1



unit volume of coating less water, where applicable. Theoretical VOC, determined by EPA method 24 equation.

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal conditions of use.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: High temperatures.

INCOMPATIBILITY WITH OTHER MATERIALS: Water. Amines. Oxidizers. Strong bases. Acids.

11. TOXICITY INFORMATION

COMPONENTS:

Hexamethylene diisocyanate homopolymer:

Eye, skin, and respiratory tract irritant. Negative results were obtained in the Ames test. Possible skin and respiratory sensitizer.

Oral LD50	Rat	> 10,000 mg/kg
Dermal LD50	Rabbit	> 5,000 mg/kg
Inhalation LC50	Rat	137 - 1,150 mg/M3/4-Hours
Eye Irritation	Rabbit	54.6/110
Skin Irritation	Rabbit	3.4/8

Methyl ethyl ketone:

Oral LD50	Rat	2,737 mg/kg
	Mouse	4,050 mg/kg
Dermal LD50	Rabbit	6,480 mg/kg
Inhalation LC50	Mouse	40,000 ppm/2-Hours
	Rat	23,500 mg/M3-8-hours

Butyl acetate, n-:

Oral LD50	Rat	13,100 mg/kg
	Mouse	2,060 mg/kg
	Guinea pig	4,700 mg/kg
Inhalation LC50	Rat	2,000 ppm/4-Hours
	Mouse	6,000 mg/M3/2-Hours

Light aromatic solvent naphtha (C8-C10):

Eye, skin, and respiratory tract irritant.

Pseudocumene:

Oral LD50	Rat	5 g/Kg
Inhalation LC50	Rat	18 g/M3/4-Hours

12. ECOLOGICAL INFORMATION

No data are available on this product.

13. DISPOSAL CONSIDERATIONS

DISPOSAL: When a decision is made to discard this material as supplied, it meets RCRA's characteristic definition of ignitability. The toxicity characteristic (TC) has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

GENERAL STATEMENTS: Federal regulations may apply to empty container. State



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characteristic (TC) has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

GENERAL STATEMENTS: Federal regulations may apply to empty container. State and/or local regulations may be different.

GENERAL RECOMMENDATIONS: Of the methods of disposal currently available, it is recommended that an alternative be selected according to the following order of preference, based upon environmental acceptability: (1) recycle or rework, if feasible; (2) incinerate at an authorized facility; or (3) treat at an acceptable waste treatment facility.

SPECIAL INSTRUCTIONS: Be sure to contact the appropriate government environmental agencies if further guidance is required.

14. TRANSPORT INFORMATION

Weight (lb) Shipping Name 49 CFR IATA IMO
Paint Related Materials Y Y

DOT Label.....: Flammable Liquid UN/NA Id Num...: UN1263
DOT Label No...: Not Applicable
Hazard Class...: 3 (IATA/49CFR)
Packing Group.: II

15. REGULATORY INFORMATION

FEDERAL:

This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SARA Title III - Section 311/312 - Hazard Categories:
Y- Fire Hazard
N- Sudden Release of Pressure Hazard
N- Reactivity Hazard
Y- Immediate (acute) Health Hazard
Y- Delayed (chronic) Health Hazard

Ozone-Depleting Chemicals - No regulated ingredients.

SARA Section 302 Extremely Hazardous Mat - No regulated ingredients.

SARA Section 313 Toxic Chemicals
Methyl ethyl ketone
1,2,4-trimethylbenzene

TSCA Section 12(b) Export Notification
Butyl acetate, n-

TSCA Section 8(d) Data Reporting Rule
Methyl ethyl ketone

CHEMICAL LISTING - Listed on the following Country's Chemical Inventories:

European Union EINECS (Euro. Inventory of Chem. Subst.)
Listed.

United States Toxic Substance Control Act



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Environmental Hazard.
Light aromatic solvent naphtha (C8-C10) 64742-95-6 1.6
Pseudocumene 95-63-6 0.5

Environmental Hazard.
Non-hazardous trade secret ingredient(s) Proprietary Balance

California - California Proposition 65
WARNING: This product contains a chemical(s) known to the State of California to cause cancer.
Toluene diisocyanate 26471-62-5 < 0.1
Cancer Hazard.
* Trace = present at less than 0.01 percent.

CONEG - No data available.

CANADA:

This is a "controlled product" under the Canadian Workplace Hazardous Materials Information System (WHMIS).

CEPA - NPRI
Methyl ethyl ketone
Pseudocumene

Canadian Chemical Inventory

Domestic Substance List
Listed.

16. OTHER INFORMATION

USERS RESPONSIBILITY: A bulletin such as this cannot be expected to cover all possible individual situations. As the user has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if, or where, precautions - in addition to those described herein - are required. Any health hazard and safety information herein should be passed on to your customers or employees, as the case may be.

DISCLAIMER OF LIABILITY: The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical is the sole responsibility of the user. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to the information contained herein or the chemical to which the information refers. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

End of Material Safety Data Sheet



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purpose or any other nature are made hereunder with respect to the information contained herein or the chemical to which the information refers. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

End of Material Safety Data Sheet



MATERIAL SAFETY DATA SHEET

CHEMICAL PRODUCT AND COMPANY INFORMATION

Product ID: 94233 **ST 696**
 Generic Description: CLASSEY GREY /NH264L
 Product Use: Decorative coating

For customer service/technical information, contact:
 Morton Automotive Coatings
 2701 E. 170th Street
 Lansing IL 60438
 708-474-7000

MSDS prepared by:
 Toxicology and Regulated Substance Compliance
 David Wienckowski, D.A.B.T.
 100 N. Riverside Plaza
 Chicago IL 60606
 312-807-3422

HAZARD RATINGS		
	HMIS	NFPA
Health	2 *	2
Fire	3	3
Reactivity	0	0
* = Chronic		

ChemTrec Emergency
 1-800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CAS #	Approximate % (w/w)
Methyl ethyl ketone	78-93-3	20 - 30
Propylene glycol methyl ether acetate	108-65-6	20 - 30
Amorphous synthetic silica gel	112926-00-8	5 - 10
Butyl acetate, n-	123-86-4	1 - 5
Titanium Dioxide	13463-67-7	1 - 5
Xylene	1330-20-7	1 - 5
Methyl pentamethyl-4-piperidinyl sebacate	82919-37-7	1 - 5
Carbon black	1333-86-4	0 - 1
Non-hazardous and other ingredients below reportable levels	Proprietary	Balance

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: FLAMMABLE LIQUID AND VAPOR. INHALATION MAY CAUSE DIZZINESS, HEADACHE AND INCOORDINATION. INGESTION CAN CAUSE DIZZINESS, FAINTNESS, HEADACHE AND INCOORDINATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY CAUSE DIGESTIVE TRACT IRRITATION. INGESTION MAY CAUSE NAUSEA, VOMITING, PAIN, UPSET STOMACH, DIARRHEA. INHALATION MAY CAUSE NAUSEA, VOMITING, UPSET STOMACH. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. See sections 3, 5, & 6.

PRIMARY ROUTES OF EXPOSURE: Eye. Skin. Inhalation (breathing).

EYE CONTACT: May cause slight to mild irritation. May cause corneal opacity (clouding of the eye surface). Can cause burning sensation, tearing, and redness.



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IN CONTACT: May cause slight to mild irritation. Prolonged or repeated contact may dry the skin and lead to irritation (i.e. dermatitis). Can cause redness, itching, and burning sensation.

INHALATION (Breathing): Irritating to the eyes, nose, and respiratory tract. Can cause dizziness, headaches, and incoordination. Nausea, vomiting, and stomach upset can occur. Can cause anesthetic and/or narcotic effects. Can cause wheezing, coughing, shortness of breath, and tightness in the chest.

INGESTION (Swallowing): Irritating to the mouth, throat, and stomach. May cause nausea, vomiting, pain, and stomach upset (e.g., diarrhea). Can cause dizziness, faintness, headache, and incoordination.

TARGET ORGANS/CHRONIC EFFECTS: Nervous system. Lungs and respiratory system. Eyes. Skin. Liver. Kidneys. Blood and/or blood-forming organs.

CONDITIONS AGGRAVATED BY EXPOSURE: Nervous system. Lungs and respiratory system. Skin. Kidneys. Blood and/or blood-forming organs.

CARCINOGENICITY:

	ACGIH	IARC	NTP	OSHA
Methyl ethyl ketone	No	No	No	No
Propylene glycol methyl ether acetate	No	No	No	No
Amorphous synthetic silica gel	No	No	No	No
Butyl acetate, n-	No	No	No	No
Titanium Dioxide	No	No	No	No
Xylene	No	No	No	No
Methyl pentamethyl-4-piperidinyl sebacate	No	No	No	No
Carbon black	No	2B	No	No

4. FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.

SKIN CONTACT: Immediately flush with water. Remove contaminated clothing and shoes. Get medical attention if irritation persists. Professionally wash clothing and shoes before re-use.

INHALATION (Breathing): Remove to fresh air. If symptoms develop, seek immediate medical attention. If not breathing, give artificial respiration.

INGESTION (Swallowing): Seek medical attention. Immediately induce vomiting, as directed by medical personnel. Never give anything by mouth to an unconscious person.

NOTES TO PHYSICIANS: Treatment should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.

5. FIRE FIGHTING METHODS

Flash Point...: 25F -3.8C Method.....: Tagliabue Closed Cup
 Explosive Lmts: LEL(%) Not Determined UEL(%) Not Determined
 Autoignition...: Not Determined

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Smoke, soot, and toxic/irritating fumes (i.e., carbon dioxide, carbon monoxide, etc.).

FIRE AND EXPLOSION HAZARDS: High temperatures can cause sealed containers to

**MATERIAL SAFETY DATA SHEET**

pture due to a build up of internal pressure. Cool with water. Vapors can travel to a source of ignition (flame, electric motor, hot surface, cigarette, etc.) and flash back. During a fire, irritating and highly toxic gases may be generated during combustion or decomposition.

EXTINGUISHING MEDIA: SMALL FIRES: Dry chemical, carbon dioxide, water spray, or foam. LARGE FIRES: Water spray, fog, or alcohol foam.

FIRE FIGHTING PROCEDURES/EQUIPMENT: Fire fighters and others who may be exposed to the products of combustion should be equipped with NIOSH-approved positive pressure self-contained breathing apparatus (SCBA) and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

EVACUATION: Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Eliminate all sources of ignition.

CONTAINMENT: Safely stop discharge. Contain material, as necessary, with a dike or barrier. Stop material from contaminating soil, or from entering sewers or bodies of water.

CLEAN-UP/PERSONAL PROTECTION EQUIPMENT: Appropriate safety measures and protective equipment should be used. Use supplied air respirator or self-contained breathing apparatus in enclosed spaces or if airborne exposure limits can be exceeded. See Section 8.

COLLECTION AND DISPOSAL: Stop discharge, if safe to do so. Use proper protective equipment. Use non-sparking tools and/or explosion-proof equipment. Stop ignition sources. Cover spills with absorbent clay or sawdust and place in closed chemical waste containers. Dispose of according to applicable local, state and federal regulations.

REPORTING: Spills of this material in excess of a component's RQ must be reported to the National Response Center (1-800-424-8802) and to the appropriate state and local emergency response organizations.

Methyl ethyl ketone

RQ = 5000 LB

Xylene

RQ = 100 LB

7. HANDLING AND STORAGE

STORAGE CONDITIONS: Store in cool, dry, well ventilated area away from heat, ignition sources, and direct sunlight. Keep containers tightly closed.

WARNING: Hot organic chemical vapors or mists can suddenly and without warning combust when mixed with air. Ignition can occur at typical elevated temperature process conditions. Any use in such processes should be evaluated thoroughly to assure safe operating conditions.

TRANSFER: Containers should be supported and grounded before opening, dispensing, mixing, pouring, and emptying. Open with non-sparking tools. If container is warm, open bung slowly to release internal pressure.

PERSONAL HYGIENE: Wash thoroughly after handling, especially before eating, drinking, smoking, and using restroom facilities. Wash contaminated goggles, faceshield, and gloves. Professionally launder contaminated clothing before use.

EMPTY CONTAINER PRECAUTIONS: Attention! This container hazardous when empty. Follow label warnings even after container is emptied since empty containers



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Do not retain product residues. Do not use heat, sparks, open flames, torches, cigarettes on or near empty container. Do not reuse empty container without professional cleaning for food, clothing, or products for human or animal consumption or where skin contact can occur.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**EXPOSURE GUIDELINES:****ACGIH - TLV**

Methyl ethyl ketone	200 ppm
Amorphous synthetic silica gel	10 mg/M3 Total dust
Butyl acetate, n-	150 ppm
Titanium Dioxide	10 mg/M3
Xylene	100 ppm
Carbon black	3.5 mg/M3

ACGIH - STEL

Methyl ethyl ketone	300 ppm
Butyl acetate, n-	200 ppm
Xylene	150 ppm

OSHA - PEL

Methyl ethyl ketone	200 ppm
Amorphous synthetic silica gel	6 mg/M3 Total dust
Butyl acetate, n-	150 ppm
Titanium Dioxide	10 mg/M3
Xylene	100 ppm
Carbon black	3.5 mg/M3

OSHA - STEL

Methyl ethyl ketone	300 ppm
Butyl acetate, n-	200 ppm
Xylene	150 ppm

ENGINEERING CONTROLS/VENTILATION: Local exhaust ventilation is recommended when vapors, mists, or dusts can be released in excess of established airborne exposure limits (TLVs or PELs).

EYE PROTECTION: Wear chemical splash goggles. An eye wash facility should be readily available.

SKIN PROTECTION: Wear protective clothing and appropriate impervious gloves. Because a variety of protective gloves exist, consult glove manufacturer to determine the proper type for a specific operation.

RESPIRATORY PROTECTION: Avoid breathing vapor and/or mists. Wear NIOSH/MSHA-approved equipment. Determine the appropriate type by consulting the respirator manufacturer. High airborne concentrations may necessitate the use of self-contained breathing apparatus (SCBA) or a supplied air respirator. Respiratory protection programs must be in compliance with 29 CFR 1910.134.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance....: See Section 1	Odor.....: Characteristic
Physical State: Liquid	Solubility....: Insoluble
.....: Not Applicable	Boiling Point.: 284F 140C
Vapor Density.: > 1 Air = 1	Evaporation Rt: < 1 (Butyl acetate)
VOC Material...: Not Applicable	VOC Coating...: 563.3 g/L 4.7 lbs/gal



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Specific Grvty: 1.005
 Volatile(v/v): 65

%Non-Vol(w/w): 44.2
 Wt(lbs)/gal...: 8.4

NOTE: The physical data presented above are typical values and should not be construed as a specification.

ADDITIONAL INFORMATION: VOC content is being expressed as mass of VOC per unit volume of coating less water, where applicable.

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal conditions of use.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: High temperatures.

INCOMPATIBILITY WITH OTHER MATERIALS: Oxidizers. Acids.

11. TOXICITY INFORMATION

COMPONENTS:

Methyl ethyl ketone:

Oral LD50	Rat	2,737 mg/kg
	Mouse	4,050 mg/kg
Dermal LD50	Rabbit	6,480 mg/kg
Inhalation LC50	Mouse	40,000 ppm/2-Hours
	Rat	23,500 mg/M3-8-hours

Propylene glycol methyl ether acetate:

Oral LD50	Rat	8,532 mg/kg
Dermal LD50	Rabbit	> 5,000 mg/kg
Inhalation LC50	Rat	4,345 ppm/6-hrs.

Amorphous synthetic silica gel:

Repeated exposure to dusts can lead to particulate deposition in the lungs (i.e., pneumoconiosis).

Oral LD50	Rat	> 31,600 mg/kg
Dermal LD50	Rabbit	> 2,000 mg/kg
Inhalation LC50	Rat	> 2 mg/L-1 hour

Butyl acetate, n-:

Oral LD50	Rat	13,100 mg/kg
	Mouse	2,060 mg/kg
	Guinea pig	4,700 mg/kg
Inhalation LC50	Rat	2,000 ppm/4-Hours
	Mouse	6,000 mg/M3/2-Hours

Titanium Dioxide:

In a 2-year study in rats, an increase in benign and malignant lung tumors was observed at 250 mg/M3 respirable dust level. This level is 50 times the current occupational exposure level and is not expected to correlate to human exposures.

Xylene:

Oral LD50	Rat	4,300 mg/kg
Inhalation LC50	Rat	5,000 ppm/4-Hours



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thyl pentamethyl-4-piperidiny l sebacate:
 Oral LD50 Rat 125 mg/kg

Carbon black:

Inhalation studies in rats have shown increased rates of benign and malignant lung tumors. Solvent extracts of carbon black have been shown to be carcinogenic to the skin of mice. However, epidemiological studies of carbon black workers in the United States show no increased incidence of cancer deaths compared to the general population. Dust can irritate eyes and skin.

12. ECOLOGICAL INFORMATION

No data are available on this product.

13. DISPOSAL CONSIDERATIONS

DISPOSAL: When a decision is made to discard this material as supplied, it meets RCRA's characteristic definition of ignitability. The toxicity characteristic (TC) has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

GENERAL STATEMENTS: Federal regulations may apply to empty container. State and/or local regulations may be different.

GENERAL RECOMMENDATIONS: Of the methods of disposal currently available, it is recommended that an alternative be selected according to the following order of preference, based upon environmental acceptability: (1) recycle or rework, if feasible; (2) incinerate at an authorized facility; or (3) treat at an acceptable waste treatment facility.

SPECIAL INSTRUCTIONS: Be sure to contact the appropriate government environmental agencies if further guidance is required.

14. TRANSPORT INFORMATION

Weight (lb)	Shipping Name	49 CFR	IATA	IMO
	Paint	Y	Y	

DOT Label.....:	Flammable Liquid	UN/NA Id Num...:	UN1263
DOT Label No...:	Not Applicable		
Hazard Class...:	3 (IATA/49CFR)		
Packing Group...:	II		

15. REGULATORY INFORMATION**FEDERAL:**

This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SARA Title III - Section 311/312 - Hazard Categories:

- Y- Fire Hazard
- N- Sudden Release of Pressure Hazard
- N- Reactivity Hazard
- Y- Immediate (acute) Health Hazard
- Y- Delayed (chronic) Health Hazard

One-Depleting Chemicals - No regulated ingredients.

SARA Section 302 Extremely Hazardous Mat - No regulated ingredients.



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SARA Section 313 Toxic Chemicals
Methyl ethyl ketone
Xylene

TSCA Section 12(b) Export Notification
Butyl acetate, n-

TSCA Section 8(d) Data Reporting Rule
Methyl ethyl ketone
Propylene glycol methyl ether acetate

CHEMICAL LISTING - Listed on the following Country's Chemical Inventories:

European Union
Listed. EINECS (Euro. Inventory of Chem. Subst.)

Japan
Not listed. Japanese MITI Inventory

United States
Chemical component(s) in this product are on the section 8(b) Chemical
Substance Inventory List (40 CFR 710). Toxic Substance Control Act

STATE RIGHT-TO-KNOW:

Pennsylvania - New Jersey R-T-K	
Methyl ethyl ketone	78-93-3 20 - 30
Environmental Hazard.	
Propylene glycol methyl ether acetate	108-65-6 20 - 30
Amorphous synthetic silica gel	112926-00-8 5 - 10
Butyl acetate, n-	123-86-4 1 - 5
Environmental Hazard.	
Titanium Dioxide	13463-67-7 1 - 5
Xylene	1330-20-7 1 - 5
Environmental Hazard.	
Methyl pentamethyl-4-piperidinyll sebacate	82919-37-7 1 - 5
Carbon black	1333-86-4 0.4
Non-hazardous trade secret ingredient(s)	Proprietary Balance

California - California Proposition 65 - No regulated ingredients.

CONEG - No data available.

CANADA:

This is a "controlled product" under the Canadian Workplace Hazardous
Materials Information System (WHMIS).

Class B Division 2
Class D Division 2 Sub-division B

Class D Division 2 Sub-division A

CEPA - NPRI

Methyl ethyl ketone
Xylene

Canadian Chemical Inventory

Domestic Substance List



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Listed.

16. OTHER INFORMATION

USERS RESPONSIBILITY: A bulletin such as this cannot be expected to cover all possible individual situations. As the user has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if, or where, precautions - in addition to those described herein - are required. Any health hazard and safety information herein should be passed on to your customers or employees, as the case may be.

DISCLAIMER OF LIABILITY: The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical is the sole responsibility of the user. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to the information contained herein or the chemical to which the information refers. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

End of Material Safety Data Sheet

Memorandum

To: Cindy Phillips, PE

From: Lennon Anderson

Date: May 24, 2000

Subject: Florida Production Engineering (FPE), Facility ID # 1270102

Request for MACT modification and approval to exclude negligibly photoreactive chemicals from VOC compliance calculations

BACKGROUND

FPE was issued a MACT Determination with MACT limits at 3.22 and 6.44 pounds VOC per gallon, as applied for the topcoat and promoter spray booths, respectively. After issuance of the MACT, FPE has alleged that the MACT limits cannot be met. As a result, on January 10, 2000, FPE requested the following:

- (1) a relaxation of its MACT
- (2) an exclusion of propylene glycol methyl ether acetate from VOC calculations

DISCUSSION

Request # 1

FPE is requesting a temporary relaxation of its MACT limit to 3.60 pounds of VOC per gallon of coating (as applied) until the expiration of construction permit number 1270102-004-AC which is June 30, 2004. FPE further argued that if this request is granted then the facility could come into compliance by the end of 2000. Furthermore, the period from now until expiration of the construction permit will allow for the development, testing and implementation of the means necessary to achieve the MACT limitation of 3.22 pounds per gallon of coating (as applied).

Request # 2

In order for FPE to reduce its VOC emission by 38 tons per year, FPE is alleging that propylene glycol methyl ether acetate can be categorized as "negligibly photoreactive" pursuant to 40 CFR 51.100(s)(2). If it is negligibly photoreactive, then it may be excluded from VOC calculations for the purpose of demonstrating compliance. Propylene glycol methyl ether acetate is not a HAP; however it is a VOC. According to Rule 62-210.200(313), F.A.C and 40 CFR 51.100, propylene glycol methyl ether acetate is not listed as one of the negligibly photoreactive chemicals.

CONCLUSION

Based on studies conducted, it is hereby recommended that Request # 1 be GRANTED and Request # 2 be DENIED.

INTEROFFICE MEMORANDUM

Date: 21-Jun-2000 11:21am
From: Bill
billkinell@usa.net
Dept:
Tel No:

To: phillips_c (phillips_c@dep.state.fl.us)
CC: anderson_l (anderson_l@wpbl.dep.state.fl.us)

Subject: Florida Production Engineering

Regarding the request to exclude propylene glycol methyl ether acetate, a.k.a. 2-(1-methoxy)propyl acetate, CAS# 108-65-6 from VOC calculations at this facility, please consider the attached information. Particularly the statements on page 5, which identify this material as basically unregulated. This information can be viewed on-line at the Vermont SIRI site, <<http://hazard.com/msds/>>.

THANX

Bill Kinell

2-(1-Methoxy)propyl Acetate, 97% (GC)
04396

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: 2-(1-Methoxy)propyl Acetate, 97% (GC)

Catalog Numbers:

AC413900000, AC413900010, AC413900250

Synonyms:

1-Methoxy-2-Acetoxypropane; 1,2-Propandiol Monomethyl Ether Acetate

Company Identification: Acros Organics N.V.

One Reagent Lane

Fairlawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
108-65-6	2-(1-Methoxy)Proxy Acetate	97%	203-603-9
7732-18-5	Water	Balance	231-791-2

Hazard Symbols: XI

Risk Phrases: 10 36/38

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: colourless. Flash Point: 42 deg C.

Warning! Flammable liquid. May form explosive peroxides. May cause eye and skin irritation. May cause respiratory and digestive tract irritation.

Target Organs: None known.

Potential Health Effects

Eye:

Causes mild eye irritation.

Skin:

Causes mild skin irritation.

Ingestion:

May cause irritation of the digestive tract.

Inhalation:

Inhalation of vapor may cause respiratory tract irritation.

Chronic:

No information found.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid immediately.

Skin:

Get medical aid: Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. Use water spray to keep fire-exposed containers cool. Flammable Liquid. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. May be ignited by heat, sparks, and flame. Vapors may form an explosive mixture with air. Containers may explode when heated.

Extinguishing Media:

Use water spray to cool fire-exposed containers. In case of fire, use water fog, dry chemical, carbon dioxide, or regular foam. Contact professional fire-fighters immediately. Cool containers with flooding quantities of water until well after fire is out.

Autoignition Temperature: 333 deg C (631.40 deg F)

Flash Point: 42 deg C (107.60 deg F)

NFPA Rating: Not published.

Explosion Limits, Lower: 1.30 vol %

Upper: 13.10 vol %

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:

Wash thoroughly after handling. Use with adequate ventilation. Ground and bond containers when transferring material. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final
2-(1-Methoxy)Proxy	none listed	none listed	none listed

Acetate			
Water	none listed	none listed	none listed

OSHA Vacated PELs:

2-(1-Methoxy)Proxy Acetate:

No OSHA Vacated PELs are listed for this chemical.

Water:

No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State: Liquid
 Appearance: colourless
 Odor: Ethereal odor.
 pH: Not available.
 Vapor Pressure: 4.9 mbar @ 20 deg C
 Vapor Density: 4.6 (air=1)
 Evaporation Rate: Not available.
 Viscosity: Not available.
 Boiling Point: 146 deg C @ 760.00mm Hg
 Freezing/Melting Point: -67 deg C
 Decomposition Temperature: Not available.
 Solubility: Soluble.
 Specific Gravity/Density: .9690g/cm3
 Molecular Formula: C6H12O3
 Molecular Weight: 132.16

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:

Stable under normal temperatures and pressures. This material may be sensitive to peroxide formation.

Conditions to Avoid:

Incompatible materials, ignition sources, excess heat.

Incompatibilities with Other Materials:

Oxidizing agents - strong acids - strong bases.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:

CAS# 108-65-6: AI8925000
CAS# 7732-18-5: ZC0110000

LD50/LC50:

CAS# 108-65-6: Oral, rat: LD50 = 8532 mg/kg; Skin, rabbit: LD50 = >5 gm/kg.

CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg.

Carcinogenicity:

2-(1-Methoxy)Propyl Acetate -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Water -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology:

No data available.

Teratogenicity:

No data available.

Reproductive Effects:

No data available.

Neurotoxicity:

No data available.

Mutagenicity:

Results of in vitro (Test tube) mutagenicity tests have been negative.

Other Studies:

No data available.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity:

Static acute LC50 for Fathead Minnow is 161 mg/l. Material is practically non-toxic to fish on an acute basis (LC50>100 mg/l).

Static acute LC50 for daphnids (Daphnia magna) is reported to be 408 mg/L. Material is practically non-toxic to aquatic invertebrates on a static acute basis (LC50>100 mg/l).

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Dispose of in a manner consistent with federal, state, and local regulations.

RCRA D-Series Maximum Concentration of Contaminants:

None listed.

RCRA D-Series Chronic Toxicity Reference Levels: None listed.

RCRA F-Series: None listed.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Not listed as a material banned from land disposal according to RCRA.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT

Shipping Name: FLAMMABLE LIQUID, N.O.S.
(2-(1-METHOXY)PROPYL ACETATE)

Hazard Class: 3

UN Number: UN1993

Packing Group: III

IMO

No information available.

IATA

No information available.

RID/ADR

No information available.

Canadian TDG

Shipping Name: FLAMMABLE LIQUID NOS (METHOXYPROPYLACETATE)

Hazard Class: 3

UN Number: UN1993

Other Information: FP 48 C

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL

TSCA

CAS# 108-65-6 is listed on the TSCA inventory.

CAS# 7732-18-5 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)

None of the chemicals in this material have an RQ.

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

2-(1-Methoxy)Proxoy Acetate is not present on state lists from CA, PA, MN, MA, FL, or NJ.

Water is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level:

None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI

Risk Phrases:

R 10 Flammable.

R 36/38 Irritating to eyes and skin.

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

WGK (Water Danger/Protection)

CAS# 108-65-6: 1

CAS# 7732-18-5: No information available.

Canada

CAS# 108-65-6 is listed on Canada's DSL/NDSL List.

CAS# 7732-18-5 is listed on Canada's DSL/NDSL List.

This product has a WHMIS classification of B3, D2B.

CAS# 108-65-6 is not listed on Canada's Ingredient Disclosure List.

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 2/28/1995 Revision #4 Date: 10/07/1998

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Fisher be

liable

for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.

Memorandum

To: Cindy Phillips, PE

From: Lennon Anderson

Date: September 14, 2000

Subject: Florida Production Engineering (FPE), Facility ID # 1270102

Request for MACT modification

On May 31, 2000 we had a discussion regarding whether or not the limits in pounds of VOC per gallon of coating should be deleted from the MACT determination and focus on limits in pounds of HAP per gallon of coating (please see attached memo). The latter was agreed upon since the purpose of MACT is to regulate HAPs not VOCs. By doing so, Florida will be setting a precedent because the MACT that EPA is working on, including rules from other states, has limits in pounds of VOC per gallon of coating.

Nonetheless, as applied limits in pounds of HAPs per gallon of coating are as follows:

MACT floor

6.41 for promoter spray-booth

1.86 for topcoat spray-booth

Beyond the MACT floor

6.41 for promoter spray-booth

1.25 for topcoat spray-booth

Data from FPE indicate that the coating as applied in the promoter and topcoat spray-booths are 6.72 and 2.50 pounds of HAP per gallon of coating, respectively.

Should the MACT determination change to these limits, the requests discussed in the attached memo would be moot.

Permit File Scanning Request from Cindy Phillips

Priority: -ASAP (Public Records Request, etc.) -Place in Normal Scanning Queue

Facility ID	Project#/PATs#	Type	PSD #	Submittal Date	Batch #
1270102	004	AC			

File Approved For Disposal Correspondence Intent Permit Draft (Title V)
 Return File to BAR Amendment Application OGC Proposed (Title V)

REVISED MACT DETERMINATION

Document Date 9-20-00



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

Mr. Mark Kirby, Plant Manager
Florida Production Engineering, Inc
2 Tower Circle West
Ormond Beach, FL 32174-8759

DEP File No. 1270102-004-AC (MACT-FL-003A)
Volusia County

RE: Modification of Maximum Achievable Control Technology (MACT) Determination issued on July 9, 1999, Permit Number 1270102-004-AC

Dear Mr. Kirby:

We have reviewed your request for a modification of the above permit. Pursuant to that request, the MACT Determination is changed as follows:

FROM:

MACT Determination

Based on the information presented by the applicant and the studies conducted, MACT for the subject facility is listed below:

- VOC coating content limit of 3.22 lbs/gal (maximum) as applied for topcoat spray-booths.
- VOC coating content limit of 6.44 lbs/gal (maximum) as applied for promoter spray-booths.
- Use HVLP spray guns with robotics in all spray-booths.

TO:

Based on the information presented by the applicant and the studies conducted, MACT for the subject facility is listed below:

- HAP coating content limit of 1.25 lbs/gal (maximum) as applied for topcoat spray-booths.
- HAP coating content limit of 6.41 lbs/gal (maximum) as applied for promoter spray-booths.
- Use HVLP spray guns with robotics in all spray-booths.

This letter must be attached to the original and becomes part of that MACT Determination.

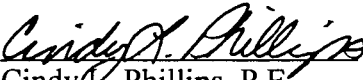
"More Protection, Less Process"

Printed on recycled paper.

Details of the Analysis may be Obtained by Contacting:

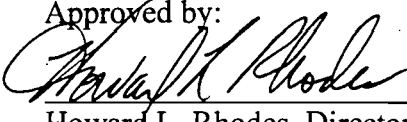
Lennon Anderson, EIT
Department of Environmental Protection
Southeast District
Air Section
400 North Congress Ave.
West Palm Beach, Florida 33401

Recommended by:



Cindy C. Phillips, P.E.
Air Toxics/Title III Section
Bureau of Air Regulation

9/20/00
Date

Approved by:


Howard L. Rhodes, Director
Division of Air Resources
Management

9/20/00
Date


C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

9/20/00
Date



Florida
Department of
Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David Struhs
Secretary

F A X T R A N S M I T T A L S H E E T

DATE: 9-26-00

TO: ALAN ZAHM

PHONE: _____

FAX: _____

FROM: CINDY PHILLIPS

PHONE: SC 291-9534

Division of Air Resources Management

FAX: 850.922.6979

RE: FPE REVISED MACT

CC: _____

Total number of pages including cover sheet: 3

Message

ALAN, FPE REQUESTED THAT THEIR MACT BE REVISED

SO THAT THEIR LIMITS ARE IN TERMS OF HAPS NOT VOCs.

WE'VE REVISED THE MACT. COULD YOU PLEASE REVISE THEIR

AC TO REFLECT THIS CHANGE?

P.S. LENNON WILL BE AT THE ANNUAL MEETING IF YOU

WANT TO DISCUSS THIS WITH HIM.

If there are any problems with this fax transmittal, please call the above phone number.

"Protect, Conserve, and Manage Florida's Environmental and Natural Resources"

Printed on recycled paper



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

Mr. Mark Kirby, Plant Manager
Florida Production Engineering, Inc
2 Tower Circle West
Ormond Beach, FL 32174-8759

DEP File No. 1270102-004-AC (MACT-FL-003A)
Volusia County

RE: Modification of Maximum Achievable Control Technology (MACT) Determination issued on July 9, 1999, Permit Number 1270102-004-AC

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This letter must be attached to the original and becomes part of that MACT Determination.


"More Protection, Less Process"

Printed on recycled paper.

Details of the Analysis may be Obtained by Contacting:

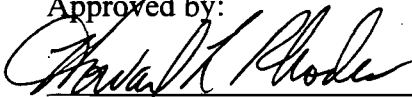
Lennon Anderson, EIT
Department of Environmental Protection
Southeast District
Air Section
400 North Congress Ave.
West Palm Beach, Florida 33401

Recommended by:



Cindy L. Phillips, P.E.
Air Toxics/Title III Section
Bureau of Air Regulation

9/20/00
Date

Approved by:


Howard L. Rhodes, Director
Division of Air Resources
Management

9/20/00
Date


C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

9/20/00
Date



Jeb Bush
Governor

Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

NOTICE OF PERMIT

RECEIVED
David B. Strubs
Secretary
JUL 13 1999
BUREAU OF AIR REGULATION

CERTIFIED MAIL
P 183 853 411

Florida Production Engineering, Incorporated
2 Tower Circle West
Ormond Beach, Florida 32174-8759

Attention: Mark Kirby, Plant Manager

Volusia County - AP
Manufacturing Cells 1, 2, 3, 4, 5, 12, A, B, C, D, E,
And Research Cell R

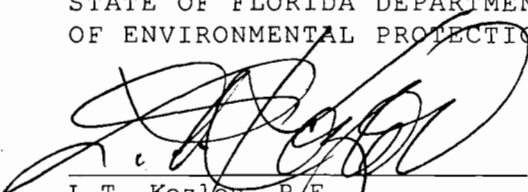
Dear Mr. Kirby:

Enclosed is Permit Number 1270102-003-AC, as amended by file number 1270102-004-AC, to construct the above referenced source issued pursuant to Section(s) 403.087, Florida Statutes.

Any party to the Order has the right to seek judicial review of the Order 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, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000; 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 the Final Order is filed with the Clerk of the Department.

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


L.T. Kozlov, P.E.
Program Administrator
Air Resources Management

Date: 7-8-99

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

LTK

LTK/wje

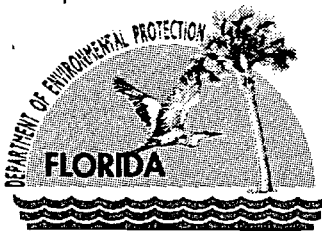
Dina Jones
Clerk _____ Date *July 9, 1999*

Copies furnished to:

William Kinnell - CHMM Project Manager
Lennon Anderson - FDEP Southeast District
Cindy L. Phillips, P.E. - FDEP Tallahassee

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT ISSUANCE and all copies were mailed before the close of business on July 9, 1999 to the listed persons, by Mary Lou Edwards.



Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

Permittee:
Florida Production Engineering,
Incorporated
2 Tower Circle West
Ormond Beach, Florida 32174-8759

Attention: Mark Kirby, Plant Manager

I.D. Number: 1270102
File Number: 1270102-004-AC
Modification of Permit: 1270102-003-AC
Expiration Date: June 30, 2004
County: Volusia
Latitude/Longitude: 29°17'36"N/81°7'14"W
UTM: 17-488.29 KmE; 3240.31 KmN
Project: Manufacturing Cells 1,2,3,4,5,12,
A,B,C,D,E and Research Cell R

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-210. 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:

The permittee may construct the following wheel cover manufacturing cells:

Cells 1, 2, 3, 4, 5, 12, and Research Cell R, which consist of six color coat spray booths, six clear coat spray booths, one color and clear coat spray booth, three surface preparation spray booths, one basecoat spray booth, one topcoat spray booth, one powder coating spray booth, ten infrared drying ovens, seven propane-fired drying ovens, one electric curing oven, six cooling tunnels, one aqueous washer tank, two aqueous mask washer tanks, two alkaline cleaner tanks, one deoxidizer tank, one conversion coating tank, and one sealer tank.

The permittee may also construct the following airbag cover manufacturing cells:

Cell A, which consists two promoter spray booths, two topcoat spray booths, and one gas-fired curing oven.

Cells B, C, D, and E, which consist of eight promoter spray booths, eight topcoat spray booths, and four gas-fired curing ovens. These cells are subject to maximum achievable control technology (MACT) requirements.

Each emission point is approximately 40 feet in height above grade. Each paint spray booth is equipped with paint filters which provide a particulate reduction efficiency of approximately 99 percent. This facility will be subject to Title V due to HAP emissions.

Pursuant to Rule 62-210.300(1), F.A.C., permit number 1270102-003-AC is being amended by file number 1270102-0040AC to add manufacturing cells B, C, D, and E and replaces all previously issued air pollution construction permits at the facility.

These sources are located at 2 Tower Circle West in Ormond Beach, Volusia County, Florida.

General Conditions, which are pages 2 and 3, are mailed only to the permittee.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, Florida Statutes (F.S.) The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup and auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (a) Have access to and copy any records that must be kept under conditions of this permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (a) A description of and cause of noncompliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

GENERAL CONDITIONS:

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and '62-30.300, Florida Administrative Code (F.A.C.), as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - () Determination of Best Available Control Technology (BACT)
 - () Determination of Prevention of Significant Deterioration (PSD)
 - () Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
 - () Compliance with New Source Performance Standards
14. The permittee shall comply with the following:
 - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring information) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 1. the date, exact place, and time of sampling or measurements;
 2. the person responsible for performing the sampling or measurements;
 3. the dates analyses were performed;
 4. the person responsible for performing the analyses;
 5. the analytical techniques or methods used;
 6. the results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

Permittee:
Florida Production Engineering,
Incorporated
Attn: Mark Kirby, Plant Manager

I.D. Number: 1270102
File Number: 1270102-004-AC
Modification of Permit: 1270102-003-AC
Expiration Date: June 30, 2004
County: Volusia

SPECIFIC CONDITIONS:

OPERATING CONDITIONS

1. Each emission unit is permitted to operate 6120 hours per consecutive twelve months with the exception of Cells A, B, C, D and E, which are permitted to operate 6300 hours per consecutive 12 months.
[Rule 62-210.200, (PTE), F.A.C.]
2. Each oven utilized shall be fired by natural gas or propane only. The total oven maximum heat input rate is 74,079 MMBtu per consecutive twelve months.
[Rule 62-210.200, (PTE), F.A.C.]
3. Volatile Organic Compound (VOC) usage at the facility shall not exceed 249 tons per consecutive twelve months.
[Rule 62-210.200, (PTE), F.A.C.]
4. For manufacturing cells B, C, D and E, VOC coating content shall not exceed:
[MACT determination]
 - a) 3.22 lbs/gal, as applied, for topcoat spray booths, or
 - b) 6.44 lbs/gal, as applied, for promoter spray booths.
5. For manufacturing cells B, C, D and E, all spray booths shall use HVLP (high volume, low pressure) spray guns with programmable robotic arms as described in the MACT proposal received March 19, 1999 and the Department MACT determination [Construction permit application and MACT determination.]
6. No person shall circumvent any pollution control device or allow the emissions of air pollutants without the applicable air pollution control device operating properly [Rule 62-210.650, F.A.C.]
7. No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department [Rule 62-296.320(1)(a), F.A.C.]. To comply, procedures to minimize pollutant emissions should include but not be limited to the following:
 - a) tightly cover or close all VOC containers when they are not in use,
 - b) tightly cover, where possible, all open troughs, basins, baths, tanks, etc. when they are not in use,
 - c) maintain all piping, valves, fittings, etc. in good operating condition,
 - d) prevent excessive air turbulence across exposed VOC's,
 - e) immediately confine and clean up VOC spills and make sure certain wastes are placed in closed containers for reuse, recycling or proper disposal,
 - f) maintain appropriate recordkeeping practices to demonstrate compliance with VOC usage limits.

Permittee:
Florida Production Engineering,
Incorporated
Attn: Mark Kirby, Plant Manager

I.D. Number: 1270102
File Number: 1270102-004-AC
Modification of Permit: 1270102-003-AC
Expiration Date: June 30, 2004
County: Volusia

SPECIFIC CONDITIONS:

8. No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. An objectionable odor is defined as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.
[Rule 62-296.320(2)]

EMISSION LIMITS

9. The visible emissions from each emission unit must comply with Rule 62-296.320(4)(b)1., F.A.C. (limited to less than 20% opacity.)
10. The total VOC emission limit for these emission units is 249 tons per consecutive 12 months.
[Construction permit applications 1270102-003-AC and 1270102-004-AC.]

COMPLIANCE TESTING

11. Each emission unit must be tested for visible emissions in accordance with DEP Method 9 for 30 minutes or the length of the batch/cycle within 30 days after being placed in operation. For any other approved method to be utilized, the Department must give prior written approval.
[Rule 62-297.310(4)(a)2., F.A.C.]
12. At least 15 days prior to the date on which each formal compliance test is due to begin, the permittee shall provide written notification of the test to the Central District Office of the Department of Environmental Protection. The notification must include the following information: the date, time, and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and telephone number of the person conducting the test.
[Rule 62-297.310(7)(a)9., F.A.C.]
13. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rule 62-297.310(2), F.A.C.]
14. The owner or operator shall submit a copy of the compliance test results to the air compliance section of this office within 45 days after the last sampling run of each test is completed [Rule 62-297.310(8)(b), F.A.C.]

Permittee:
Florida Production Engineering,
Incorporated
Attn: Mark Kirby, Plant Manager

I.D. Number: 1270102
File Number: 1270102-004-AC
Modification of Permit: 1270102-003-AC
Expiration Date: June 30, 2004
County: Volusia

SPECIFIC CONDITIONS:

15. Pursuant to Rule 62-4.070(3), F.A.C., a monthly log shall be kept for this facility to document compliance with the limitations of Specific Conditions 3, 4 and 10. The log shall be completed by the end of the following month and retained on file at the facility for at least three years. At a minimum, the monthly log shall:
- a) Identify and quantify each material used at the facility that has an air pollution emission.
 - b) Quantify the consecutive 12 month period total of emissions from VOCs.
 - c) Quantify the VOC coating contents to document compliance with specific condition number 4.

Documentation of each chemical reclaimed will use a mass balance method to determine usage/emissions (amount used minus amount collected for disposal or recycle.) Supporting documentation (chemical usage tracking logs, MSDS sheets, purchase orders, EPA "As Supplied" data sheets, EPA Method 24, etc.) shall be kept for each chemical and associated products which includes sufficient information to determine usage rates and emissions. These records shall be made available to the Department upon request.

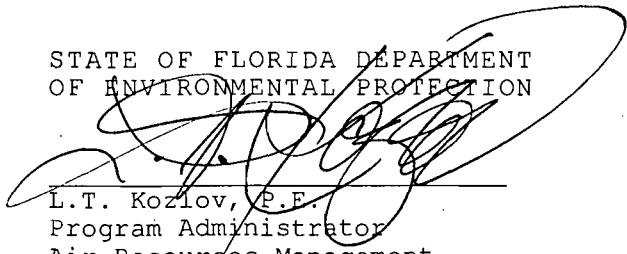
16. The owner or operator shall complete DEP Form No. 62-210.900(5), F.A.C. "Annual Operating Report for Air Pollutant Emitting Facility", including the Emissions Report, for each calendar year and submit to the air compliance section of this office on or before March 1 of the following year.
[Rule 62-210.370(3), F.A.C.]

PERMIT APPLICATION

17. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, he must notify the Department in writing at least 90 days prior to the expiration of the construction permit and submit an application for an extension of the construction permit.

The permittee shall update the Title V operating permit within 180 days after completion of construction or modification of the emission units covered by this construction permit. The permittee must demonstrate compliance with the conditions of the construction permit and submit the compliance test results along with an application for air permit to the Department's Central Florida District office [Rule 62-4.220 and Rule 62-4.090(1), F.A.C.]

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



L.T. Kozlov, P.E.
Program Administrator
Air Resources Management

Issued: 7-8-99

Memorandum**To:** Cindy Phillips, PE**From:** Lennon Anderson **Date:** July 20, 1999**Subject:** FPE's Meeting Scheduled for July 21 at 2:30 P.M.
Teleconference Number 850/921-6580 or SC 291-6580

I would like to discuss with you the following prior to the meeting tomorrow:

- similar source
- unusual circumstances
- BACT for Lake Worth Generation (LWG)

BACKGROUND

Florida Production Engineering (FPE) was recently issued a MACT Determination with MACT limits at 3.22 and 6.44 lbs/gal, as applied, for topcoat and promoter spray booths, respectively. After issuance of the MACT, FPE is now claiming that the MACT limits cannot be met.

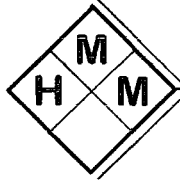
DISCUSSION

Attached is a response from the National Parks Service (NPS) regarding a BACT for LWG. Although the response addresses BACT, the process is similar to MACT for determining if a facility should meet certain limits. According to NPS, similar projects should use similar controls, unless the applicant demonstrates that there exist unusual circumstances. FPE and Mayco Plastics are similar sources by definition.

All information faxed on July 6 by FPE to support changing the MACT limits have been reviewed. FPE did not present any information that could be considered as unusual circumstances.

CONCLUSION

Since NPS took the position that LWG did not provide any information to support "unusual circumstances", SCR should be required. In the same light, the MACT limits for FPE should not change, since there has been no demonstration of "unusual circumstances".



HM MANAGEMENT

PO Box 1172 Bunnell, Florida 32110-1172

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CELL (904) 503-5900

E-MAIL billkinell@usa.net

CERTIFIED MAIL # Z 455 210 770

December 28, 1999

Cindy L. Phillips, P.E.
Bureau of Air Regulation
Department of Environmental Protection
Mail Station 5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Florida Production Engineering, Inc.
2 Tower Circle
Ormond Beach, Florida 32174
Facility ID # 1270102

RECEIVED

JAN 10 2000

BUREAU OF AIR REGULATION

Dear Ms. Phillips;

On behalf of the above referenced facility, it is hereby requested that consideration be given to the following request for permit modification and approval to exclude negligibly photoreactive chemicals from VOC compliance calculations.

REQUEST # 1 Temporary Relaxation of MACT VOC Limitation

As stated in the MACT Determination dated June 6, 1999, specific condition number 4(a), the maximum allowable VOC in topcoats used in manufacturing cells B, C, D, E, is established at 3.22 pounds of VOC per gallon of coating (as applied). During the MACT review process the MACT floor was determined to be 3.61 pounds of VOC per gallon of coating, as applied (Mayco plastics data). Based on coating manufactures data and in plant research and development, it has been determined that the established MACT of 3.22 pounds VOC per gallon for this facility is not technically feasible at this time. It is estimated that two of three years of continuing research, testing and coating development are necessary to perfect the formulation and achieve the stated MACT limitation. It is anticipated however, that during the year 2000, the MACT VOC limitation that served as the floor (3.61 pounds VOC per gallon) may be achievable. Since the MACT VOC limitation for this facility must be lower than the MACT floor, it is therefore requested that the MACT value stated in specific condition number 4(a), for this facility be increased to 3.60 pounds VOC per gallon of coating (as applied), until the expiration date of the construction permit. The requested modification of the MACT VOC limitation is lower than established MACT floor and it is believed that the period of time from now until construction permit expiration will allow for the development, testing and implementation of the means necessary to achieve the MACT limitation of 3.22 pounds VOC per gallon of coating (as applied). Our investigation indicates the imposed MACT VOC limitation of 3.22 pounds of VOC per gallon of coating may be the most stringent MACT limitation in this country for these types of

coatings. Therefore, additional time is required to develop, test and have approval of the coating formulations, or other means necessary to achieve compliance. Revising the MACT VOC limit to 3.60 pounds VOC per gallon means that this facility will be able to comply with the applicable specific permit condition, at a sooner point in time. It is anticipated that with the lower MACT value compliance can be achieved prior to the expiration date of the construction permit.

REQUEST # 2 Exclusion of Negligibly Photoreactive Chemicals in VOC Determinations

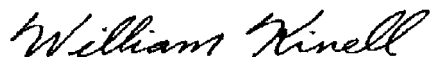
In accordance with the definitions stated in 40 CFR 51.100 (s)(2), negligibly photoreactive chemicals may be excluded from VOC calculations, for purposes of demonstrating compliance (with the approval of the permitting authority). It is our position that propylene glycol methyl ether acetate (2-(1-methoxy) propyl acetate) CAS # 108-65-6 meets the requirements for exclusion from VOC compliance calculations, since it has negligible photochemical reactivity. Propylene glycol methyl ether acetate is not a HAP and it is not regulated under the Clean Air Act as a Class 1 Ozone Depletor (ODS), or a Class 2 ODS. Additional chemical and physical data indicate that this chemical qualifies as a negligibly photoreactive chemical and as specified in the Federal Regulations, the Permitting Authority has the ability to exclude this material from VOC compliance calculations. Propylene glycol methyl ether acetate is a significant component of the topcoat applied in the subject emission units. In addition to its negligible photochemical reactivity, since it is chemically an ester, some fraction of the material aids in the polymerization of the plural component coating being applied and is effectively bound into the cured coating (polymers are excluded from the glycol ether category). Being able to exclude this material from VOC compliance calculations, due to the reasons stated above, would allow this facility to comply with the established MACT VOC limitation at much sooner point in time.

Based on the regulatory classification and the properties of propylene glycol methyl ether acetate and its negligible photochemical reactivity, it is hereby requested that this facility be allowed to exclude propylene glycol methyl ether acetate from VOC calculations, for purposes of demonstrating compliance.

Should you have any questions regarding these requests or require additional information, please do not hesitate to contact us.

Sincerely,

HM MANAGEMENT



William Kinell, CHMM
Project Manager

cc: Mark Kirby - FPE, Inc.
Charlie Corbeil - FPE, Inc.
William M. Cummings, P.E.

RECEIVED

JAN 10 2000

BUREAU OF AIR REGULATION

Copies of this correspondence have been forwarded to:

CERTIFIED MAIL # Z 455 210 770

Cindy L. Phillips, P.E.
Bureau of Air Regulation
Department of Environmental Protection
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2600 Blair Stone Road
Tallahassee, Florida 32399-2400

CERTIFIED MAIL # Z 455 210 771

Lennon Anderson, Engineer
Air Permitting Section
Department of Environmental Protection
PO Box 15425
West Palm Beach, Florida 33416

CERTIFIED MAIL # Z 455 210 769

Alan Zahm, P.E.
Air Permitting Supervisor
Department of Environmental Protection
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Orlando, Florida 32803-3767