

Technical Evaluation
and
Preliminary Determination

Conserv, Inc.
Polk County, Florida

Sulfuric Acid Plant
Federal Permit Number:
PSD-FL-076

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting
July 23, 1981

I. PROJECT DESCRIPTION

A. Applicant:

Conserv, Inc.

P. O. Box 314

Nichols, Florida 33863

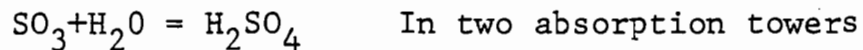
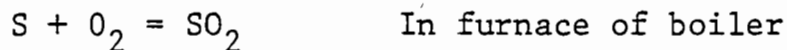
B. Project and Location:

The applicant proposes to construct a 2,000 ton per day (TPD) (100% H₂SO₄ basis) double absorption sulfuric acid plant to replace two existing 750 TPD plants. The new plant will increase Conserv's production of sulfuric acid by 500 TPD.

The plant site is in Polk County at State Road 676, 2 miles southwest of Mulberry, Florida. UTM coordinates are 398.41 km East and 3084.2 km North.

C. Process and Controls:

The principal steps in the process consist of burning sulfur (S) in air to form sulfur dioxide (SO₂), combining the sulfur dioxide with oxygen (O₂) to form sulfur trioxide (SO₃), and combining the sulfur trioxide with water (H₂O) to form sulfuric acid (H₂SO₄). The chemical reactions are:



The dual absorption process selected by the applicant is the best demonstrated control technology for SO₂ emissions from sulfuric acid plants. The high efficiency acid mist eliminator is the best demonstrated control technology for acid mist emissions. These controls will reduce the total emissions from the proposed source to a level that is in compliance with the federal New Source Performance Standards (NSPS) requirements of 40 CFR 60, Subpart H.

II. RULE APPLICABILITY:

The proposed project, building a new sulfuric acid plant to replace two existing units, is subject to preconstruction review under federal prevention of significant deterioration (PSD) regulations, Section 52.21 of Title 40 of the Code of Federal Regulations (40 CFR 52.21) as amended in the Federal Register of August 7, 1980 (45 FR 52676). Specifically, the new sulfuric acid plant is a major stationary source (40 CFR 52.21(b)(1)) located in an area designated in 40 CFR 81.310 as unclassifiable for the criteria pollutant particulate matter and attainment for the remaining criteria pollutants including SO₂. The plant will increase production from 1500 TPD to 2000 TPD; this will result in a significant net emissions increase of SO₂, thereby rendering it a major modification (40 CFR 52.21(b)(2)) subject to PSD review (40 CFR 52.21(i)).

Full PSD review is required for each pollutant for which a significant net emissions increase would occur. For this modification, the review is required for SO₂ only. The review consists of a determination of best available control technology (BACT) and an analysis of the air quality impact of the increased emissions. The review also includes an analysis of the impact of the proposed project on soils, vegetation, visibility and the air quality impacts resulting from associated commercial, residential and industrial growth.

The proposed project is also subject to the provisions of the federal New Source Performance Standard (NSPS) for sulfuric acid plants (40 CFR 60, Subpart H).

III. SUMMARY OF EMISSIONS AND AIR QUALITY ANALYSIS:

A. Emission Limitations

Table I summarizes the emissions of all pollutants regulated under the Act which are affected by the proposed modification. The contemporaneous emissions reductions of sulfuric acid mist and nitrogen oxides (NO_x) from the existing plants that will be shut down have been credited to the proposed emissions of the new plant. As the table shows, the proposed emissions increase of SO_2 exceeds the significance levels set in the PSD regulations. Although the other regulated pollutants are exempt from a PSD review because their emissions do not increase, they are required to meet all applicable emission limits and standards of performance under the Florida State Implementation Plan and Federal New Source Performance Standards.

Best Available Control Technology (BACT) has been determined for SO_2 emissions from the proposed source. The emission limiting standards selected as BACT and made a condition of this permit are listed in Table II. Justification for the standard selected is included in Technical Appendix A.

The permitted emissions, including those subject to BACT, are in compliance with the Federal New Source Performance Standards (NSPS) requirements of 40 CFR 60, Subpart H.

Table I
Emission Summary
 (Tons per Year)

<u>SOURCE</u>	<u>SO₂</u>	<u>Acid Mist</u>	<u>NO_x</u>
A. New Sulfuric Acid Plant	1460 ^a	54.76 ^a	225.5 ^a
B. Existing Sulfuric Acid Plants to be shut down	529.25 ^b	60.84 ^b	380.1 ^b
C. Net Increase from Proposed Construction	+930.75 ^c	-5.72 ^c	-157.6 ^c
D. PSD Significance Level	40 ^d	7.0 ^d	40.0 ^d

(a) Permitted allowable emissions (PSD-FL-076) at maximum allowable production rate of 2000 tons per day of 100% H₂SO₄ for 365 days per year.

(b) Applicant's estimate of actual (1979-1980) emissions.

(c) Emissions decrease after the shut down of the existing plants.

(d) 40 CFR 52.21(b)(23).

Table II
Allowable Emission Limits

<u>Pollutant</u>	<u>Pounds per hour</u>	<u>Max. Emission Rate</u>	<u>Basis</u>
Sulfur Dioxide	333.4	4 ^a	NSPS, BACT
Acid Mist	12.5	0.15 ^a	NSPS
Visible Emissions		10% opacity	NSPS, BACT
Nitrogen Oxides	50.8		Documentat- ion of con- temporaneous change

(a) Pounds per ton of 100% H₂SO₄ produced.

B. Air Quality Impacts

An air quality impacts analysis has been performed to evaluate the impact of the proposed project on ambient concentrations of sulfur dioxide. Through the use of dispersion modeling, the analysis considered the impacts of all sulfur dioxide emitting sources within the Conserv plant along with those sources at other facilities surrounding the site which may add to the impact from Conserv.

Results of the analysis provide reasonable assurance that the project, as described in this permit and subject to the conditions herein, will not lead to any violation of National Ambient Air Quality Standards or PSD increments. Details of the analysis are discussed in the Technical Appendix B.

C. Additional Impact Analysis

An additional impacts analysis has been performed to assess (1) the impact of the proposed project on soils, vegetation, and visibility and (2) any air quality impacts resulting from associated commercial, residential, or industrial growth. No adverse impacts are expected; details of the analysis are discussed in Technical Appendix C.

CONCLUSIONS

Based on the review of the data submitted by Conserv, Inc. for the construction of a double absorption type sulfuric acid plant, the FDER concludes that compliance with all applicable federal air quality regulations will be achieved provided certain specific conditions are met. The NSPS emission limits proposed by the applicant of 4 pounds of sulfur dioxide per ton of 100% acid produced, 0.15 pounds of acid mist per ton of 100% acid produced, and 10 percent opacity have been determined to be the Best Available Control Technology (BACT). The impact of the sulfuric acid plant emissions will not cause or contribute to a violation of any ambient air quality standard or PSD increment.

The FDER therefore proposes that an authorization to construct be issued to Conserv, Inc. for the proposed sulfuric acid plant subject to specific conditions to insure compliance with all applicable regulations. Appendix D includes the proposed conditions.

TECHNICAL APPENDIX A

BACT ANALYSIS

The applicant is required under the provisions of 40 CFR 52.21 as revised August 7, 1980 (45 CFR 52676), to apply BACT to all criteria and non-criteria pollutants for which a significant net emissions increase would occur. In this case, only sulfur dioxide is affected.

The applicant proposed double absorption technology and an emission limit of 4.0 pounds of sulfur dioxide per ton of 100% H_2SO_4 produced as BACT for this sulfuric acid plant. This limit meets NSPS requirements (40 CFR 60.82).

EPA recently reviewed available sulfuric acid plant technology and concluded that double absorption remains the best technology for SO_2 emissions control. No basis for reducing the NSPS limit was found to exist. Similarly, no justification could be found by FDER to require a lower emission limit for the proposed plant.

TECHNICAL APPENDIX B

AIR QUALITY ANALYSIS

PSD Increment Analysis

PSD increment analysis pertains only to sulfur dioxide (SO₂) and particulate matter (PM) for which maximum allowable increases (increments) are defined in 40 CFR 52.21(c). These increments provide for future industrial growth while also ensuring that "cleaner" areas of the nation remain relatively clean. The class II PSD increments apply in the area of the Conserv plant.

For the proposed modification (sulfuric acid plant replacement) at the Conserv facility, only one pollutant, SO₂, is subject to PSD review. The emission rate increase of this pollutant is above the significance level defined in 40 CFR 52.21(b)(23).

Two EPA-approved dispersion models, CRSTER and ISC, were used in the PSD increment analysis. The CRSTER model was used for preliminary analysis and the ISC short-term model was used for a more refined analysis. CRSTER was utilized to determine worst-case meteorology over a five year record and to determine annual increment consumption. In the above applications of CRSTER, the conservative assumption of all emissions of Conserv and Mobil Chemicals Co. being colocated was used.

The ISC model was run for all short-term (3-hour and 24-hour) periods using only the days of critical meteorology as determined by previous CRSTER runs. The ISC model is more complex than the CRSTER model in that it allows for greater variation of information in its input and output; e.g., separation

of sources. It is, however, equivalent to CRSTER in regards to the dispersion algorithm.

The meteorological data input to the models for both hourly surface observations and twice-daily mixing heights were that of Tampa, Florida, 1970-1974.

The results of the PSD increment analysis, taking into account all increment consuming sources within a 50 kilometer radius of Conserv, show no violation of any maximum allowable increase.

<u>Pollutant (Avg, Time)</u>	<u>Maximum Increment Consumed</u>	<u>Class II Allowable Increment</u>
SO ₂ (annual)	1 ug/m ³	20 ug/m ³
SO ₂ (24-hour)	27.6 ug/m ³	91 ug/m ³
SO ₂ (3-hour)	88.8 ug/m ³	512 ug/m ³

Preconstruction Monitoring

Under the PSD regulations, FDER may require a period of continuous preconstruction monitoring for any pollutant subject to review. An exemption from this requirement can be obtained if the net emissions increase of the pollutant from the modification would cause, in any area, an air quality impact less than a certain de minimus level as defined in 40 CFR 52.21(1)(8)(i). Using the CRSTER model, the applicant has shown that this exemption is valid for the proposed modification in that the maximum obtained, 10.7 ug/m³, is less than the 13 ug/m³ de minimus level for SO₂ on a 24-hour basis. Therefore, the Department has not required Conserv to conduct preconstruction monitoring as part of the air quality analysis.

National Ambient Air Quality Standards Analysis

The National Ambient Air Quality Standards (NAAQS) are established to protect public health and welfare. PSD regulations require the permit applicant to demonstrate that a proposed emissions increase subject to PSD review will not cause or contribute to any NAAQS violation. For the proposed modification at Conserv, PSD review is required for SO₂.

The maximum annual average ground-level SO₂ concentration was computed using the CRSTER dispersion model. A receptor grid spacing of 0.1 kilometers was used. Two conservative assumptions were made in the input to the model run: one, the collocation of all point sources at Conserv and Mobil; and two, the inclusion of two standby boilers which would be run only when the new plant is shut down.

The 24-hour and 3-hour maximum impacts were determined for selected days of critical meteorology. The ISC short-term dispersion model was used with a receptor spacing of 0.1 kilometers. All significant sources upwind of Conserv were included in the model runs as appropriate. The Mobil plant, which is located in close proximity, was included in all runs. The values obtained were highest second-high concentrations over a five year meteorological record. Included in all cases but one were the two stand-by boilers.

In both the annual and short-term analyses, the background value for SO₂ was assumed to be zero since all sources of SO₂ in the area were included in the modeling. The results of the NAAQS analysis are as follows:

<u>Pollutant (Avg. Time)</u>	<u>Projected Air Quality</u>	<u>NAAQS</u>
SO ₂ (annual)	43.2 ug/m ³	80 ug/m ³
SO ₂ (24-hour)	223.3 ug/m ³	365 ug/m ³
SO ₂ (3-hour)	748.2 ug/m ³	1300 ug/m ³

Class I Area Analysis

The nearest Class I area to the Conserv plant is the Chassahowitzka National Wilderness Area more than 100 kilometers to the northwest. Based on a long-range transport screening procedure contained in the EPA document Guidelines for Air Quality Maintenance Planning and Analysis, Volume 10 (Revised), impact on this area as a result of the proposed modification would be less than the significance level of 1 ug/m³, 24-hour average.

Stack Heights

For the new sulfuric acid plant, the applicant has proposed a stack height consistent with Good Engineering Practice (GEP). The GEP stack height is determined from the formula $h_s = h_b + 1.5a$ where h_b is a building height and "a" is the lesser of the building height or maximum building width. For the Conserv sources, the major obstacle which could produce downwash of the stack effluent is a rock pile 60 feet in height and approximately 110 feet wide. The appropriate GEP stack height of 150 feet was used in all model calculations.

TECHNICAL APPENDIX C
ADDITIONAL IMPACTS ANALYSIS

Impacts on Soils, Vegetation, and Visibility

The maximum impact of the proposed increase in SO₂ emissions, as demonstrated through the air quality analysis, will be below the national secondary air quality standards established to protect public welfare related values. As such, no adverse effect on soils, vegetation, and visibility is expected.

Growth Impacts

The increased production of sulfuric acid by 500 tons per day is the result of replacing existing units. There will be little or no increase in the number of employees at this site due to the modification, and no secondary residential, commercial, or industrial growth which will adversely affect air quality in the area is expected.

TECHNICAL APPENDIX D

SPECIFIC CONDITIONS

FDER proposes a preliminary determination of approval with conditions for the project (construction of a new sulfuric acid plant to replace two existing plants) requested by Conserv, Inc. in the complete PSD permit application submitted on April 23, 1981.

The specific conditions of approval are as follows:

1. The new facility shall be constructed in accordance with the capacities and specifications stated in Table I.

2. Following start-up and shake-down (180 days maximum) of the new sulfuric acid plant, the existing sulfuric acid plants will cease operation. During the shake-down period, the existing facilities may be operated so long as the combined capacity utilization of the new and existing facilities does not exceed the maximum capacity of the new unit (85.1 tons per day of 100% H_2SO_4).

3. Emission of sulfur dioxide from the sulfuric acid plant shall not exceed 333.4 pounds per hour at the maximum allowable operating rate of 85.1 tons per hour of 100% H_2SO_4 . At lower operating rates, the emissions shall not exceed 4 pounds per ton of 100% H_2SO_4 produced.

4. Emission of acid mist from the sulfuric acid plant shall not exceed 12.5 pounds per hour at the maximum allowable operating rate of 85.1 tons per hour of 100% H_2SO_4 . At lower operating rates, the emissions shall not exceed 0.15 pounds per ton 100% H_2SO_4 .

5. Visible emissions from the sulfuric acid plant shall not exceed 10% opacity.

6. Sulfur dioxide emissions from the sulfuric acid plant shall be continuously monitored in accordance with the provisions of Paragraph 60.84 of 40 CFR 60, Subpart H - Standards of Performance for Sulfuric Acid Plants. The applicant shall also comply with all other requirements of 40 CFR 60, Subpart H.

7. Compliance with all emission limits shall be determined by performance tests scheduled in accordance with the attached General Conditions. Except as provided under 40 CFR 60.8(b), the performance tests shall be conducted in accordance with the provisions of the following reference methods which are described in Appendix A of 40 CFR 60:

- a. Method 1 for sample and velocity traverses;
- b. Method 2 for volumetric flow rate;
- c. Method 3 for gas analysis;
- d. Method 7 for nitrogen oxides;
- e. Method 8 for concentration of SO₂ and acid mist; and
- f. Method 9 for visible emissions.

A compliance test shall consist of the average of three consecutive runs. The maximum sample time and volume per run will be as specified in the NSPS (40 CFR 60.85). The facility shall operate within 10 percent of maximum capacity during sampling. The parameters for the operating rate and control equipment variables and all continuous monitoring results shall be recorded during compliance testing and made a part of the test report.

8. The plant shall be allowed to operate continuously (8736 hours per year).

9. The plant shall comply with the requirements of the attached General Conditions.

10. This permit is not valid until the applicant has received a permit covering the proposed modification issued under the State of Florida SIP. Any emission limits in the State permit which are more stringent than those specified in the conditions above shall become a condition of this permit.

GENERAL CONDITIONS

1. The permittee shall notify the permitting authority in writing of the beginning of construction of the permitted source within 30 days of such action and the estimated date of start-up of operation.
2. The permittee shall notify the permitting authority in writing of the actual start-up of the permitted source within 30 days of such action and the estimated date of demonstration of compliance as required in the specific conditions.
3. Each emission point for which an emission test method is established in this permit shall be tested in order to determine compliance with the emission limitations contained herein within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source. The permittee shall notify the permitting authority of the scheduled date of compliance testing at least thirty (30) days in advance of such test. Compliance test results shall be submitted to the permitting authority within forty-five (45) days after the complete testing. The permittee shall provide (1) sampling ports adequate for test methods applicable to such facility, (2) safe sampling platforms, (3) safe access to sampling platforms, and (4) utilities for sampling and testing equipment.
4. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of two (2) years from the date of recording.
5. If, for any reason, the permittee does not comply with or will not be able to comply with the emission limitations specified in this permit, the permittee shall provide the permitting authority with the following information in writing within five (5) days of such conditions:
 - (a) Qualitative and quantitative description of noncomplying emission(s),
 - (b) cause of noncompliance,
 - (c) anticipated time the noncompliance is expected to continue or, if corrected, the duration of the period of noncompliance,
 - (d) steps taken by the permittee to reduce and eliminate the non-complying emission,and
 - (e) steps taken by the permittee to prevent recurrence of the noncomplying emission.

Failure to provide the above information when appropriate shall constitute a violation of the terms and conditions of this permit. Submittal of this report does not constitute a waiver of the emission limitations contained within this permit.

6. Any change in the information submitted in the application regarding facility emissions or changes in the quantity or quality of materials processed that will result in new or increased emissions must be reported to the permitting authority. If appropriate, modifications to the permit may then be made by the permitting authority to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause violation of the emission limitations specified herein.
7. In the event of any change in control or ownership of the source described in the permit, the permittee shall notify the succeeding owner of the existence of this permit by letter and forward a copy of such letter to the permitting authority. Such notification must be given prior to transfer of ownership.
8. The permittee shall allow representatives of the State environmental control agency and/or representatives (including contractors) of the Environmental Protection Agency, upon the presentation of credentials:
 - (a) to enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of the permit;
 - (b) to have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit, or the Act;
 - (c) to inspect at reasonable times any monitoring equipment or monitoring method required in this permit;
 - (d) to sample at reasonable times and emission of pollutants;and
 - (e) to perform at reasonable times an operation and maintenance inspection of the permitted source.
9. All correspondence required to be submitted by this permit to the permitting agency shall be mailed to the:

Chief, Consolidated Permits Branch
Enforcement Division
U.S. Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30365
10. The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

The emission of any pollutant more frequently or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

PEEPLS, EARL, REYNOLDS & BLANK

PROFESSIONAL ASSOCIATION

ATTORNEYS AT LAW

L. GRANT PEEPLES
WILLIAM L. EARL
ROBERT N. REYNOLDS, P.A.
ROBERT H. BLANK
PAUL H. AMUNDSEN
WILLIAM F. TARR
SANTIAGO G. LEON
NINA S. KOLE
ELIZABETH M. WEAVER

MOORE & WILLIAMS, P.A.
TALLAHASSEE, FLORIDA
COUNSEL

ONE BISCAYNE TOWER, SUITE 3636
TWO SOUTH BISCAYNE BOULEVARD
MIAMI, FLORIDA 33131
(305) 358-3000

306 EAST COLLEGE AVENUE
POST OFFICE BOX 1169
TALLAHASSEE, FLORIDA 32302
(904) 222-2156

August 10, 1983

DER

AUG 11 1983

BAQM

REPLY TO:
Miami

C.H. Fancy, P.E.
Deputy Bureau Chief
Bureau of Air Quality Management
Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

Re: Ciba-Geigy Corp.; Initial Response to Completeness
Review; File No. AC 13-65839

Dear Mr. Fancy:

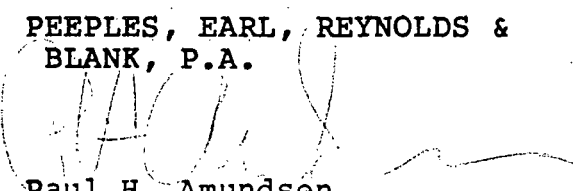
On behalf of Ciba-Geigy, I have enclosed the Company's revised and signed permit application and answers to all previously unanswered questions of the Department's completeness review. By copy of this letter, the same is being sent to Dade County.

Ciba-Geigy must emphasize that information contained in this permit application is extremely confidential and proprietary, and we, therefore, request that the contents of the permit application be kept confidential in accordance with Section 403.111, Florida Statutes.

Again, I note that in regard to the answer to question number five, DER is now conducting rulemaking which will change the ozone nonattainment status of Dade and other counties. I believe this rulemaking will affect your review of this application.

Sincerely,

PEEPLS, EARL, REYNOLDS &
BLANK, P.A.


Paul H. Amundsen
For the Firm

PHA:nir
Enclosures
cc: Cynthia Christen
Robert Duval



STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
APPLICATION TO OPERATE/CONSTRUCT
AIR POLLUTION SOURCES

SOURCE TYPE: Stationary [] New¹ [X] Existing¹
 APPLICATION TYPE: [X] Construction [] Operation [] Modification
 COMPANY NAME: CIBA-GEIGY Corporation COUNTY: Dade

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) Cure Oven Nos. 1, 2 & 3, with Electrostatic Precipitator and associated dipping and purging processes.

SOURCE LOCATION: Street 3550 N.W. 49 Street City Miami
 UTM: East 575307 North 2856387
 Latitude 25 ° 49 , 05 "N Longitude 80 ° 15 , 16 "W

APPLICANT NAME AND TITLE: Doug Buchanan, Site Manager
 APPLICANT ADDRESS: 3550 N.W. 49 Street, Miami, Florida 33142

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of CIBA-GEIGY Corporation

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: *Doug Buchanan*
Doug Buchanan, Site Manager
 Name and Title (Please Type)

Date: _____ Telephone No. (305) 633-9066

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed: *Antonio P. Mazpule*
Antonio P. Mazpule
 Name: (Please Type)

CIBA-GEIGY Corporation
 Company Name (Please Type)
3550 N.W. 49 Street, Miami, FL 33142
 Mailing Address (Please Type)

Florida Registration No. PE 0023368 Date: _____ Telephone No. (305) 633-9066

¹See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.
 This project consists of the installation of an Electrostatic Precipitator, Eltron, Model No. EHD-182-CLSS, to collect and remove particulate emissions from cure ovens, thus eliminating the plume by reducing the opacity to less than 20%, and relocation of oven no. 1 to a site north of oven no. 2; and the installation of a third oven (no. 3). We also propose to place floating devices on the diptanks to control IPA emissions during non-production hours.

B. Schedule of project covered in this application (Construction Permit Application Only)
 Start of Construction Right after issuance of construction permit Completion of Construction As soon as possible; estimated to be approximately 30-52 weeks

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Electrostatic Precipitator	Approximately \$410,000
Air Compressor	
Floating Covers for Diptanks	Approximately \$2,000

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.
 Baghouses and slicing saws, operation permit no. AO 13 44507. Source is subject of lawsuit in Dade County Circuit Court, Case No. 81-1991; this application is submitted in an effort to settle the lawsuit.

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? Yes No

F. Normal equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ; if power plant, hrs/yr No ;
 if seasonal, describe: Operating times will vary and plant is expected to be down periodically for maintenance, etc. and during times of low product demand. The data which follows is an average of actual operations for the last three years.

G. If this is a new source or major modification, answer the following questions. (Yes or No)

- | | |
|---|-------------------|
| 1. Is this source in a non-attainment area for a particular pollutant? | <u>Yes; ozone</u> |
| a. If yes, has "offset" been applied? | <u>N/A</u> |
| b. If yes, has "Lowest Achievable Emission Rate" been applied? | <u>N/A</u> |
| c. If yes, list non-attainment pollutants.
<u>VOC's</u> | |
| 2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. | <u>N/A</u> |
| 3. Does the State "Prevention of Significant Deterioration" (PSD) requirements apply to this source? If yes, see Sections VI and VII. | <u>N/A</u> |
| 4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? | <u>N/A</u> |
| 5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? | <u>N/A</u> |

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

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

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

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Nomex & Fiberglass			114	
Isopropyl Alcohol			84	(1)
Phenolic Resin			195	(2)
Acetone			1.97	*

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

1. Total Process Input Rate (lbs/hr): 393

2. Product Weight (lbs/hr): 245

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission ¹		Allowed Emission ² Rate per Ch. 17-2, F.A.C.	Allowable ³ Emission lbs/hr	Potential Emission ⁴		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Particulates	.083	.18	Table 610-1 from	.30	.91	2.01	(11)(10)(12)
IPA ^A	146	322	17-2 .610		146	322	(4)(6)(8)
Phenol	6.96	15.4	17-2 .620(1)(a)		6.96	15.4	(8)
Formaldehyde	0.84	1.86			0.84	1.86	
Acetone ^{***}	1.97	4.4			1.97	4.4	(8)

Time average of last three years: 4433 hours

D. Control Devices: (See Section V, Item 4) ^AThere will be a further total reduction of at least 6% of IPA emissions by use of floating covers on diptanks during non-production hours. ^{**}Used for cleaning printer equipment.

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles ⁵ Size Collected (in microns)	Basis for Efficiency (Sec. V, It ⁵)
Process Precipitator Eltron Model #EHD-182- CLSS	Almost any kind of aerosol or condensable pollutant.	¹ Approaches 100% even for ultrafine mists and smoke in which most of the particles are submicron in size. ² 90.9% in tests conducted in the pilot unit.		¹ Eltron Mfg. Inc. Manual PSM 979. ² Report 512-S from So. Fla. Environmental Service, Inc.
Floating Covers	IPA	Will reduce IPA emissions by at least 6%.		

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. - 0.1 pounds per million BTU heat input)

³Calculated from operating rate and applicable standard

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

⁵If Applicable

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Natural Gas <u>Current consumption rest of plant</u>	.00252	.00252	2.7
Natural Gas (Oven No. 3)	.00081	* .00081	.86

*.00081 we took 50% of both oven Nos. 1 and 2 in operational test.

Fuel Analysis:

Percent Sulfur: None. Percent Ash: -----
 Density: _____ lbs/gal Typical Percent Nitrogen: _____
 Heat Capacity: 1070 BTU/CF BTU/lb _____ BTU/gal
 Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating. Annual Average None. Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.
Same as answer for question #11.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack): Ovens No. 2/No. 1/No. 3
 Stack Height: 23.83/30/26 ft. Stack Diameter: 2.65/2/3 ft.
 Gas Flow Rate: **8775/4765/3775 ACFM Gas Exit Temperature: 141/134/140 °F.
 Water Vapor Content: 5.4/3.6/4.1 % Velocity: 26.5/25.3/21 FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

Description of Waste _____

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

Approximate Number of Hours of Operation per day _____ days/week _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume (ft) ³	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: Cyclone Wet Scrubber Afterburner Other (specify) _____

Brief description of operating characteristics of control devices: _____

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

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation.
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.).
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3, and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8½" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8½" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

- 9. An application fee of \$20, unless exempted by Section 17-4.05(3), F.A.C. The check should be made payable to the Department of Environmental Regulation.
- 10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?
 Yes No

Contaminant	Rate or Concentration
_____	_____
_____	_____
_____	_____
_____	_____

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy) Yes No

Contaminant	Rate or Concentration
_____	_____
_____	_____
_____	_____
_____	_____

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

Contaminant	Rate or Concentration
_____	_____
_____	_____
_____	_____
_____	_____

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

- | | |
|---------------------------|----------------------|
| 1. Control Device/System: | 4. Capital Costs: |
| 2. Operating Principles: | 6. Operating Costs: |
| 3. Efficiency: * | 8. Maintenance Cost: |
| 5. Useful Life: | |
| 7. Energy: | |
| 9. Emissions: | |

Contaminant	Rate or Concentration
_____	_____
_____	_____
_____	_____
_____	_____

*Explain method of determining D 3 above.

10. Stack Parameters

- | | | | |
|---------------|------|-----------------|-----|
| a. Height: | ft. | b. Diameter: | ft. |
| c. Flow Rate: | ACFM | d. Temperature: | °F |
| e. Velocity: | FPS | | |

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

- a. Control Device:
- b. Operating Principles:

- c. Efficiency*:
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy*:
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:

- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

- a. Control Device:
- b. Operating Principles:

- c. Efficiency*:
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy**:
- h. Maintenance Costs:
- i. Availability of construction materials and process chemicals:

- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

*Explain method of determining efficiency.

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

3.

- a. Control Device:
- b. Operating Principles:

- c. Efficiency*:
- d. Capital Cost:
- e. Life:
- f. Operating Cost:
- g. Energy:
- h. Maintenance Cost:

*Explain method of determining efficiency above.

- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space and operate within proposed levels:

4.

- a. Control Device
- b. Operating Principles:
- c. Efficiency*:
- d. Capital Cost:
- e. Life:
- f. Operating Cost:
- g. Energy:
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

- 1. Control Device:
- 2. Efficiency*:
- 3. Capital Cost:
- 4. Life:
- 5. Operating Cost:
- 6. Energy:
- 7. Maintenance Cost:
- 8. Manufacturer:
- 9. Other locations where employed on similar processes:

a.

- (1) Company:
- (2) Mailing Address:
- (3) City:
- (4) State:
- (5) Environmental Manager:
- (6) Telephone No.:

*Explain method of determining efficiency above.

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

b.

- (1) Company:
- (2) Mailing Address:
- (3) City:
- (4) State:

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions*:

Contaminant	Rate or Concentration
_____	_____
_____	_____
_____	_____

(8) Process Rate*:

10. Reason for selection and description of systems:

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII – PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. no sites TSP () SO² • Wind spd/dir
 Period of monitoring / / to / /
 month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

2. Instrumentation, Field and Laboratory

- a) Was instrumentation EPA referenced or its equivalent? Yes No
- b) Was instrumentation calibrated in accordance with Department procedures? Yes No Unknown

B. Meteorological Data Used for Air Quality Modeling

- 1. _____ Year(s) of data from / / to / /
 month day year month day year
- 2. Surface data obtained from (location) _____
- 3. Upper air (mixing height) data obtained from (location) _____
- 4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

- 1. _____ Modified? If yes, attach description.
- 2. _____ Modified? If yes, attach description.
- 3. _____ Modified? If yes, attach description.
- 4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

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

E. Emission Data Used in Modeling

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

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

*Specify bubbler (B) or continuous (C).

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

RESPONSE TO QUESTIONS SUBMITTED BY THE
DEPARTMENT OF ENVIRONMENTAL REGULATION
CONCERNING PERMIT APPLICATION
AC-12-65839

SUBMITTED BY:
CIBA-GEIGY CORPORATION

CIBA-GEIGY'S RESPONSE TO QUESTIONS SUBMITTED
BY DER CONCERNING CIBA-GEIGY'S PERMIT
APPLICATION TO CONSTRUCT AN AIR
POLLUTION SOURCE

1. In Section I:A. of the Application, there is no signature of the applicant's representative nor is there an attached "letter of authorization" for anyone to sign as the applicant's representative. (Ch. 17-4.21(1)(a) and (b), FAC; Ch. 17-4.07(1), FAC)

Attachment "A" is a letter of authorization.

2. In Section I:B of the Application, there is no signature of the P.E. (Professional Engineer) nor is there an official seal of the P.E. (Chapter 17-4.21(1)(a) and (b), FAC; Ch. 17-4.07(2), FAC)

The permit application has been signed by Ciba-Geigy's Professional Engineer, and he has affixed his official seal.

3. The fee requirement for this application is one thousand dollars (\$1,000.00). (Ch. 17-4.05(4)(a)1, FAC; Ch. 17-4.07(2), FAC)

A check was enclosed for the application fee in Ciba-Geigy's first response.

4. In Section III:C of the Application list the specific name(s) of the VOC (volatile organic compounds) being used and complete the remaining applicable parts, remembering confidentiality will be maintained by the reviewing committee if so requested for proprietary information. (Ch. 17-4.21(1)(b) and (c), FAC; Ch. 17-2.510(8)(a)1., FAC; Ch. 17-4.07(1) and (2), FAC)

Section III:C has been amended to show that the VOC's being used are IPA, phenol, formaldehyde and acetone. Acetone is used only in small quantities to clean the printing equipment.

Attachment "B" is a letter from Ciba-Geigy's resin supplier and it details the VOC components in the resin, the specifics of the ASTM test used to characterize the emissions resulting from curing the resin, and an explanation of the severity of the ASTM test which leads to the conclusion that actual emissions of phenol and formaldehyde will be significantly reduced. Attachment "C" is a copy of the ASTM "Standard Analytical Test Procedure."

5. Submit a recommended LAER (Lowest Achievable Emission Rate) for the affected pollutant VOC, which is to be determined in accordance with the provisions of Chapter 17-2.640, FAC. (Ch. 17-2.100(102) and (95), FAC; Ch. 17-2.410(1)(a)2., FAC; Ch. 17-2.510(2)(d)4.a., FAC; Ch. 17-2.510(4)(a), FAC; Ch. 17-4.07(1) and (2), FAC)

The DER has proposed revisions to Rules 17-2.400 (Procedures for Designation of Areas Not Meeting Ambient Air Quality Standards); 17-2.510 (New Source Review for Nonattainment Areas); and 17-2.650 (Reasonably Available Control Technology), Florida Administrative Code. The effect of the proposed rule revisions would redesignate to attainment the seven ozone nonattainment counties -- Dade, Broward, Palm Beach, Hillsborough, Pinellas, Orange and Duval. These areas will be listed as air quality maintenance areas under a new Rule 17-2.460. That rule will provide that all emission limiting standards, permit limitations, and other air pollution control measures that were established as a result of the nonattainment corrective plans for these areas would remain in effect. New and modified facilities, such as

Ciba-Geigy's facility, however, would no longer be subject to new source nonattainment review.

Even though the effect of not subjecting new and modified facilities in the proposed "air quality maintenance areas" to nonattainment new source review requirements would be to spare those facilities the expense of having to meet the lowest achievable emission rate (LAER), Ciba-Geigy nevertheless proposes to reduce VOC emissions by using floating covers on its dip tanks. These floating covers and their effect on emissions are more particularly described in the response to question 9 below.

6. Submit the last five (5) years of the actual emission changes for all affected pollutants contained in Table 500-2, Chapter 17-2, FAC, in accordance with Chapter 17-2.510(2)(e) and 17-4.07(1) and (2), FAC.

Attachment "D" provides emissions of the affected pollutant VOC's for the past three years and, in addition, provides emissions for particulate matter. As discussed with Mr. Mitchell of your office, data was available only for the past three years.

7. If, from #6, an affected pollutant other than VOC exceeds the significant level in Table 500-2, the applicant must recommend BACT(s) (Best Available Control Technology) for the affected pollutant(s). (Ch. 17-2.510(2)(d)4.a., FAC; Ch. 17-4.07(1) and (2), FAC)

Not applicable.

8. Since only 10% (percent) of the total VOC emissions are emitted from the curing ovens (Nos. 1, 2, and 3), why was 100% of the VOC potential emissions requested to be permitted from the ESP's stack? Based on the Application's Exhibit 7,

the dipping process and the purging process emit 60% and 30%, respectively, of the total VOC potential emissions. (Ch. 17-4.07(1), (2) and (3), FAC)

The precipitator will not control VOC's so all VOC's going through the precipitator will be discharged to atmosphere.

9. Are the pollutant emissions from the dipping process and the purging process controlled? If one or both are not controlled, where do the emissions exit? How much outside dilution air is pumped into the work area? (Ch. 17-4.07(1), FAC).

Ciba-Geigy proposes to control IPA emissions by the placement of floating covers on the dip tanks when the dip tanks are not in use. Evaporation (emissions) of IPA will be decreased by reducing the exposed surface of resin in the tanks during the non-production hours. As Attachment "E" indicates, this pollution control technique can reduce total IPA emissions by at least an additional 60%.

Moreover, pollutant emissions and concentrations from the dipping and purging process are controlled by drawing large amounts of additional air into the plant and out through roof ventilators and stacks. See attachment "F" which shows each ventilator's flow rate and the total exhaust from both rooms.

10. For the No. 3 curing oven, complete and submit Sections III:E and H of the Application. (Ch. 17-4.21(1)(b) and (c), FAC; Ch. 17-2.510(8)(a)1, FAC; Ch. 17-4.07(a) and (2), FAC).

Sections III:E and H of the permit application have been completed to reflect the fuel use of Oven #3. See Attachment "G."

11. In Section III:G of the Application, it was indicated that the effluent from the ESP would be discharged into a drain. Into what drain will this effluent be discharged and has a permit, if required, been obtained to do so? (Ch. 17-4.03, FAC; Ch. 17-4.07(9), FAC; Ch. 17-2.210, FAC).

Item III:G is amended. ESP effluent will not be disposed of via a drain, but will be properly disposed of as solid waste.

12. In Exhibit 7, which was submitted with the Application, the PM emissions were incorrectly calculated according to the presented material balance scheme. The "0.05" should have reflected 13.93 lbs/hr (pounds per hour) and not the 0.91 lbs/hr as is indicated in Exhibit 7 and Section III:C of the Application. A correction will be required in both parts and the correct values restated in the appropriate sections. (Ch. 17-4.21(1)(b) and (c), FAC; Ch. 17-2.510(8)(a)1., FAC; Ch. 17-4.07(1) and (2), FAC)

The calculations have been corrected. See attachment "H."

13. After completing #12, the potential emissions for the pollutant PM shall be required, reflecting the ESP's efficiency. Exhibit "7" and Section III:C will have to be corrected and resubmitted. (Ch. 17-4.21(1)(b) and (c), FAC; Ch. 17-2.510(8)(a)1., FAC; Ch. 17-4.07(1) and (2), FAC)

On Attachment "H", the precipitator and flow diagrams were included to show emission control of particulate matter.

(10) changed (11) and (12) was added.

In Section III.C of the application, the particulate emission (1) was corrected to actual tons/year of PM on the average plant operating hours during the last three years.

14. In Section III:D of the Application, state the "efficiency" that will be used to calculate the potential PM emissions, which will be reflected in Section III:C of the Application and in Exhibit 7. (Ch. 17-4.21(1)(b), (c), and (d), FAC; Ch. 17-2.510(8)(A)1., FAC; Ch. 17-4.07(1), (2) and (3), FAC)

Section III.D of the application (Attachment "G") reflects that the efficiency of particulate collection of the precipitator is 90.9%. This efficiency was determined by South Florida Environmental Services, Inc.

15. Submit information relating to the air quality impact of the facility by the modification, including meteorological and topographical data necessary to estimate such impact in accordance with Chapter 17-2.510(8)(a)4. and 17-4.07(1) and (2), FAC.

See Attachment "I".

16. Submit a detailed schedule for construction of the modification in accordance with Chapter 17-2.510(8)(a)2. and Ch. 17-4.07(6), FAC.

Attachment "J" is a tentative schedule. It is the most detailed schedule available at this time. Every effort will be made to complete the work as soon as possible when approved.

17. Submit a description of the nature, location, design capacity and maximum operating schedule of the dipping tank process and the purging process as affected by the addition of the No. 3 curing oven, including specifications and drawings showing their design and plant layout in accordance with Chapter 17-2.510(8)(a)1. and 17-4.07(1) and (2), FAC.

The Number 3 oven will have no effect on the present capacity of the dipping and purging process. See attachment "K".

18. Since 90% of the VOC potential emissions are from the dipping process and the purging process and the potential VOC emissions are greater than the significant levels, propose LAER for each of the processes as affected by the No. 3 curing oven. (Ch. 17-2.510(2)(d)4.a., FAC; Ch. 17-2.510(2)(e), FAC; Ch. 17-2.510(4)(a), FAC; Ch. 17-4.07(1), (2), and (3), FAC)

As stated in response to question 17, the Number 3 oven will not increase emissions from either the dipping or purging process. See attachment "K."

19. Submit the maximum fuel consumption per hour in the appropriate section, Section III:E, of the Application. (Ch. 17-4.21(1)(b) and (c), FAC; Ch. 17-2.510(8)(a)1., FAC; Ch. 17-4.07(1) and (2), FAC)

As stated above, the operation of the third oven will not increase production; therefore, there will not be an increase in the maximum fuel consumption. Fuel consumption will remain as shown in attachment "G."

20. The PM allowable emissions found by using the process weight equation, $E = 3.59 P$, where P is less than or equal to 30 tons per hour, should be based on the total process input rate of the solid material being processed (130.93 lbs./hr. resin + 114 lbs./hr. Nomex and Fiberglass = 244.93 lbs./hr.). (Ch. 17-2.610(1)(b), FAC)

The potential emission is equal to 0.91 lbs./hour which is less than the allowable emission rate as stated in Table 610-1. See Attachment "L."

21. Submit the last five (5) years of actual operations by process and by curing oven, including the monthly total process input of the isopropyl alcohol, the phenolic resin by component, the Nomex and Fiberglass, and the total product yield. Also, submit the amount of reclaimed or recycled material, including receipts with the vendor for the service rendered. (Ch 17-2.510(2)(e), FAC; Ch. 17-4.07(1) and (2), FAC)

Attachment "M" shows the actual usage of IPA and phenolic resin for the last three years. A detailed breakdown by month is

not available. We do not recycle or reclaim material. Refer to Section III.A for a rate utilization of Nomex and Fiberglass.

ATTACHMENT "A"

August 16, 1982

I hereby certify that Mr. Douglas Buchanan is the authorized representative of CIBA-GEIGY Corporation at the Miami Site.

JS:rd



Jack Schneller
President
Plastics & Additives Division
CIBA-GEIGY Corporation

ATTACHMENT "B"



CHEMICALS/PLASTICS

CLARK CHEMICAL CORP.

Sub. of CLARK OIL & REFINING

Corporation

P.O. BOX 297
BLUE ISLAND, ILLINOIS 60406
PHONE: AREA CODE 312
371-5540

June 27, 1983

Mr. Douglas Buchanan
Ciba-Geigy Corporation
3550 N.W. 49th Street
Miami, FL 33142

Dear Mr. Buchanan:

In response to your question of solids determination and potential emissions from our resin CR-3243, I offer the following comments.

The test for determining the solids content of resin solutions, adapted by the industry, is conducted under some very severe conditions for optimum polymerization. The resin is weighed into a flat aluminum pan and placed in an oven at 135°C. This results in the resin solution coming to a boil and vaporizing some of the lower boiling monomers before they have enough time to combine or polymerize into higher boiling liquids or to convert to a solid.

In your process you gradually heat the resin, resulting in a greater solids recovery.

The resin is first devolatilized of the solvent raising the boiling point of the remaining resin solution and by the gradual application of heat you are polymerizing the resin into a thermoset infusible mass.

The resin, as supplied to you, in the solids test I described could evolve, by weight, under these severe conditions

4.0%	Isopropyl alcohol
5.0%	Free water
12.5%	Water of condensation
1.0%	Free formaldehyde
7.5%	Free phenol

The heating schedule you use in production would not boil off this amount of material as your conditions are more conducive to polymerization. The amount of Free phenol and Free formaldehyde emitted would be reduced based on this polymerization.

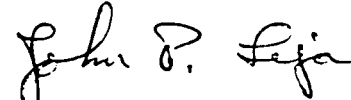
The weight balance of resin in and product out is a better measure, than a momentary concentration, to determine the amount of effluents in a batch heating/curing process as employed in your manufacturing plant.

With these conditions and the proposed additions you described, I am sure you will be easily able to comply with the EPA guidelines for your industry.

If I can be of any other help to you, please feel free to call.

Very truly yours,

CLARK CHEMICAL CORPORATION



John P. Leja
General Manager, Resins

JPL:lp

ATTACHMENT "C"

NO. 0006B¹

STANDARD ANALYTICAL PROCEDURE

3/9/72

NON-VOLATILE MATTER IN PHENOLIC RESINS

PRINCIPLE OF METHOD: Determine non-volatiles by heating @ 135°C for 3 hours.

REAGENTS REQUIRED: None

APPARATUS:

- 1) Analytical Balance, accurate to 0.1 mgr. (Ainsworth 28N or equivalent)
- 2) Desiccator
- 3) Oven, forced draft convection, controlled @ 135°C ± 1°C (Thelco # 26 (SGA) or equivalent).
- 4) Thermometer, range 0°-200°C, graduated to 1°C
- 5) Syringe, Lever type, 10 ml capacity or equivalent
- 6) Aluminum Weighing dishes, (Cat. No. 8-732 Fisher Scientific or equivalent)

PROCEDURE: Preheat weighing dishes @ 135°C in oven for a minimum of 30 minutes. Place in desiccator for a minimum of 15 minutes until equilibrium is reached.² Mark for identification and tare (2) two aluminum weighing dishes.

Transfer 1.5 ± 0.1 gr. of sample directly to the weighing dish and determine the weight immediately (within 20 seconds). (Note: if the sample contains low boiling solvents then the specimens may be weighed by difference from the syringe into the previously tared weighing dishes.)³ Swirl the resin until the surface of the weighing dish is totally covered.

Place the dishes in the constant temperature forced draft oven in close proximity to the bulb of the thermometer for a period of 3 hours ± 5 minutes.

At the end of the heating period remove from the oven, and cool in the desiccator to room temperature.

Weigh the dishes with the residues immediately upon removal from the desiccator to the nearest 0.1 mgr.

CALCULATION: Non-Volatile Matter, % =
$$\frac{(\text{Wgt. Residue} + \text{dish}) - (\text{Wgt. of dish})}{\text{Wgt. of Sample}} \times 100$$

If the reproducibility between duplicate runs is greater than ± 0.40%, then the analysis must be repeated.

When the samples are removed from the oven, a small amount of shattering or splintering of the samples will occur during the cooling process. Cover the weighing dishes until ready to weigh to minimize loss of material. If this amount appears excessive, then a smaller sample size of 1.0 ± 0.1 grams may be used.

Reference: ASTM D-115-68 "Standard Methods of Testing Varnishes Used for Electrical Insulation" Volume 21 pp. 30-37 (1971) (particularly part 18-22)

- Notes:
- 1) This procedure supersedes SAP 0006A dated 12/1/69.
 - 2) Preheating the aluminum weighing dishes is necessary to remove the oil film often found on the aluminum. This film tends to prevent the resin from spreading properly and prevents removal of volatiles, yielding high solids.
 - 3) This spreads the resin over the entire surface and ensures removal of all volatiles.

ATTACHMENT "D"

ATTACHMENT "D"

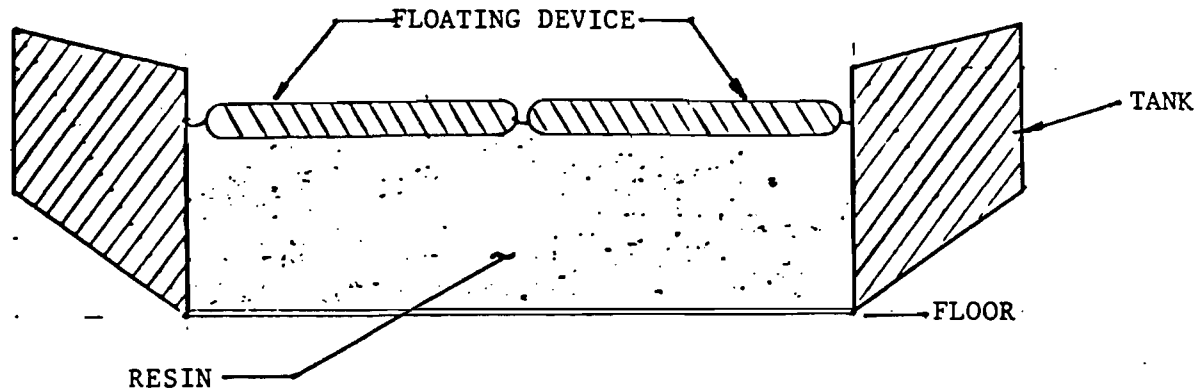
EMISSIONS OF AFFECTED POLLUTANTS

<u>YEAR</u>		<u>VOC (Tons/Yr.)</u>			<u>PM</u>
	<u>IPA*</u>	<u>ACETONE</u>	<u>PHENOL</u>	<u>FORMALDEHYDE</u>	
1980	528	4.4	14.5	1.9	3.2 Tons/Yr.
1981	254	4.4	6.1	0.8	1.5 Tons/Yr.
1982	232	4.4	7.3	1.0	1.4 Tons/Yr.

*Use of floating covers on dip tanks will reduce IPA emissions by at least 6 percent.

ATTACHMENT "E"

ATTACHMENT "E"
IPA EMISSION CONTROL IN THE DIP TANKS



Evaporation of IPA is decreased by reducing the exposed surface of resin in the tanks during the non-production hours.

Calculations

Reduction of free surface of resin 90%

Estimated reduction of IPA emission from tanks10%

Reduction of total IPA emission: $10\% \times 60\% = 6\%$

IPA emission reduction in lbs/hr 8.8

IPA emission reduction in tons/yr19.3

ATTACHMENT "F"

ATTACHMENT "F"

VOC EMISSION FROM STACKS

<u>Description</u>	<u>Dip Room</u>	<u>Dimensions D" X H"</u>	<u>Flow (CFM)</u>
Floor Vent	#1	24" X 54"	7,700 (continuous)
Purge Box #1	#1	30" X 58"	10,000 (non-continuous)
Purge Box #2	#1	30" X 58"	10,000 (non-continuous)
Dip Tank #1 & 2	#1	(12" X 16") X 50"	3,000 (continuous)
Dip Tank #3	#2	24" X 51"	5,000 (continuous)
Dip Tank #4	#2	24" X 51"	5,000 (continuous)
Purge Box #3	#2	30" X 58"	10,000 (non-continuous)
Purge Box #4	#2	30" X 58"	10,000 (non-continuous)

EXHAUST FROM PURGE BOXES

$$E_p = 60 \frac{\text{Cycles}}{\text{Shift}} \cdot X \cdot 20 \frac{\text{Min}}{\text{Cycle}} \cdot X \cdot 10,000 \text{ CFM} \div 10 \frac{\text{Hrs}}{\text{Shift}}$$

$$E_p = 1.2 \times 10^6 \text{ CFH}$$

EXHAUST FROM DIP ROOMS

Dip Tanks	13000 CFM
Floor Vent	<u>7700 CFM</u>
Total	20700 CFM

$$E_{dr} = 20700 \text{ CFM} \times 60 \frac{\text{Min}}{\text{Hr}} = 1.242 \times 10^6 \text{ CFH}$$

$$\text{Total } E_p + E_{dr} = 2.442 \times 10^6 \text{ CFH}$$

ATTACHMENT "G"

ATTACHMENT "G"

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Natural Gas Current Consumption Rest of Plant	.00252	.00252	2.7
Natural Gas (Oven # 3)	.00081	*.00081	.86

*.00081 we took 50% of both oven Nos. 1 and 2 in operational test.

*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, lbs/hr

Fuel Analysis:

Percent Sulfur: None Percent Ash: -----

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: 1070 Btu/CF BTU/lb _____ BTU/gal

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

F. If applicable, indicate the percent of fuel used for space heating. Annual Average None Maximum _____

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

Same as answer for question # 11.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack): Ovens No. 2/No.1/No.3

Stack Height: 23.83/30/26 ft. Stack Diameter: 2.65/2/3 ft.

Gas Flow Rate: ** 8775/4765/8775 ACFM Gas Exit Temperature: 141/134/140 °F.

Water Vapor Content: 5.4/3.6/4.1 % Velocity: 26.5/25.3/21 FPS

**Test data South Florida Environmental Services, Inc., Exhibit "9" permit for ovens 1 and 2.

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

Description of Waste _____

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

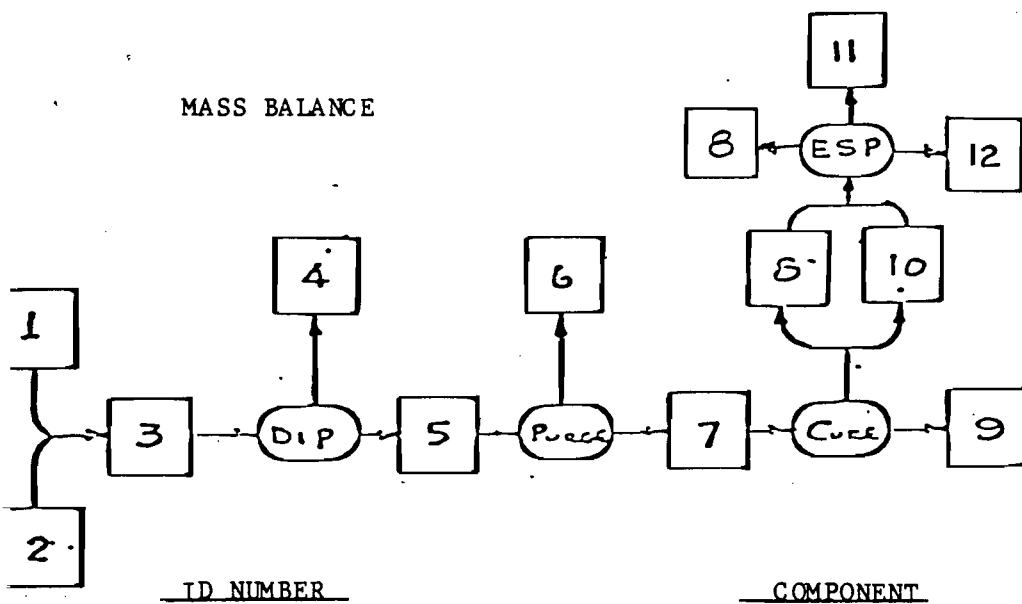
Approximate Number of Hours of Operation per day _____ days/week _____

Manufacturer _____

Date Constructed _____ Model No. _____

ATTACHMENT "H"

MASS BALANCE



ID NUMBER

COMPONENT

- (1) Solvent added to resin
- (2) Resin
- (3) Mixture of resin & solvent in dip tanks
- (4) Solvent evaporated from dip tanks
- (5) Mixture in blocks after purging
- (6) Solvent evaporated while purging
- (7) Mixture in blocks after purging
- (8) Solids evaporated while curing
- (9) Solvent in blocks after curing
- (10) Particulate emission - before control
- (11) Particulate emission from ESP after control
- (12) Particulate collection from ESP

Mass balance is based on "Mixture in Dip Tanks" equals 1.00

(3) Mixture in Dip Tanks		1.00
Basic Formula in Mixture (Lab Analysis)		.49
Solvent in Mixture		.51
Solids in Resin equals Solids in Mixture		
Resin (as received)		
Base formula		70 %
Solvent		30 %
(2) Base Formula in Resin		.49
Solvent in Resin	$\frac{.49 \times .30}{.70}$.21
Resin (total)		.70

Solvent added to Resin .51 - .21 = .30

Solvent evaporated (Dip Tanks Purge Boxes & Cure Ovens): (4) + (6) + (8)

$$(4) + (6) + (8) = (3) - (9)$$

$$1.00 - .49 = .51$$

$$(4): 60\% \text{ of total solvent evaporated} = .306$$

$$(6): 30\% \text{ of total solvent evaporated} = .153$$

$$(8): 10\% \text{ of total solvent evaporated} = .051$$

Mixture in blocks after dipping = mixture in dip tanks minus evaporation from dip tanks.

$$(5) = (3) - (4)$$

$$(5) = 1.00 - .306 = .694$$

Mixture in blocks after purging = mixture in blocks after dipping minus evaporation during purging.

$$(7) = (5) - (6)$$

$$(7) = .694 - .153 = .541$$

See Exhibit No. 8

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
BASE FORMULA	-	.490	.490	-	.490	-	.490	-	-	-	-	-
SOLIDS	-	-	-	-	-	-	-	-	.357	.003	<.001	<.003
IPA	.300	.210	.510	.306	.204	.153	.051	.051 .020	-	-	-	-
PHENOL	-	-	-	-	-	-	-	.025	-	-	-	-
FORMALDEHYDE	-	-	-	-	-	-	-	.003	-	-	-	-
WATER	-	-	-	-	-	-	-	.085	-	-	-	-
TOTAL	.300	.700	1.000	.306	.694	.153	.541	.184	.357	.003	<.001	<.003

THE FOLLOWING TABLE IS BASED ON 195 LBS./HR. ACTUAL RESIN USAGE

See Exhibit No. 8

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
BASE FORMULA	-	136.50	136.50	-	136.50	-	136.50	-	-	-	-	-
SOLIDS	-	-	-	-	-	-	-	-	99.45	.91	.083	.827
IPA	83.57	58.50	142.07	85.24	56.83	42.62	14.21	14.21	-	-	-	-
								6.96				
PHENOL	-	-	-	-	-	-	-	10.31	-	-	-	-
FORMALDEHYDE	-	-	-	-	-	-	-	0.84	-	-	-	-
WATER	-	-	-	-	-	-	-	23.68	-	-	-	-
TOTAL	83.57	195.00	278.57	85.24	193.33	42.62	150.71	51.26	99.45	.91	.083	.827

EMISSION: BEFORE CONTROL

.91 lbs/Hr., See Exhibit No. 8

AFTER CONTROL

.083 lbs/Hr., See Exhibit No. 8

ATTACHMENT "I"

ATTACHMENT "I"

Air Quality Impact Assessment
Ciba-Geigy, Inc.

Total Volatile Organic Compound (VOC) emissions from the Ciba-Geigy facility were estimated at 549 tons per year (TPY) in 1980, falling to 245 tons per year in 1982. Maximum VOC emissions at full capacity were estimated at 647 TPY in an air permit application recently submitted to Florida DER. The VOC's are primarily due to isopropyl alcohol used in the mixture into which the honeycomb blocks are dipped. The vapor pressure of isopropyl alcohol (2-Propanol) is approximately 50 mm Hg at 80 degrees F. As a result, isopropyl alcohol is defined as a VOC under Florida Administrative Code (FAC), Chapter 17-2.200 since its vapor pressure exceeds 0.10 mm Hg.

The direct effects of VOC emission upon ozone concentrations cannot be estimated accurately with current air dispersion/chemical reaction models. No such models have yet been accepted or approved by Dade County or State of Florida environmental control agencies. The potential contributions of Ciba-Geigy's VOC emissions to ozone concentrations in Dade County can be estimated by review of past and current VOC emissions and ozone data from Dade County.

According to a September 2, 1982, correspondence (1977 and 1981 data, attached) from José-Luis Mesa of the Metropolitan Dade County Air Quality Attainment Task Force, and subsequent correspondence (1982 data, attached) from Victoria Martinez of the Florida Department of Environmental Regulation, Bureau of Air Quality Management, the following VOC emissions were projected by the Dade County Department of Environmental Resources Management (DERM):

	Base-Year 1977 <u>(tons)</u>	Estimated 1981 <u>(tons)</u>	Estimated 1982 <u>(tons)</u>
Stationary Sources	25,213	28,229	21,538
Mobile Sources	74,021	50,132	50,029
Total	99,234	78,361	71,563

The "Base-Year" emissions formed the basis of the State of Florida's ozone nonattainment plan for Dade County¹. Base year VOC emissions were compared with 1975 through 1977 measured ozone levels to determine the amount of reductions in VOC emissions which would be needed to achieve the ozone standard (0.12 ppm) in Dade County. Using the linear rollback method, a 11.1 percent decrease in VOC emissions was estimated as required for Dade County in order to meet the ozone standard. This level of reduction amounts to 11,026 TPY, or a total VOC tonnage in Dade County of 88,208 tons in order to meet the standard.

Considering needed reductions and actual anticipated reductions in emissions for Dade County (anticipated reductions primarily due to increased VOC controls on automobiles), the New Source Allowance (NSA) for Dade County was established. Since anticipated reductions in VOC emissions exceeded necessary reductions to achieve the ozone standard, the NSA is positive. The NSA for Dade County is 4,000 TPY (FAC Chapter 17-2.510(5)[b]) and allows for future growth in VOC emissions from new sources. The State Implementation Plan¹ (SIP) shows that by 1987, more than 27,000 tons of VOC will be available for growth in Dade County.

Ciba-Geigy's estimated maximum of 647 TPY of VOC in 1980 constitutes only 0.65 percent of the total VOC tonnage estimated for the 1977 base year. (Note: actual VOC emissions are not available for 1977). The estimated Ciba-Geigy 1981 tonnage of 245 tons represents only 0.34 percent of estimated 1981 Dade County emissions. At the maximum emission rate of 647 TPY, Ciba-Geigy would have contributed only 0.82 percent to total Dade County emissions in 1981 or 0.90 percent to total 1982 emissions, as total emissions decreased by 6,798 tons from 1981 to 1982 in Dade County. These percentages are very small and show that Ciba-Geigy does not contribute significantly to VOC emissions, and therefore ozone concentrations, in Dade County. Further, the estimated 1982 Dade County VOC emissions are approximately 17,000 tons below the level required to achieve compliance with the ozone standard. As a result, Ciba-Geigy's emissions are not preventing attainment or maintenance of the ozone standards in Dade County.

Past ambient ozone data (1977-1982) for Dade, Broward and Palm Beach Counties were reviewed to determine the status of those levels in relation to ambient standards. Data were available for four stations in Palm Beach County, three stations in Broward County and three stations in Dade County (Table 1). Review of the data show that in general, maximum ozone levels increased from 1981 to 1982. In 1982, only two stations recorded maximum levels in excess of the 0.120 ppm standard, and only one station (Virginia Key/Dade County) recorded 2nd maximum levels in excess of the standard. For the latter site, discussions with the State of Florida indicate that the 2nd maximum recorded value in 1982 is questionable because it occurred in December, which is not in the peak ozone season. If this questionable value is discarded, then the Dade-Broward-Palm Beach County airshed did not record any exceedances of the ozone standard in 1982. Further reductions in VOC emissions in the airshed through 1987, as mandated by the SIP, should act to provide a further margin of compliance with the standard. Ciba-Geigy's relatively insignificant VOC emissions are not expected to impede this progress.

1: Addendum to the State Implementation Plan for Nonattainment Areas, State of Florida, Department of Environmental Regulations, May 1980.

BEST AVAILABLE COPY

SUMMARY FORMAT FOR VOC

SOURCE		BASE YEAR EMISSIONS 1977	EMISSIONS FROM SOURCES EXISTING IN 1982	GROWTH SINCE 1977
PETROLEUM REFINERIES	REFINERY FUGITIVES (STATION I)	0	0	0
	MISCELLANEOUS SOURCES a) Process Drains and Waste b) Venting Petroleum Substrates c) Process Unit Blowdowns	0	0	0
	OTHER	0	0	0
STORAGE, TRANSPORTATION & MARKETING OF PETROLEUM PRODUCTS	OIL & GAS PRODUCTION FIELDS	0	0	0
	NATURAL GAS AND NATURAL GASOLINE PROCESSING PLANTS	0	0	0
	GASOLINE & CRUDE OIL STORAGE ¹	7	0	-7
	SHIP AND BARGE TRANSFER OF GASOLINE & CRUDE OIL	5	0	-5
	BULK GASOLINE TERMINALS ²	0	0	0
	GASOLINE BULK PLANTS ²	0	23	23
	SERVICE STATION LOADING (STATION II)	3130	452	-2678
	SERVICE STATION UNLOADING (STATION III)	3160	3377	-217
OTHER	241	-	-241	
INDUSTRIAL PROCESSES	ORGANIC CHEMICAL MANUFACTURE	32	124	92
	PAINT MANUFACTURE	227	135	-92
	VEGETABLE OIL PROCESSING	0	0	0
	PHARMACEUTICAL MANUFACTURE	0	210	210
	PLASTIC PRODUCTS MANUFACTURE	13	97	84
	RUBBER PRODUCTS MANUFACTURE	163	28	-135
	TEXTILE POLYMERS MANUFACTURE	0	0	0
	OTHERS	561	369	-192
INDUSTRIAL SURFACE COATING	LARGE APPLIANCES	0	0	0
	MAGNET WIRE	4	2	-2
	AUTOMOBILES	0	0	0
	CANS	0	40	40
	METAL COILS	0	0	0
	PAPER	0	364	364
	FABRIC	0	172	172
	METAL FURNITURE	211	211	10
	WOOD FURNITURE	188	232	44
	FLAT WOOD PRODUCTS	0	0	0
	OTHER METAL PRODUCTS	661	518	-143
	OTHERS	814	86	-728
NON INDUSTRIAL SURFACE COATINGS	ARCHITECTURAL COATINGS	3187	4000	813
	ALTO REFINISHING	454	309	-145
	OTHERS	0	0	0
OTHER SOLVENT USE	DEGREASING	2580	240	-2340
	DRY CLEANING	1450	1565	115
	GRAPHIC ARTS	2540	1481	-1059
	ADHESIVES	376	-	-376
	CUTBACK ASPHALT	401	50	-351
	OTHER SOLVENT USE	2748	5478	2730
OTHER MISCELLANEOUS SOURCES	FUEL COMBUSTION	225	259	34
	SOLID WASTE DISPOSAL	45	0	-45
	FOREST, AGRICULTURAL, AND OTHER OPEN BURNING	1800	1716.	-84
TOTAL VOC EMISSIONS FROM STATIONARY SOURCES		25,213	21,538	-3675
MOBILE SOURCES	HIGHWAY VEHICLES a) Light Duty Automobiles b) Light Duty Trucks c) Heavy Duty Gasoline Trucks d) Heavy Duty Diesel Trucks e) Motorcycles	59,328	33,548	-25,780
	OFF HIGHWAY VEHICLES	4402	4826	424
	RAIL	151	141	-10
	AIRCRAFT	5850	6490	640
	VESSELS	4290	5020	730
	TOTAL VOC EMISSIONS FROM MOBILE SOURCES		74021	50,025
TOTAL VOLATILE ORGANIC EMISSIONS		99234	71,563	-27,671

¹ Includes all storage facilities except those at service stations and bulk plants.

² Emissions from loading tank trucks and rail cars.

³ Emissions from storage and transfer operations.

Table 1. Summary of Maximum Measured Ozone Concentrations in the Dade-Broward-Palm Beach County Airshed, 1977-1982

Site/Location	1-Hour Ozone Concentrations (ppm)					
	1977	1978	1979	1980	1981	1982
<u>Dade County</u>						
0860-021/Thompson Park						
Maximum	-	0.084	0.040	0.120	0.130	0.095
2nd Max	-	0.070	0.036	0.105	0.130	0.090
0860-023/Virginia Key						
Maximum	-	0.076	0.050	0.155	0.150	0.140
2nd Max	-	0.074	0.048	0.150	0.130	0.140
0860-026/Everglades National Park						
Maximum	-	-	-	-	-	0.070
2nd Max	-	-	-	-	-	0.070
<u>Broward County</u>						
0420-003/Coral Springs						
Maximum	-	-	0.111	0.162	0.113	0.092
2nd Max	-	-	0.102	0.136	0.105	0.091
0420-004/N. Lauderdale						
Maximum	-	-	-	0.104	0.120	0.090
2nd Max	-	-	-	0.103	0.111	0.088
2720-001/Lauderdale Lakes						
Maximum	0.090	0.085	-	-	-	-
2nd Max	0.080	0.080	-	-	-	-
<u>Palm Beach County</u>						
4760-001/1st & Tamarand						
Maximum	0.106	0.075	0.036	-	-	-
2nd Max	0.101	0.069	0.036	-	-	-
3420-006/Twenty Mile Bend						
Maximum	-	-	-	0.083	0.095	0.080
2nd Max	-	-	-	0.083	0.089	0.078
3420-007/Royal Palm St. Cmpd.						
Maximum	-	-	0.079	0.102	0.103	0.122
2nd Max	-	-	0.076	0.093	0.089	0.093

Source: State of Florida

Note: Ozone Standard is 0.120 ppm, not to be exceeded on the average more than one calendar day per year.

ATTACHMENT "J"

CIBA-GEIGY MIAMI

Tentative Construction Schedule

ESP Project

Engineering

Engineering
Instrumentation

Purchase
Major Equipment

Delivery Time

Site
Preparation

Equipmentment

Start
Up

Month:

1 2 3 4 5 6 7 8 9 10 11 12

ATTACHMENT "K"

ATTACHMENT "K"

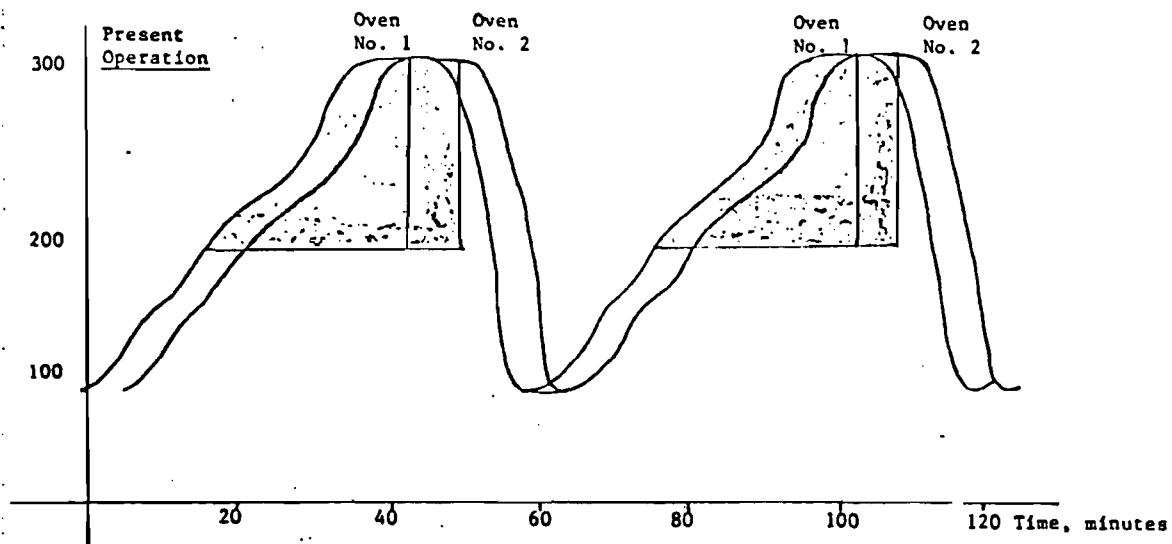
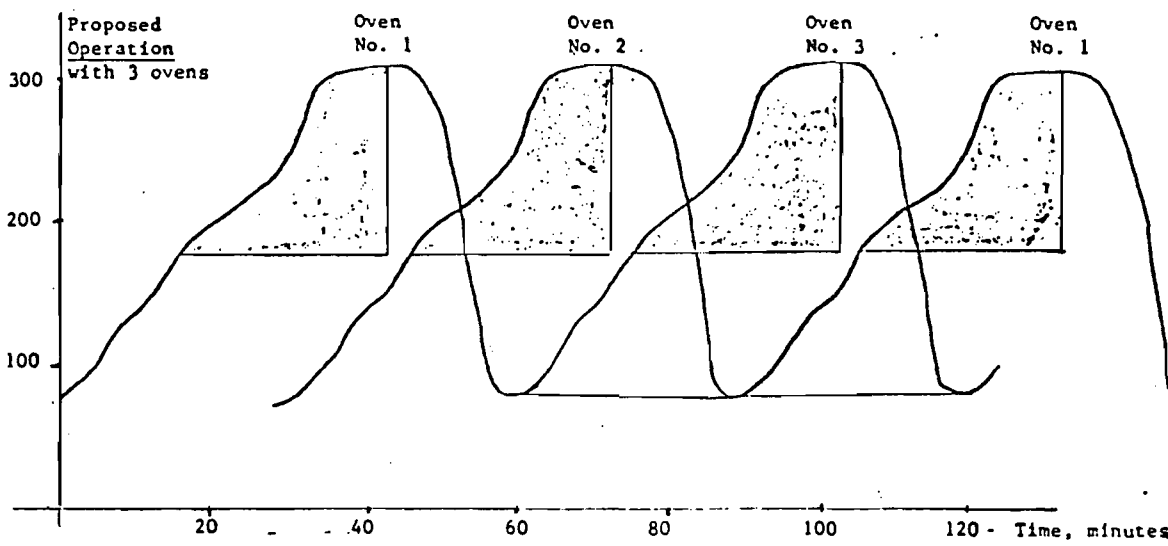
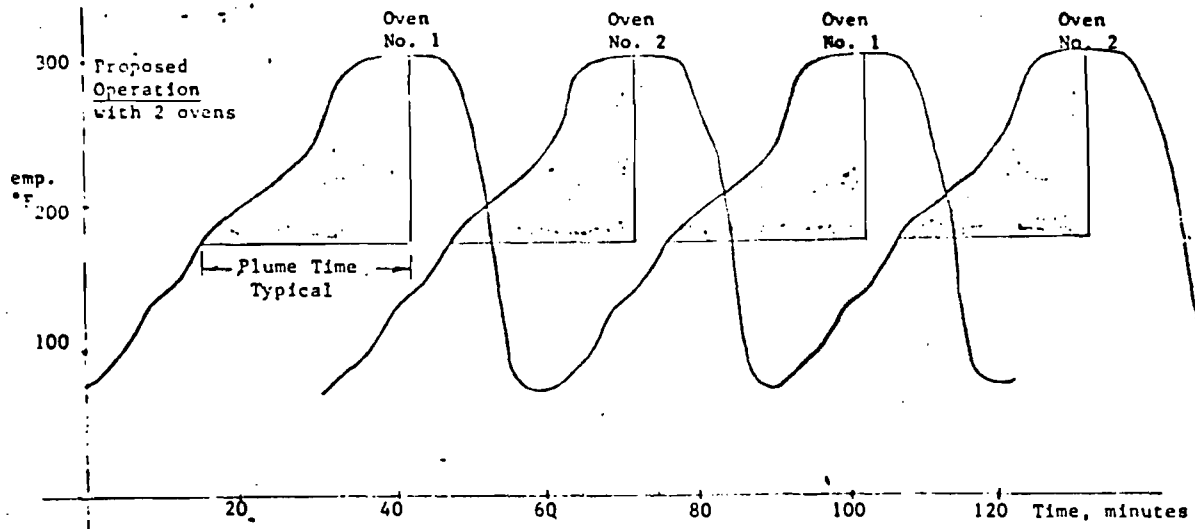
Page 1 of 2

OVEN OPERATIONS

With the addition of Oven No. 3, there will not be an increase in production capacity. With the precipitator installed, each oven has to be cycled in series so the particulate emissions are controlled. All ovens will be connected and cycled by a computer so that only one at a time will operate in the critical phase where particulate matter exceeds the opacity regulation.

Page 2 of 2 shows how the cycles operate with the critical plume time controlling the operation of the ovens with the precipitator.

If we have to operate with only two ovens, the loading and unloading is critical to maintain production capacity at present levels. The third oven is needed to give flexibility due to the critical restraint on PM emission control. Oven No. 3 will enable us to clean and maintain the equipment rather than on weekends and as presently being done.



The capacity of the proposed electrostatic precipitator is limited to process the emission of only one oven at a time.

ATTACHMENT "L"

ATTACHMENT "L"

CALCULATIONS FOR PROCESS WEIGHT

$$E = 3.59 P^{.62}$$

Where

E: Emissions, Lbs./Hr.

P: Product, Tons/Hr.

$$P = 245 \text{ Lbs./Hr.}$$

$$P = .1225 \text{ Tons/Hr.}$$

$$E = 3.59 \times .1225^{.62} = .977 \text{ Lbs./Hr.}$$

Emission after control: .083 Lbs./Hr.

$$.083 \ll .977$$

ATTACHMENT "M"

ACTUAL PURCHASES OF IPA, ACETONE AND PHENOLIC RESIN

<u>Year</u>	<u>IPA (Gallons)</u>	<u>Acetone* (Gallons)</u>	<u>Resin** (Gallons)</u>
1980	119,000		71,000
1981	59,800	1,200	30,000
1982	49,800	1,200	36,000

*Acetone is used to clean the printing equipment. No information for acetone was available for 1980.

**The resin is fifty percent IPA by volume as received.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

January 6, 1984

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

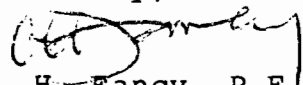
Mr. Doug Buchanan
Site Manager
Ciba-Geigy Corporation
3550 N.W. 49th Street
Miami, Florida 33142

Dear Mr. Buchanan:

Enclosed is Permit Number AC 13-65839, dated January 6, 1984, to Ciba-Geigy Corporation, issued pursuant to Section 403, Florida Statutes.

Acceptance of this permit constitutes notice and agreement that the department will periodically review this permit for compliance, including site inspections where applicable, and may initiate enforcement actions for violation of the conditions and requirements thereof.

Sincerely,


C. H. Fancy, P.E.
Deputy Bureau Chief
Bureau of Air Quality
Management

CHF/bjm

Enclosure

cc: Antonio P. Mazpule, Ciba-Geigy Corporation
Paul H. Amundsen, Peeples, Earl, Reynolds & Blank
Roy Duke, DER Southeast Florida District
Rafael Rodon, Dade County Department of Environmental
Resources Management

FINAL DETERMINATION

Ciba-Geigy Corporation
Dade County

The construction permit application has been reviewed by the bureau. Public notice of the department's intent to issue was published in The Miami Herald on November 25, 1983. The technical evaluation and preliminary determination were available for public inspection at the Dade County Department of Environmental Resources Management office, the DER's Southeast Florida District office, and the DER's Bureau of Air Quality Management office.

Comments were received from Mr. Doug Buchanan, who is with Ciba-Geigy Corporation, and the DER's Southeast Florida District office. Before addressing each of their comments, which will follow, it is appropriate to state that several meetings were held with the applicant prior to the public notice of the department's intent to issue and the drafting of the bureau's technical evaluation and preliminary determination. Even though some of the "Specific Conditions" are not specifically defined in the FAC Chapter 17-2, they were finalized by negotiations and in agreement with the attendees. Also, the bureau feels that the "Specific Conditions" in the proposed construction permit, No. AC 13-65839, are enforceable conditions and are at least as stringent as any applicable rule.

Comments received from Mr. Doug Buchanan:

Mr. Buchanan requests an increase of the annual usage of acetone, which is used for clean-up purposes, from 3.9 to 4.4 tons per year. The 4.4 tons per year was the average annual usage at the existing facility during the years 1980-1982. Since acetone, a volatile organic compound (VOC), is independent of the total VOC's used for production, the bureau agrees with the request and the following will be changed and added as follows:

Specific Condition:

3. Based on #1, the maximum allowable pollutant emissions are:

Source	Pollutant	Maximum Allowable Emissions	
		(lb/hr)	(TPY)
Facility	VOC		
	IPA		292.0
	Acetone		4.4
	Phenol		13.9
	Formaldehyde		1.7
No. 1 curing oven	PM	0.30	0.60
	VE	less than 20% opacity	
No. 2 curing oven	PM	0.30	0.60
	VE	less than 20% opacity	
No. 3 curing oven	PM	0.30	0.60
	VE	less than 20% opacity	

Note: VOC - volatile organic compounds; PM - particulate matter;
VE - visible emissions

Attachment to be incorporated is:

12. Mr. Doug Buchanan's letter dated December 15, 1983.

Comments received from the Southeast Florida District office:

To avoid restating each comment and since the comments were numbered, the comment (C) will be identified from the text (see attachment 13) and the bureau's response (R) will follow:

C.1.a:

R: It was decided in a meeting to incorporate the existing facility's emissions with their proposed modification/new construction application.

C.1.b.:

R: Since the particulate matter (PM) emissions are dependent on VOC related activities and the projected annual pollutant emissions are necessary for rule applicability, the 4000 annual hours of operation are pertinent. However, after PM mass emissions and visible emissions (VE) compliance tests have been conducted in accordance with Specific Condition No. 4, the applicant may apply to the bureau for an Alternate Standard and Procedure in accordance with FAC Rule 17-2.700(3). If approved, Specific Condition No. 1 can be deleted and Specific Condition No. 4 will have to be

modified. Also, Specific Condition No. 5 does require a quarterly VOC inventory and usage report.

C.1.c.:

R: Specific Condition No. 2 reflects the guidelines for in-house operations submitted and/or negotiated by the applicant and were incorporated into the Specific Conditions. However, the bureau agrees that too much judgment would be required of the field inspector and that Specific Condition No. 2.(a) and (d) will be deleted. Consequently, Specific Condition No. 2 shall read:

Specific Condition:

2. In-house preventive maintenance procedures shall include, but not be limited to:

- (a) seal each resin-dip tank with a floating-tank cover when the process is not being used;
- (b) keep lids and covers on all containers of VOC when not being used; and
- (c) maintain a monthly accounting of the VOC per type such that the beginning inventory and deliveries are accounted for.

C.2:

R: All allowable pollutant mass emissions are required to be compliance tested and in accordance with FAC Rule 17-2.700, which is what Specific Condition No. 4 requires. Also, Alternate Standards and Procedures has already been discussed in the Response to C.1.b. Finally, the applicant did not want to increase any actual pollutant emissions above the previous operating levels, thereby establishing pollutant baselines and allowing for future pollutant increases at the facility.

C.3:

R: The bureau agrees and Specific Condition No. 4 shall read:

Specific Condition:

4. Compliance tests shall be conducted on each of the baghouse systems associated with the Nos. 1-3 curing ovens and shall be DER Method 5 for PM and DER Method 9 for VE in accordance with FAC Rule 17-2.700. Compliance tests shall be conducted with the curing oven fully loaded with material being processed to achieve maximum potential pollutant emissions. The DER's Southeast Florida District office and Dade County's Department of Environmental Resources

Management office shall be notified in writing 10 working days prior to compliance testing and the compliance testing reports shall be submitted to the referenced agencies within 45 days after completion of the last compliance test run.

C.4:

R: At the request of the bureau, OSHA performed an inspection on Ciba-Geigy Corporation and did not report any health and/or welfare related violations. Since previous actions against the applicant were based on off-plant property complaints, the bureau feels that Specific Condition No. 6 is an enforcement tool and the object is to avoid spurring complaints from the local community.

C.5:

R: The applicant amended the application package with a letter and attachments to incorporate the baghouse systems as the control equipment for the curing ovens, Nos. 1-3. The documentation was discussed in a meeting prior to submittal.

Attachment to be incorporated is:

13. Southeast Florida District office's comments dated December 16, 1983.

It is recommended that the construction permit be issued as drafted, with the above revisions incorporated.

ATTACHMENT 12

COMPOSITE MATERIALS DEPARTMENT
FOUNTAIN VALLEY • MIAMI • LANSING

CIBA-GEIGY

DER
DEC 19 1983
BAQM

December 15, 1983

R. Bruce Mitchel
Bureau of Air Quality Management
State of Florida
Dept. of Environmental Regulation
2600 Blair Stone Rd.
Twin Towers Office Building
Tallahassee, Florida 32301

Dear Mr. Mitchel:

In one of our conferences we discussed and agreed to a reduction in hours of operation from 4433 hours to 4000 hours. We also agreed it would be appropriate to reduce the VOC's as they would be directly affected by hours of operation.

The actual use of acetone is for cleaning the printer, and other equipment. Use of this material is not directly related to hours of operation. We originally requested 4.4 tons per year and this was prorated down, with the other VOC's to 3.9 tons/year. We would request that this be increased to 4.4 tons/yr.

Sincerely yours,



Doug Buchanan

ATTACHMENT 13

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee		
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
From: _____	Date: _____	
Reply Optional (<input type="checkbox"/>)	Reply Required (<input type="checkbox"/>)	Info. Only (<input type="checkbox"/>)
Date Due: _____	Date Due: _____	

TO: Bill Thomas/Clair Fancy - BAQM
 FROM: I. Goldman/Tom Tittle/John Guidry - SEFD
 DATE: December 16, 1983
 SUBJECT: Comments on Preliminary Determination - Ciba-Geigy
 Construction Permit No. AC 13-65839

DER
 DEC 22 1983
 BAQM

1. As a matter of academic interest only:

a) Wouldn't a Consent Order have been a more appropriate way for Ciba-Geigy to get an operating permit, rather than through a construction permit.

b) Even though the applicant requested a restriction in operating hours to the number used in the previous 3 years (4000 hrs/year), is such restriction warranted or necessary? What is its purpose? If the intent is to restrict VOC emissions to previous levels, then the annual emissions limitations should be adequate, without limiting hours of operation. This can be verified by the annual operation report.

Rather than restrict to previous emission levels, it may be more appropriate to limit the facility to the actual capacity of the original 2 ovens (i.e. if only 1 oven could be operated at any given time, the capacity should reflect that situation). Although the design capacity has theoretically been increased threefold (separate controls being provided for each oven) this permit will restrict the facility to 0 Tons/hr increase. Does DER have the authority to restrict VOC emissions increase to an amount less than the VOC deminimus of 40 Tons/yr?

c) How can this office enforce Specific Condition 2(a), which requires Ciba-Geigy to minimize purging air after the resin-dip process? How does an inspector know when the air is at a minimum? Condition 2(d) likewise requires minimization of surface turbulence. When is turbulence at a minimum? These provisions are too vague to be enforceable.

2. Is particulate testing in accordance with EPA Method 5 economically justified when the estimated emission rate for particulates is so small? The emission limit of 0.3 lb/hr and 0.6 Tons/yr imposed by Specific Condition 3 requires a compliance test at least every 5 (five) years in accordance with Florida Administrative Code (F.A.C.) Rule 17-2.700(2)(a)3. It appears

MEMO

Page 2 of 2

December 16, 1983

that one test for each oven could be necessary to demonstrate the accuracy of the estimates, even though no test seems warranted. Besides, Method 5 should not be used for stack diameters less than 1 ft. (see 40 CFR 60, Appendix A, Method 1,1.2). On the basis of the dimensions for the dust collector blower outlet being estimated as 5" x 8" on the Torit Dust Collector drawings submitted, the outlet would have about half the specified minimum equivalent diameter. In addition, if the Department deems stack testing necessary, have provisions for sampling in accordance with F.A.C. Rule 17-2.700(4) been made for the Torit Dust Collector? Sketches showing proper provisions should have been requested when the Department realized that stack testing was deemed necessary.

There is no alternate method specified in the permit that could relieve the facility of doing Method 5 testing at least once every 5 years for each oven.

As with the comments on the VOC, what is the justification in the rules for setting an emission limit for particulates at a value less than deminimus (25 T/yr).

3. In accordance with Specific Condition 4, test reports shall be submitted 15 days after completion of the last test run. This is understood to mean within 15 days of the last test run, not exactly 15 days after the last test run. F.A.C. Rule 17-2.700(7)(b) allows within 45 days after the last test run. Why the shorter time?

4. Specific Condition 6 seems to allow objectionable odors on Ciba-Geigy property. F.A.C. Rule 17-2.620(2) generalizes to "no objectionable odor allowed". Is Specific Condition 6, as stated, DER present policy?

5. For the application to be properly updated, pages 2 and 3 on the application form should be modified to reflect the use of dust collectors, revised emission rates, and stack data for Units 1, 2 and 3.

IG:jh/12

dy

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
Ciba-Geigy Corporation
3550 NW 49th Street
Miami, Florida 33142

Permit Number: AC 13-65839
Date of Issue:
Expiration Date: December 31, 1984
County: Dade
Latitude/Longitude: 25° 49' 25"N/
80° 15' 16"W
Project: Permit existing facility,
install No. 3 curing oven, and
install a baghouse system per curing
oven (Nos. 1, 2, and 3).

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

The project consists of permitting the existing facility for all pollutants not currently permitted, install a new No. 3 curing oven, and install a baghouse system on each curing oven, Nos. 1, 2, and 3. Natural gas is the exclusive fuel for the curing ovens. The UTM coordinates for the existing facility are Zone 17, 575.307 km East and 2856.387 km North.

Construction shall be in accordance with the attached permit application, plans, amendments, documents and drawings except as otherwise noted on pages 5 - 7 of the Specific Conditions.

Attachments are as follows:

1. Application to Construct an Air Pollution Source, DER Form 17-1.122(16).
2. Letter from Mr. Patrick Wong dated February 24, 1983.
3. Incompleteness letter from Mr. C. H. Fancy dated March 17, 1983.
4. Letter from Mr. Rafael Rodon dated April 11, 1983.
5. Letter from Mr. Paul H. Amundsen dated June 10, 1983.
6. Interoffice memorandum from Mr. Tom Tittle dated June 27, 1983.
7. Incompleteness letter from Mr. C. H. Fancy dated July 13, 1983.
8. Letter from Mr. Paul H. Amundsen dated August 10, 1983.
9. Letter from Mr. Doug Buchanan dated August 25, 1983.
10. Data submitted by Mr. Doug Buchanan dated October 7, 1983.
11. Letter from Mr. Doug Buchanan dated October 12, 1983.
12. Mr. Doug Buchanan's letter dated December 15, 1983.
13. SE Florida District office's comments dated Dec. 16, 1983.

PERMITTEE:
Ciba-Geigy Corporation

I. D. Number:
Permit Number: AC 13-65839
Date of Issue:
Expiration Date: December 31, 1984

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

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), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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 does not constitute 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 the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement 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, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, 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.

PERMITTEE:
Ciba-Geigy Corporation

I. D. Number:
Permit Number: AC 13-65839
Date of Issue:
Expiration Date: Dec. 31, 1984

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or 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 or 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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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 notify and provide the department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact 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.

PERMITTEE:
Ciba-Geigy Corporation

I. D. Number:
Permit Number: AC 13-65839
Date of Issue:
Expiration Date: Dec. 31, 1984

GENERAL CONDITIONS:

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 revocation of this permit.

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 arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

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 Florida Administrative Code Rules 17-4.12 and 17-30.30, 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 is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

PERMITTEE:
Ciba-Geigy Corporation

I. D. Number:
Permit Number: AC 13-65839
Date of Issue:
Expiration Date: Dec. 31, 1984

GENERAL CONDITIONS:

- b. The permittee shall retain 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 instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - 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 that 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 submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. Maximum annual hours of operation of VOC (volatile organic compounds) related activities shall not exceed 4000 hours.

2. In-house preventive maintenance procedures shall include, but not be limited to:

- (a) seal each resin-dip tank with a floating-tank cover when the process is not being used;

PERMITTEE:
Ciba-Geigy Corporation

I. D. Number:
Permit Number: AC 13-65839
Date of Issue:
Expiration Date: Dec. 31, 1984

SPECIFIC CONDITIONS:

- (b) keep lids and covers on all containers of VOC when not being used;
- (c) maintain a monthly accounting of the VOC per type such that the beginning inventory and deliveries are accounted for.

If the above procedures are not adhered to, a review as to what the department deems necessary to minimize the emissions of VOC may be in order and shall be initiated by the DER's Southeast Florida District office and the Dade County's Department of Environmental Resources Management office.

3. Based on #1, the maximum allowable pollutant emissions are:

Source	Pollutant	Maximum Allowable Emissions	
		(lb/hr)	(TPY)
Facility	VOC		
	IPA		292.0
	Acetone		4.4
	Phenol		13.9
	Formaldehyde		1.7
No. 1 curing oven	PM	0.30	0.60
	VE	less than 20% opacity	
No. 2 curing oven	PM	0.30	0.60
	VE	less than 20% opacity	
No. 3 curing oven	PM	0.30	0.60
	VE	less than 20% opacity	

Note: VOC - volatile organic compounds; PM - particulate matter;
VE - visible emissions

4. Compliance tests shall be conducted on each of the baghouse systems associated with the Nos. 1-3 curing ovens and shall be DER Method 5 for PM and DER Method 9 for VE in accordance with FAC Rule 17- 2.700. Compliance tests shall be conducted with the curing oven fully loaded with material being processed to achieve maximum

PERMITTEE:
Ciba-Geigy Corporation

Permit Number: AC 13-65839
Date of Issue:
Expiration Date: Dec. 31, 1984

SPECIFIC CONDITIONS:

potential pollutant emissions. The DER's Southeast Florida District office and Dade County's Department of Environmental Resources Management office shall be notified in writing 10 working days prior to compliance testing and the compliance testing reports shall be submitted to the referenced agencies within 45 days after completion of the last compliance test run.

5. Emissions of volatile organic compounds will be accounted for by utilizing a material balance scheme and submitted in a quarterly report. The report shall contain the beginning quarterly inventory per type, the monthly deliveries per type, and an ending quarterly inventory per type. The quarterly report shall be submitted to the DER's Southeast Florida District office and the Dade County's Department of Environmental Resources Management office no later than 15 days after the closing date of each quarter.

6. Objectionable odor shall not be allowed on off-plant property.

7. Natural gas is an exclusive fuel for the curing ovens.

8. Prior to 90 days before the expiration date of this permit a complete application for an operating permit and compliance test results shall be submitted to the DER's Southeast Florida District office or its designee. Full operation of the sources may then be conducted in compliance with the terms of this permit until its expiration or receipt of an operating permit.

Issued this 6 day of Jan, 1987

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION



VICTORIA J. TSCHINKEL, Secretary

_____ pages attached.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

Mr. Douglas B. Buchanan
Site Manager
Ciba-Geigy Corporation
3550 N.W. 49th Street
Miami, Florida 33142

December 31, 1985

Enclosed is Permit Number AC 13-109080, to Ciba-Geigy Corporation which authorizes an increase of VOC usage and the construction/installation of two totally enclosed dip/purge processing units with associated incinerator system at your existing facility in Miami, Dade County, Florida. This permit is issued pursuant to Section 403, Florida Statutes.

Any Party to this permit has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this permit is filed with the clerk of the Department.

Sincerely,

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

Enclosure

cc: Art Bolivar
Tom Tittle

CERTIFICATION

This is to certify that the foregoing Notice of Permit and all copies requested were mailed before the close of business on Dec 31, 1985, 1985.

for *W. Thomas*
C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management
2600 Blair Stone Road
Tallahassee, Florida 32301

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

Patricia G. Adams
Clerk

December 31, 1985
Date

Final Determination

CIBA-GEIGY Corporation
Dade County
Miami, Florida

Permit Number: AC 13-109080

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

December 30, 1985

Final Determination

The construction application and attachments have been reviewed by the department. Public notice of the department's intent to issue was published in The Miami Herald issue on November 29, 1985. The technical evaluation and preliminary determination were available for public inspection at the DER's Southeast Florida District office, the Dade County's Environmental Resources Management office, and the DER's Bureau of Air Quality Management office.

There were no comments received. Therefore, it is recommended that the construction permit be issued as drafted.

CIBA-GEIGY

Composite Materials Department
Miami Plant

CIBA-GEIGY Corporation
3550 N.W. 49th Street
Miami, Florida 33142
Telephone 305 633 9066

December 19, 1985

Mr. Bruce Mitchell
Dept. of Environmental Regulations
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, FL 32301-8241

Dear Mr. Mitchell:

Please find enclosed the affidavit of the legal notice as requested per the permit.

If you have any further questions please feel free to contact me.

Sincerely,



Antonio Mazpule
Sr. Project Engineer

AM/on

enclosures

DER

DEC 20 1985

BAQM

The Miami Herald
A KNIGHT-RIDDER NEWSPAPER
PUBLISHED DAILY
MIAMI — DADE — FLORIDA

STATE OF FLORIDA
COUNTY OF DADE:

Before the undersigned authority personally appeared

ANN MARTULA

who on oath says that he/she is

OFFICE MANAGER

of The Miami Herald, a daily newspaper published at Miami in Dade County, Florida; that the attached copy of advertisement was published in said newspaper in the issues of

NOV. 29th, 1985

Affiant further says that the said The Miami Herald is a newspaper published at Miami, in the said Dade County, Florida and that the said newspaper has heretofore been continuously published in said Dade County, Florida, each day and has been entered as second class mail matter at the post office in Miami, in said Dade County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Ann Martula

Sworn to and subscribed before me this 19th
day of DECEMBER 85
A.D. 19.....

My commission expires.....

Fanelu Susi

NOTARY PUBLIC
MY COMMISSION EXP. SEP 25, 1988
CONCEDED THRU GENERAL INC. UND.

Department of
Environmental Regulation
Notice of Proposed
Agency Action
on Permit Application
The Department of Environmental Regulation gives notice of its intent to issue a permit to Ciba-Geigy Corporation. The applicant is requesting an increase in the usage of volatile organic compounds (VOC) and to construct/install two totally enclosed dip/purge processing units with an associated incinerator system at their existing facility at 3550 Northwest 49th Street, Miami, Dade County, Florida.
Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period constitutes a waiver of any right such person may have to request an administrative determination (hearing) under section 120.57, Florida Statutes.
If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301.
If no hearing officer has been assigned, the petition is to be filed with the department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.
The application 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:

Dept. of Environmental Regulation, Bureau of Air Quality Management, 2600 Blair Stone Road, Tallahassee, Florida 32301.

Dept. of Environmental Regulation, Southeast Florida District, 3301 Gun Club Road, West Palm Beach, Florida 33402.

Dade County Dept. of Environmental Resources Management, 909 S.E. 1st Ave., Brickell Plaza, Miami, Florida 33131.

Any person may send written comment on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.
Nov. 29, 1985

DER

DEC 29 1985

BAOM

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
CIBA-GEIGY Corporation
3550 N.W. 49th Street
Miami, Florida 33142

Permit Number: AC 13-109080
Expiration Date: May 31, 1987
County: Dade
Latitude/Longitude: 25° 49' 25" N/
80° 15' 16" W
Project: Increase in VOC Usage and
Phased Construction of Two
Dip and Purge Units with an
Incinerator System

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the increase in VOC (volatile organic compounds) annual usage and the phased construction of two totally enclosed dip and purge units (DPU) with an associated incinerator system. After each DPU is installed, debugged and compliance tested, an existing uncontrolled dip and purge operation will be retired, dismantled and their operating permit surrendered.

The UTM coordinates are Zone 17, 575.507 km East and 2856.387 km North. The SCC for the processes involved is 4-02-007-06.

The construction shall be in accordance with the attached permit application and attachments, plans, drawings, amendments and documents, except as otherwise noted on pages 5-10 of the Specific Conditions.

Attachments are as follows:

1. Application to Construct an Air Pollution Source, DER Form 17-1.202(1), received September 27, 1985.
2. Ms. Stephanie S. Brooks' Interoffice Memorandum dated October 15, 1985.
3. Mr. C.H. Fancy's letter dated October 23, 1985.
4. Mr. A. Mazpule's letter and attachment dated November 14, 1985.
5. Mr. A. Mazpule's letter and attachment dated November 20, 1985.

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

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), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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 does not constitute 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 the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement 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, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, 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.

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or 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 or 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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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 notify and provide the department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact 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.

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

GENERAL CONDITIONS:

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 revocation of this permit.

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 arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

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 Florida Administrative Code Rules 17-4.12 and 17-30.30, 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 is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD).
- () Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

GENERAL CONDITIONS:

- b. The permittee shall retain 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 instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - 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 that 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 submitted or corrected promptly.

SPECIFIC CONDITIONS:

Phased Construction

- A. Facility - current
 - 1. Maximum allowable VOC (volatile organic compounds) emissions are 399.4 tons per year.
 - 2. All VOC operating, maintenance, accounting, compliance and reporting procedures contained in the construction permit No. AC 13-65839, issued January 6, 1984, shall apply to this permit.
 - 3. Particulate matter shall not exceed 2.03 TPY total from all curing ovens.

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

SPECIFIC CONDITIONS:

4. The visible emissions limit from the curing ovens shall be less than 20 percent opacity.
5. DER Method 5 shall be used to compliance test for particulate matter and DER Method 9 shall be used to compliance test for visible emissions. Compliance testing shall be in accordance with FAC Rule 17-2.700.
6. Objectionable odors shall not be allowed off plant property.
- B. Dip and Purge (DPU) #1 and Associated Incinerator System
 1. The first DPU and the associated incinerator system shall be constructed/installed, debugged, and compliance tested prior to September 1, 1986.
 2. Upon completion of compliance testing, an existing uncontrolled dip and purge operation shall be immediately retired from service and dismantled, but prior to September 1, 1986.
 3. The DPU shall be totally enclosed with a negative pressure maintained to avoid VOC emissions and to establish 100% (percent) capture efficiency. The pressure drop shall be demonstrated for the DPU to verify that negative pressure exists during each operation. Capture efficiency shall be determined using mass balance.
 4. A monitor for the temperature of the catalyst bed shall be required.
 5. The minimum VOC destruction efficiency for the incinerator shall be 95 percent, which means that at least 95 percent of the VOC, measured as total combustible carbon, will be oxidized to carbon dioxide and water. EPA Method 25, Appendix A, 40 CFR 60, shall be used to demonstrate the destruction efficiency.
 6. Compliance tests shall be demonstrated while operating at maximum capacity.
 7. Test(s) protocol shall be approved prior to the test(s) and shall be coordinated with the DER Southeast Florida District office and

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

SPECIFIC CONDITIONS:

the Dade County Environmental Resources Management office at least 15 days prior to any test(s).

8. Maximum allowable VOC emissions are 4.98 lb/hr and 19.9 TPY.
 9. Maximum allowable hours of operation are 8,000 hours per year.
 10. Maximum capacity is 125 lb/hr VOC usage and based on processing a maximum of 10 units/blocks of material per hour.
- C. Dip and Purge Unit (DPU) #2 and Incinerator System
1. The second DPU shall be constructed/installed, connected to the associated incinerator system, debugged, and compliance tested no later than May 31, 1987.
 2. Upon completion of testing, an existing uncontrolled dip and purge operation shall be immediately retired from service and dismantled, but no later than May 31, 1987.
 3. The DPU shall be totally enclosed with a negative pressure maintained to avoid VOC emissions and to establish 100% (percent) capture efficiency. The pressure drop shall be demonstrated for the DPU to verify that negative pressure exists during each operation. Capture efficiency shall be determined using mass balance.
 4. A monitor for the temperature of the catalyst bed shall be required.
 5. The minimum VOC destruction efficiency for the incinerator shall be 95 percent, which means that at least 95 percent of the VOC, measured as total combustible carbon, will be oxidized to carbon dioxide and water. EPA Method 25, Appendix A, 40 CR 60, shall be used to demonstrate the destruction efficiency. The incinerator shall be required to demonstrate the destruction efficiency of the incinerator while one DPU is in operation and while both DPU are in operation.
 6. Compliance tests shall be demonstrated while operating at maximum capacity.
 7. Test(s) protocol shall be approved prior to the test(s) and shall be coordinated with the DER's Southeast Florida District office and the Dade County Environmental Resources Management office at least 15 days prior to any test(s).

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

SPECIFIC CONDITIONS:

8. Maximum allowable VOC emissions are 4.98 lb/hr and 19.9 TPY.
9. Maximum allowable hours of operation are 8,000 hours per year.
10. Maximum capacity is 125 lb/hr VOC usage and based on processing a maximum of 10 units/blocks of material per hour.

D. Facility - after May 31, 1987

1. Maximum allowable pollutant emissions are reflected in the following table:

Source	Pollutant	Maximum Allowable lb/hr	Emissions TPY
Facility	VOC	60.66	242.64
DPU #1	VOC	4.98	19.92
DPU #2	VOC	4.98	19.92
House Cleaning	VOC	1.77	7.08
Storage	VOC	2.23	8.92
Curing Oven(3)	VOC	46.70(Total)	186.80(Total)
	PM	0.99(Total)	3.96(Total)
	VE	less than 20 percent opacity	

NOTE: Based on a maximum of 125 lb/hr/DPU VOC usage and 10 units/blocks of material processed per DPU.

2. Maximum allowable hours of operation are 8000 annually.
3. Maximum VOC capacity per DPU is 125 lb/hr (based on processing 10 units/blocks per hour per DPU).
4. Negative pressure shall be maintained within each DPU.
5. The capture efficiency shall be determined by mass balance.
6. The destruction efficiency of the incinerator of VOC shall be demonstrated using EPA Method 25, Appendix A, 40 CFR 60.
7. Compliance tests shall be conducted while operating at 90-100% of the permitted capacity.

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

SPECIFIC CONDITIONS:

8. Test(s) protocol shall be approved prior to the test(s) and shall be coordinated with the DER's Southeast Florida District office and the Dade County Environmental Resources Management office at least 15 days prior to any test(s).
9. Compliance test(s) for PM and VE shall be DER Method 5 and DER Method 9, respectively. Compliance testing shall be in accordance with FAC Rule 17-2.700.
10. Objectionable odors shall not be allowed off plant property.
11. Permits Nos. AC 13-65839 and AC 13-104266 shall be surrendered to the department.
12. The facility's VOC emissions by source shall be accounted for and submitted in the AOR (annual operating report) and is to be submitted to the DER's Southeast Florida District office or its designee, Dade County's Environmental Resources Management office.
13. 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.
14. 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 60 days prior to the expiration of the construction permit and submit a new schedule and request for an extension of the construction permit. (FAC Rule 17-4.09)

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results and Certificate of Completion, to the Department's Northeast District office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate. (FAC Rules 17-4.22 and 17-4.23)

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

SPECIFIC CONDITIONS:

If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee must apply for a new permit to construct which may take up to 90 days to process a complete application. (FAC Rule 17-4.10)

Issued this 30 day of December,
1985.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



VICTORIA J. TSCHINKEL, Secretary

_____ pages attached.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

December 3, 1985

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Douglas B. Buchanan
Site Manager
Ciba-Geigy Corporation
3550 N.W. 49th Street
Miami, Florida 33142

Dear Mr. Buchanan:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permit to increase VOC usage and to construct/install two totally enclosed dip/purge processing units with associated incinerator system at your facility in Miami, Dade County, Florida.

Before final action can be taken on your draft permit, you are required by Florida Administrative Code Rule 17-103.150 to publish the attached Notice of Proposed Agency Action in the legal advertising section of a newspaper of general circulation in Dade County no later than fourteen days after receipt of this letter. The department must be provided with proof of publication within seven days of the date the notice is published. Failure to publish the notice may be grounds for denial of the permit.

Please submit, in writing, any comments which you wish to have considered concerning the department's proposed action to Mr. Bill Thomas of the Bureau of Air Quality Management.

Sincerely,

(Signature)

for C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/pa

Attachments

cc: Art Bolivar
Tom Tittle

State of Florida
Department of Environmental Regulation
Notice of Proposed Agency Action
on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a permit to Ciba-Geigy Corporation. The applicant is requesting an increase in the usage of volatile organic compounds (VOC) and to construct/install two totally enclosed dip/purge processing units with an associated incinerator system at their existing facility at 3550 Northwest 49th Street, Miami, Dade County, Florida.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period constitutes a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

The application 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:

Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Dept. of Environmental Regulation
Southeast Florida District
3301 Gun Club Road
West Palm Beach, Florida 33402

Dade County Dept. of Environmental
Resources Management
909 S.E. 1st Ave., Brickell Plaza
Miami, Florida 33131

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

RULES OF THE ADMINISTRATIVE COMMISSION
MODEL RULES OF PROCEDURE
CHAPTER 28-5
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

- (1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.
- (2) All petitions filed under these rules should contain:
 - (a) The name and address of each agency affected and each agency's file or identification number, if known;
 - (b) The name and address of the petitioner or petitioners;
 - (c) All disputed issues of material fact. If there are none, the petition must so indicate;
 - (d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;
 - (e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;
 - (f) A demand for the relief to which the petitioner deems himself entitled; and
 - (g) Such other information which the petitioner contends is material.

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of)
Application for Permit by:)
)
Ciba-Geigy Corporation) DER File No. AC 13-109080
3550 N.W. 49th Street)
Miami, Florida 33142)

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its Intent to Issue, and proposed order of issuance for, a permit pursuant to Chapter 403, Florida Statutes, for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Ciba-Geigy Corporation, applied on September 27, 1985 to DER for a permit to increase the usage of volatile organic compounds (VOC) and to construct/install two totally enclosed dip/purge processing units with an associated incinerator system at the applicant's existing facility in Miami, Dade County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The applicant was officially notified by the Department that an air construction permit was required for the proposed work.

This intent to issue shall be placed before the Secretary for final action unless an appropriate petition for a hearing pursuant to the provisions of Section 120.57, Florida Statutes, is filed within fourteen (14) days from receipt of this letter or

publication of the public notice (copy attached) required pursuant to Rule 17-103.150, Florida Administrative Code, whichever occurs first. The petition must comply with the requirements of Section 17-103.155 and Rule 28-5.201, Florida Administrative Code (copy attached) and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32301.

Petitions which are not filed in accordance with the above provisions are subject to dismissal by the Department. In the event a formal hearing is conducted pursuant to Section 120.57(1), all parties shall have an opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination of witnesses and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exceptions to any order or hearing officer's recommended order, and to be represented by counsel. If an informal hearing is requested, the agency, in accordance with its rules of procedure, will provide affected persons or parties or their counsel an opportunity, at a convenient time and place, to present to the agency or hearing officer, written or oral evidence in opposition to the agency's action or refusal to act, or a written statement challenging the grounds upon which the agency has chosen to justify its action or inaction, pursuant to Section 120.57(2), Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition, may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of

Administrative Hearings, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

Executed the 3rd day of December, 1985, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Willard Handy
for _____
C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

Copies furnished to:

Mr. Douglas B. Buchanan
Mr. Art Bolivar
Mr. Tom Tittle

CERTIFICATION

This is to certify that the foregoing Intent to Issue and all copies were mailed before the close of business on Dec. 3, 1985.

Willard Hanks
for C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management
2600 Blair Stone Road
Tallahassee, Florida 32301

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

Patricia Y Adams Dec. 3 1985
Clerk Date

Technical Evaluation
and
Preliminary Determination

CIBA-GEIGY Corporation
Dade County
Miami, Florida

Permit Number:
AC 13-109080

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting
November 27, 1985

I. PROJECT DESCRIPTION

A. Applicant

CIBA-GEIGY Corporation
3550 Northwest 49th Street
Miami, Florida 33142

B. Project and Location

At its existing facility, the applicant is requesting an increase in the usage of volatile organic compounds (VOC) and to construct/install two totally enclosed dip/purge processing units (DPU) with an associated incinerator system. Currently, it is assumed that all of the VOC emissions are exhausted into the atmosphere because there is no VOC control system(s) associated with the existing dip and purge operations and the curing ovens.

This increase in VOC usage will also increase the annual production throughput in the curing ovens. Consequently, there will be an increase in VOC emissions and particulate matter (PM) emissions. The PM emissions are controlled with a baghouse system.

The two new DPU will be installed in phases, meaning that the first DPU along with the associated incinerator system will be installed, debugged and compliance tested. At this time, one of the existing uncontrolled dip and purge operations will be removed from service and dismantled. Then, the second DPU will be installed, connected to the associated incinerator system, debugged and compliance tested. At this time, the last existing uncontrolled dip and purge operation will be removed from service and dismantled.

The existing facility is located at the above address in Dade County. The UTM coordinates are Zone 17, 575.307 km East and 2856.387 km North.

The source classification code for the processes involved is 4-02-007-06.

C. Process and Controls

At this facility, a Nomex or fiberglass material is bonded, dipped in a resin coating bath, purged with air, dried in a curing oven, and then cut and shaped according to specifications. Approximately 80% of the facility's total VOC emissions are attributed to the dip and purge operations, 19% to the curing ovens, and 1% to house cleaning.

Until the phased construction is completed, in-house preventive maintenance procedures and crew efficiency will be utilized to minimize the emissions of VOC. The emissions of

VOC will be accounted for by a material balance, which is an inventory balance. Since this facility has no VOC reclamation or control devices at this time, the amount of VOC emitted into the atmosphere will be the difference between the beginning inventory, plus what has been delivered, and the ending inventory. Therefore, monthly logs shall be maintained and a quarterly report shall be compiled and submitted to the Dade County Environmental Resources Management (DERM) office and the DER's Southeast Florida District office.

II. RULE APPLICABILITY

The proposed modification is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4.

The application was complete November 21, 1985.

The existing facility is located in Dade County, which is an area designated nonattainment for the pollutant ozone in accordance with FAC Rule 17-2.410(1)(d). Volatile organic compounds are precursors to ozone.

The existing facility is a major emitting facility for VOC in accordance with FAC Rule 17-2.100(98). The permitted allowable VOC emissions are 351.4 tons per year (TPY).

The applicant is requesting an increase of 48.0 TPY of VOC, which is greater than the significant emission rate of 40 TPY VOC pursuant to Table 500-2. Initially, the emissions are subject to preconstruction review requirements of FAC Rule 17-2.510(4) in accordance with FAC Rule 17-2.510(2)(d)4.a. However, with the phased construction and existing source retirement, sufficient VOC emission reductions will occur such that the net overall result will be a decrease in VOC emissions. Also, the installation of the two totally enclosed DPU with an associated incinerator system (projected overall VOC control efficiency of 95%) is considered to be LAER equivalent. Consequently, the emissions will be subject to review in accordance with FAC Rule 17-2.520.

Since there are no NSPS, NESHAP, nor any applicable emission limiting standard in FAC Rules 17-2.600 and 17-2.650(1), the proposed modification shall be permitted in accordance with FAC Rules 17-2.610, General Particulate Emission Limiting Standards, and 17-2.620, General Pollutant Emission Limiting Standards.

Using the process weight equation and the current total phenolic resin input rate of 195 pounds per hour (lb/hr), equivalent to 0.10 tons per hour, the total allowable emission rate for particulate matter (PM) calculates to be 0.9 lb/hr and

2.03 TPY (at 4512 hr/yr operation) in accordance with 17-2.610(1). Per curing oven, the maximum allowable emission rates for PM are 0.30 lb/hr and 0.68 TPY. After the phased construction, the phenolic resin input will increase to 250 lb/hr, thus increasing the allowable PM emissions to 0.99 lb/hr and 3.96 TPY (at 8000 hr/yr operation), totals for 3 curing ovens.

According to 17-2.610(2)(a), no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere any air pollutants from new, or existing sources, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart the opacity of which is equal to or greater than 20 percent.

According to 17-2.620(1)(a), 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. At present, only in-house preventive maintenance procedures and crew efficiency will be utilized and deemed necessary to keep VOC emissions minimized.

Proposed and acceptable in-house preventive maintenance procedures shall include, but not be limited to: 1) seal the resin-dip tanks with floating-tank covers when the process is not being used; 2) keep lids and caps on all VOC containers when not being used; 3) maintain a monthly accounting of the volatile organic compounds per type such that the beginning inventory and deliveries are accounted for; and, 4) a quarterly report, compiled from #4, is to be submitted to the DER's Southeast Florida District office and Dade County's Department of Environmental Resources Management office no later than 15 days after the closing date of each quarter.

According to 17-2.620(2), 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 according to 17- 2.100(108). Therefore, objectionable odors shall not be allowed off plant property.

Compliance testing shall be conducted on the baghouse system associated with the curing ovens in accordance with FAC Rule 17-2.700. For PM mass emissions compliance testing, the compliance test method shall be DER Method 5. For visible emissions compliance testing, the compliance test method shall be DER Method 9.

Compliance testing shall be conducted on the new incinerator system to establish the VOC destruction efficiency. The compliance test method shall be EPA Method 25 in accordance with Appendix A, 40 CFR 60. Confirmation of the negative pressure within each DPU will also be required.

III. SUMMARY OF EMISSIONS AND AIR QUALITY ANALYSIS

A. Emission Limitations

The regulated pollutant emissions from the facility are VOC, PM and VE. The following table will reflect the maximum allowable pollutant emissions in tons per year (TPY):

Source	Pollutant	Maximum Allowable Emissions (TPY)
Facility	VOC	399.4
Curing Ovens	PM	2.03
	VE	less than 20% opacity

NOTE: °VOC emissions are based on 200 lb/hr total VOC usage and approximately 4,000 hr/yr operation
 °PM emissions are based on the process weight table and 4,512 hr/yr operation

The following table reflects the maximum allowable pollutant emissions from the facility after completion of the phased construction:

Source	Pollutant	Maximum Allowable Emissions (TPY)
Facility	VOC	242.6
Curing Ovens	PM	3.96
	VE	less than 20% opacity

NOTE: °VOC emissions are based on 250 lb/hr total VOC usage, 95% overall destruction of VOC from the two new DPU, and 8,000 hr/yr operation per DPU
 °PM emissions are based on the process weight table and 8,000 hr/yr operation

The permitted emissions are in compliance with all applicable requirements of FAC Rules 17-2 and 17-4.

B. Air Quality Analysis

From a technical review of the application, an air quality analysis was not required for the proposed phased construction and the proposed changes will not interfere with reasonable further progress toward attaining the ambient air quality standards.

IV. CONCLUSIONS

The emission limits proposed by the applicant are acceptable by the department. The phased construction of the two new controlled DPU and the phased retirement of the two existing uncontrolled dip and purge operations will have an overall net reduction effect of VOC emissions. The baghouse control system associated with the curing ovens should be capable of continued compliance with the particulate matter and visible emissions limits.

The permitted emissions from the proposed changes should not cause any violation of Florida's ambient air quality standards.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all applicable requirements of FAC Rules 17-2 and 17-4.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
CIBA-GEIGY Corporation
3550 N.W. 49th Street
Miami, Florida 33142

Permit Number: AC 13-109080
Expiration Date: May 31, 1987
County: Dade
Latitude/Longitude: 25° 49' 25" N/
80° 15' 16" W
Project: Increase in VOC Usage and
Phased Construction of Two
Dip and Purge Units with an
Incinerator System

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the increase in VOC (volatile organic compounds) annual usage and the phased construction of two totally enclosed dip and purge units (DPU) with an associated incinerator system. After each DPU is installed, debugged and compliance tested, an existing uncontrolled dip and purge operation will be retired, dismantled and their operating permit surrendered.

The UTM coordinates are Zone 17, 575.507 km East and 2856.387 km North. The SCC for the processes involved is 4-02-007-06.

The construction shall be in accordance with the attached permit application and attachments, plans, drawings, amendments and documents, except as otherwise noted on pages 5-10 of the Specific Conditions.

Attachments are as follows:

1. Application to Construct an Air Pollution Source, DER Form 17-1.202(1), received September 27, 1985.
2. Ms Stephanie S. Brooks' Interoffice Memorandum dated October 15, 1985.
3. Mr. C.H. Fancy's letter dated October 23, 1985.
4. Mr. A. Mazpule's letter and attachment dated November 14, 1985.
5. Mr. A. Mazpule's letter and attachment dated November 20, 1985.

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

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), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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 does not constitute 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 the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement 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, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, 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.

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or 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 or 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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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 notify and provide the department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact 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.

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

GENERAL CONDITIONS:

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 revocation of this permit.

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 arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

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 Florida Administrative Code Rules 17-4.12 and 17-30.30, 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 is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD).
- () Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

GENERAL CONDITIONS:

- b. The permittee shall retain 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 instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - 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 that 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 submitted or corrected promptly.

SPECIFIC CONDITIONS:

Phased Construction

A. Facility - current

1. Maximum allowable VOC (volatile organic compounds) emissions are 399.4 tons per year.
2. All VOC operating, maintenance, accounting, compliance and reporting procedures contained in the construction permit No. AC 13-65839, issued January 6, 1984, shall apply to this permit.
3. Particulate matter shall not exceed 2.03 TPY total from all curing ovens.

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

SPECIFIC CONDITIONS:

4. The visible emissions limit from the curing ovens shall be less than 20 percent opacity.
5. DER Method 5 shall be used to compliance test for particulate matter and DER Method 9 shall be used to compliance test for visible emissions. Compliance testing shall be in accordance with FAC Rule 17-2.700.
6. Objectionable odors shall not be allowed off plant property.
- B. Dip and Purge (DPU) #1 and Associated Incinerator System
 1. The first DPU and the associated incinerator system shall be constructed/installed, debugged, and compliance tested prior to September 1, 1986.
 2. Upon completion of compliance testing, an existing uncontrolled dip and purge operation shall be immediately retired from service and dismantled, but prior to September 1, 1986.
 3. The DPU shall be totally enclosed with a negative pressure maintained to avoid VOC emissions and to establish 100% (percent) capture efficiency. The pressure drop shall be demonstrated for the DPU to verify that negative pressure exists during each operation. Capture efficiency shall be determined using mass balance.
 4. A monitor for the temperature of the catalyst bed shall be required.
 5. The minimum VOC destruction efficiency for the incinerator shall be 95 percent, which means that at least 95 percent of the VOC, measured as total combustible carbon, will be oxidized to carbon dioxide and water. EPA Method 25, Appendix A, 40 CFR 60, shall be used to demonstrate the destruction efficiency.
 6. Compliance tests shall be demonstrated while operating at maximum capacity.
 7. Test(s) protocol shall be approved prior to the test(s) and shall be coordinated with the DER Southeast Florida District office and

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

SPECIFIC CONDITIONS:

- the Dade County Environmental Resources Management office at least 15 days prior to any test(s).
8. Maximum allowable VOC emissions are 4.98 lb/hr and 19.9 TPY.
 9. Maximum allowable hours of operation are 8,000 hours per year.
 10. Maximum capacity is 125 lb/hr VOC usage and based on processing a maximum of 10 units/blocks of material per hour.
- C. Dip and Purge Unit (DPU) #2 and Incinerator System
1. The second DPU shall be constructed/installed, connected to the associated incinerator system, debugged, and compliance tested no later than May 31, 1987.
 2. Upon completion of testing, an existing uncontrolled dip and purge operation shall be immediately retired from service and dismantled, but no later than May 31, 1987.
 3. The DPU shall be totally enclosed with a negative pressure maintained to avoid VOC emissions and to establish 100% (percent) capture efficiency. The pressure drop shall be demonstrated for the DPU to verify that negative pressure exists during each operation. Capture efficiency shall be determined using mass balance.
 4. A monitor for the temperature of the catalyst bed shall be required.
 5. The minimum VOC destruction efficiency for the incinerator shall be 95 percent, which means that at least 95 percent of the VOC, measured as total combustible carbon, will be oxidized to carbon dioxide and water. EPA Method 25, Appendix A, 40 CR 60, shall be used to demonstrate the destruction efficiency. The incinerator shall be required to demonstrate the destruction efficiency of the incinerator while one DPU is in operation and while both DPU are in operation.
 6. Compliance tests shall be demonstrated while operating at maximum capacity.
 7. Test(s) protocol shall be approved prior to the test(s) and shall be coordinated with the DER's Southeast Florida District office and the Dade County Environmental Resources Management office at least 15 days prior to any test(s).

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

SPECIFIC CONDITIONS:

8. Maximum allowable VOC emissions are 4.98 lb/hr and 19.9 TPY.
9. Maximum allowable hours of operation are 8,000 hours per year.
10. Maximum capacity is 125 lb/hr VOC usage and based on processing a maximum of 10 units/blocks of material per hour.

D. Facility - after May 31, 1987

1. Maximum allowable pollutant emissions are reflected in the following table:

Source	Pollutant	Maximum Allowable lb/hr	Emissions TPY
Facility	VOC	60.66	242.64
DPU #1	VOC	4.98	19.92
DPU #2	VOC	4.98	19.92
House Cleaning	VOC	1.77	7.08
Storage	VOC	2.23	8.92
Curing Oven(3)	VOC	46.70(Total)	186.80(Total)
	PM	0.99(Total)	3.96(Total)
	VE	less than 20 percent opacity	

NOTE: Based on a maximum of 125 lb/hr/DPU VOC usage and 10 units/blocks of material processed per DPU.

2. Maximum allowable hours of operation are 8000 annually.
3. Maximum VOC capacity per DPU is 125 lb/hr (based on processing 10 units/blocks per hour per DPU).
4. Negative pressure shall be maintained within each DPU.
5. The capture efficiency shall be determined by mass balance.
6. The destruction efficiency of the incinerator of VOC shall be demonstrated using EPA Method 25, Appendix A, 40 CFR 60.
7. Compliance tests shall be conducted while operating at 90-100% of the permitted capacity.

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

SPECIFIC CONDITIONS:

8. Test(s) protocol shall be approved prior to the test(s) and shall be coordinated with the DER's Southeast Florida District office and the Dade County Environmental Resources Management office at least 15 days prior to any test(s).
9. Compliance test(s) for PM and VE shall be DER Method 5 and DER Method 9, respectively. Compliance testing shall be in accordance with FAC Rule 17-2.700.
10. Objectionable odors shall not be allowed off plant property.
11. Permits Nos. AC 13-65839 and AC 13-104266 shall be surrendered to the department.
12. The facility's VOC emissions by source shall be accounted for and submitted in the AOR (annual operating report) and is to be submitted to the DER's Southeast Florida District office or its designee, Dade County's Environmental Resources Management office.
13. 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.
14. The construction shall reasonably conform to the plans and schedule submitted in the application. If the applicant is unable to complete construction on schedule, he must notify the Department in writing 60 days prior to the expiration of the construction permit and submit a new schedule and request for an extension of the construction permit. (FAC Rule 17-4.09)

To obtain a permit to operate, the applicant must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results and Certificate of Completion, to the Department's Northeast District office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate. (FAC Rules 17-4.22 and 17-4.23)

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-109080
Expiration Date: May 31, 1987

SPECIFIC CONDITIONS:

If the construction permit expires prior to the applicant requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the applicant must apply for a new permit to construct which may take up to 90 days to process a complete application. (FAC Rule 17-4.10)

Issued this _____ day of _____,
19__.

**STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION**

VICTORIA J. TSCHINKEL, Secretary

_____ pages attached.

ATTACHMENT 1

LAW OFFICES

HOLLAND & KNIGHT

DER

SEP 27 1985

110 EAST BROWARD BLVD.
P. O. Box 14005
FORT LAUDERDALE, FLORIDA 33302
(305) 525-1000

BAQM

406 THIRTEENTH STREET WEST
P. O. Box 1669
BRADENTON, FLORIDA 33506
(813) 746-7107

92 LAKE WIRE DRIVE
P. O. DRAWER B W
LAKELAND, FLORIDA 33802
(813) 682-1161

1200 BRICKELL AVENUE
P. O. Box 015441
MIAMI, FLORIDA 33101
(305) 374-8500

255 SOUTH ORANGE AVENUE
P. O. Box 1526
ORLANDO, FLORIDA 32802
(305) 425-8500

2033 WOOD STREET
P. O. DRAWER 49768
SARASOTA, FLORIDA 33578
(813) 365-3321

BARNETT BANK BLDG.
P. O. DRAWER 810
TALLAHASSEE, FLORIDA 32302
(904) 224-7000

600 NORTH FLORIDA AVE.
P. O. Box 1288
TAMPA, FLORIDA 33601
(813) 223-1621

PLEASE REPLY TO: Tallahassee
September 26, 1985

888 SEVENTEENTH STREET, N. W.
SUITE 400
WASHINGTON, D. C. 20006
(202) 955-5550

CABLE ADDRESS
HND KNIGHT TPA
H&K MIA
TELEX 5-2630-TAMPA
TELEX 52-2233-MIAMI

Mr. Bruce Mitchell
Bureau of Air Quality Management
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blainstone Road
Tallahassee, Florida 32301

Re: Ciba-Geigy Corporation -- Request for a Variance

Dear Mr. Mitchell:

On behalf of Ciba-Geigy Corporation, we are submitting as a supplement to the petition for a variance an application for a construction permit to install a new dipping and purging system for the Ciba-Geigy facility.

The construction proposal is to build two dipping/purging modules that are totally enclosed. The VOCs are swept to an incinerator for destruction. These new machines will replace the two dip room facilities presently in use. Each machine will have a dipping section, a hold section, and a purge section. The entire machine will be totally enclosed and will move the blocks through each section automatically. When the block reaches the purge section it will be baffled to a vent hood to allow warm air to be drawn through the block to remove the IPA. The vent system leads to an incinerator that will destroy the VOCs. There is a continuous sweep of VOCs from the dip/purge box to provide a slight negative pressure to insure capture of the VOCs in the box. This flow will be directed to the incinerator. Exhibit A, attached hereto, contains details of the system.

A project is being prepared presently and will be submitted for internal approvals in October. Final approval should be obtained by January of 1986. Ciba-Geigy will seek to have the engineering and long-term procurement begin prior to the project final approval. Actual construction and installation of the first machine should be completed in September of 1986. It is expected that the machine will require some modifications after initial start-up. Ciba-Geigy expects the equipment to be fully on stream by November of 1986. It is expected that the incinera-

Mr. Bruce Mitchell
September 26, 1985
Page 2

tor will be ready for service at about the same time the first machine is fully installed. Ciba-Geigy expects to make operational tests in December of 1986. The second machine is expected to come on line in April of 1987. See Exhibit B.

When construction begins one existing dip tank and purge vent will be taken out of service and removed. When the first dip/purge machine is installed and operational the entire dip room No. 1 will be taken out of service. At the time the second machine is installed the other dip room will be dismantled.

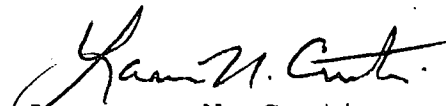
This project will impact VOC reduction beginning in October of 1986 when the plant decreases its emission rate from 200 pounds/hour to 128 pounds/hour. In April of 1987, when the second dip/purge machine becomes operational, the emission rate will decrease to 56 pounds/hour. After this the plant will continue to decrease emissions even with additional hours of operation. With the plant operating 24 hours per day, 7 days per week, 50 weeks per year, the plant will be operating at less than 250 tons per year. (See Exhibit C). With scheduled production increases during the next several years the offsets in emissions will be favorable in 1987.

The plant demands for increased production by the Ciba-Geigy marketing group continue to be very strong. We therefore request that the proposal for construction and installation of a control device be approved expeditiously in connection with the variance request. Approval will insure that Ciba-Geigy can continue to operate in the fourth quarter of 1985, and will ultimately result in a reduction in VOC emissions below the levels of current operation.

We very much appreciate your cooperation in the handling of this matter and look forward to hearing from you in the near future as to the final disposition of the variance. In the event you have any questions concerning the foregoing or require additional information, please do not hesitate to contact me.

Sincerely yours,

HOLLAND & KNIGHT


Lawrence N. Curtin

LNC/cs
Enclosures

cc: Mr. Doug Buchanan

Mr. Bruce Mitchell
September 26, 1985
Page 3

092640003L9/26:144



McGill Incorporated
5800 West 68th Street
Post Office Box 9667
Tulsa, Oklahoma 74157-0667

The Technology People

Tulsa • London

Telephone 918-445-2431

Telex: 796434

September 25, 1985

Mr. Doug Buchanan
c/o Mr. Larry Curtin
Suite 600
Barnett Bank Building
315 S. Calhoun Street
Tallahassee, Florida 32301

RECEIVED

SEP 26 1985

Subject: Ciba Geigy Isopropanol Incinerator
McGill File TC-85244

HOLLAND & KNIGHT
TALLAHASSEE

Gentlemen:

This letter is in response to my telephone conversation with Brown & Root's Jim Sherman today. Several McGill sales brochures are enclosed for your use. Essentially all of our incinerator systems are custom designed to fit particular applications, since operating temperatures and furnace volumes are varied as needed to achieve the required hydrocarbon destruction efficiencies. The Ciba Geigy waste stream consists of isopropanol in air. McGill has been requested to guarantee 95% destruction efficiency of the isopropanol. Based on our cumulative experience with similar compounds, we have selected an operating temperature of 1400°F and a combustion products retention time of 0.5 second to give in excess of 95% efficiency. Specific combustion test results for this particular combination of compounds are not available.

The model number of the proposed incinerator package is FMSYS4. The fuel consumption is 1.0 MMBTU/HR (both average and maximum), since the combustion products are used to preheat the waste stream.

When other questions arise, feel free to contact McGill as needed.

Very truly yours,

McGILL AMERICAS, INC.

A handwritten signature in dark ink, appearing to read "Dan Banks", written in a cursive style.

Dan Banks
Senior Engineer
Combustion Systems

sm

Enclosures

CIBA-GEIGY Corporation

Date 9/25/85

By DBD

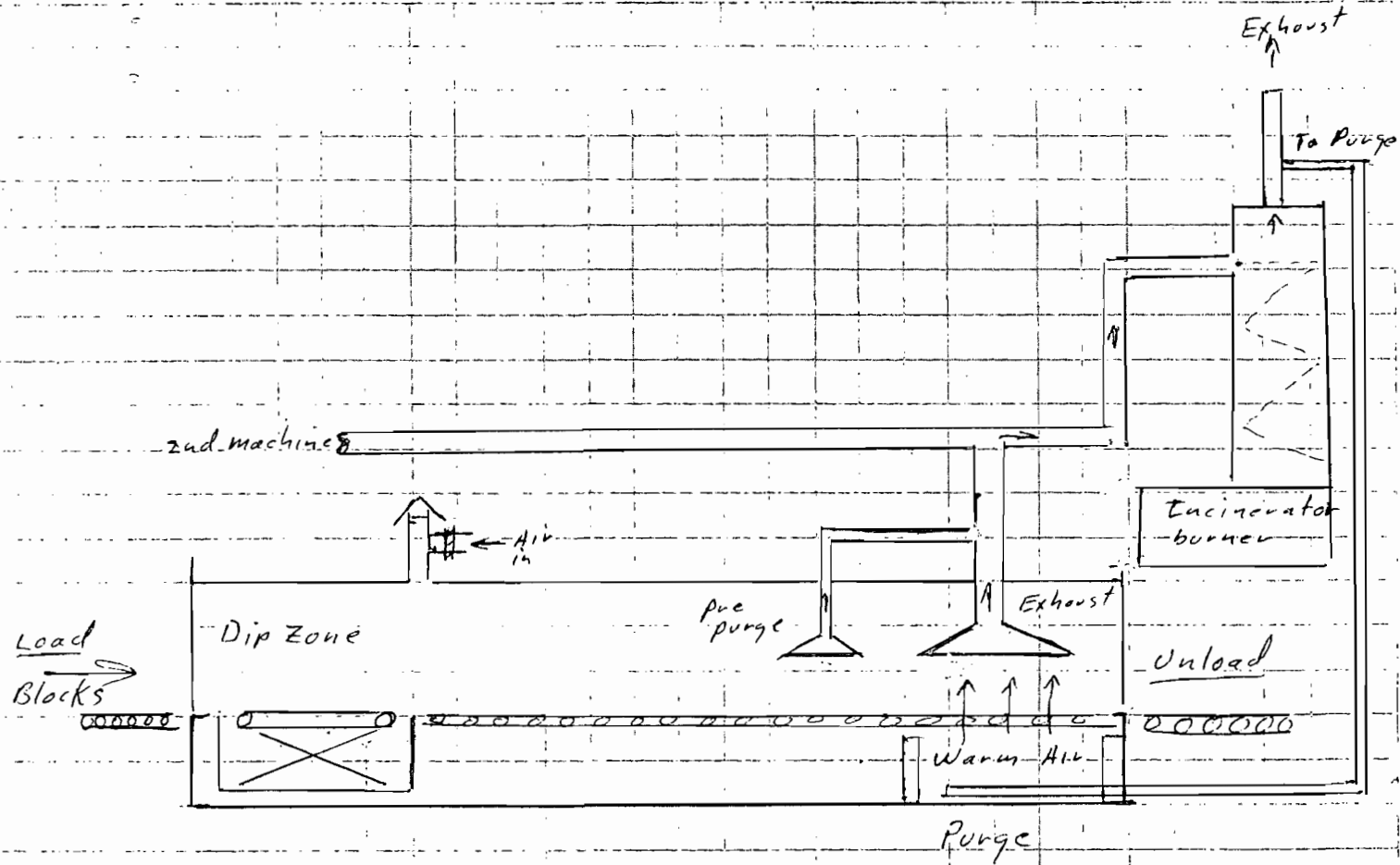
Checked AM

Subject Dip/Purge Machine

Sheet _____ of _____

Contract _____

Project No. JR-0737



Dip/Purge Machine
with Incineration

Exhibit A

DBD 9-25-85

CIBA-GEIGY Corporation

Date _____

Subject _____

Sheet _____ of _____

By _____

Project No. _____

Checked _____

Projection of Project Milestones

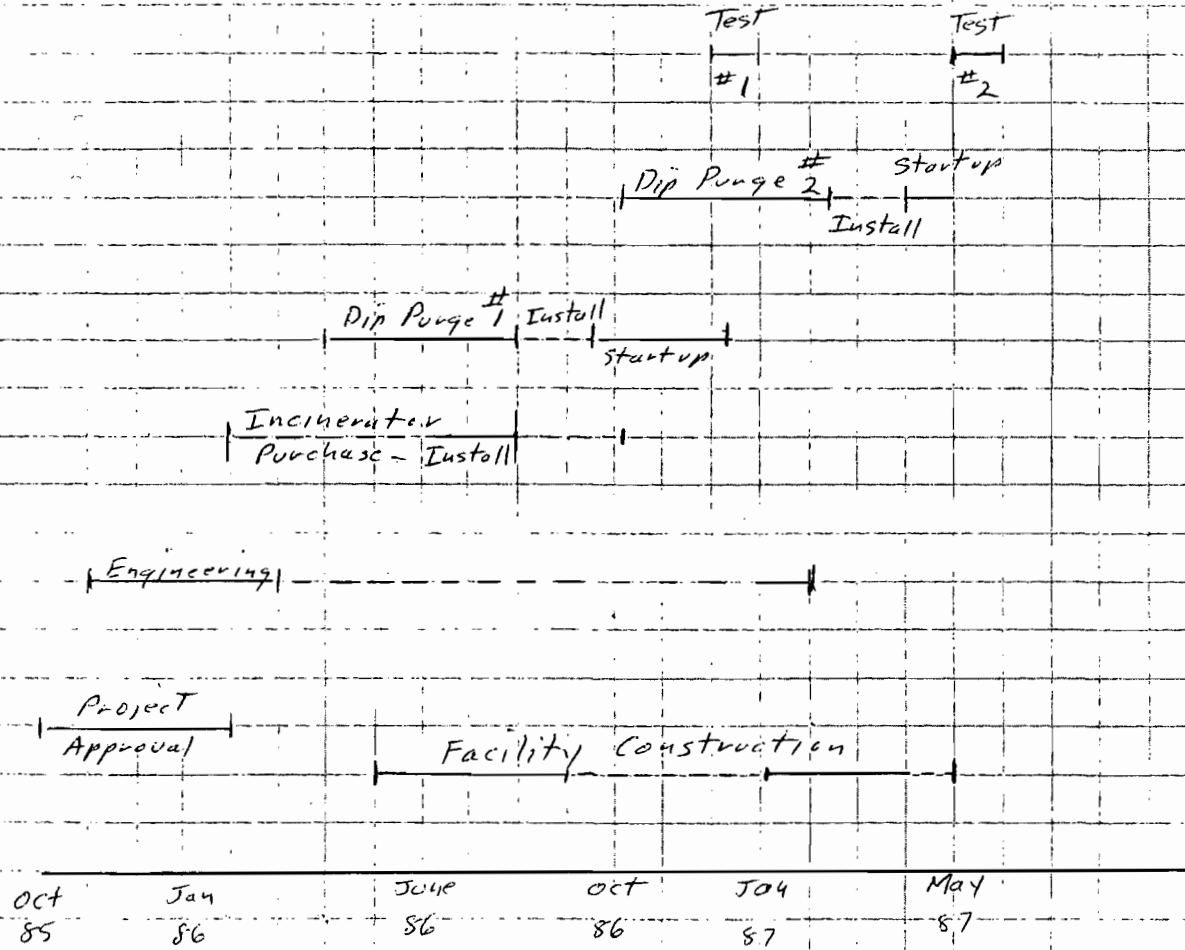


Exhibit B

DB 9/26/85

CIBA-GEIGY Corporation

Sheet _____ of _____

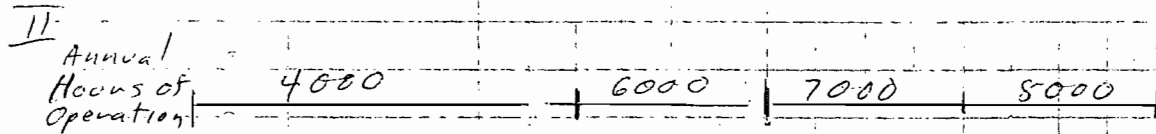
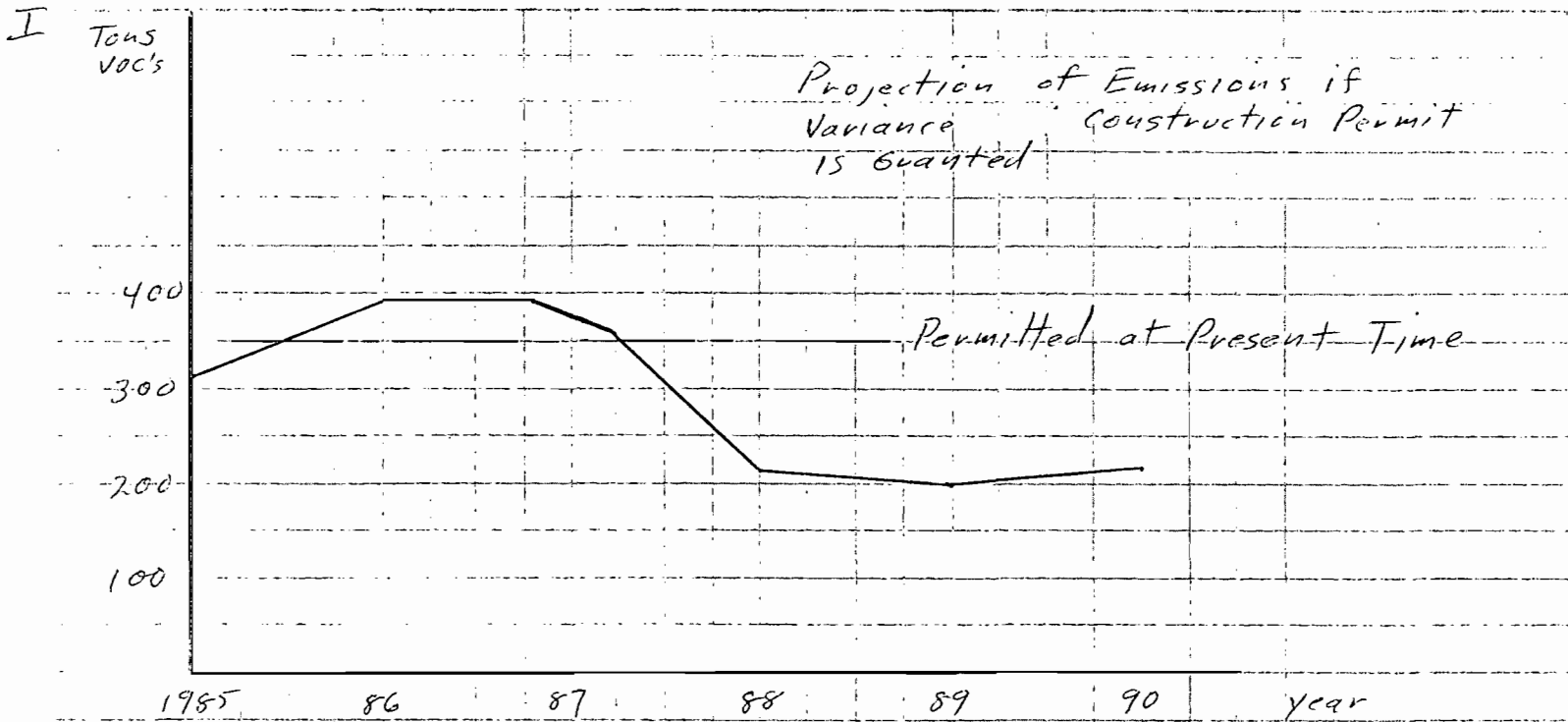
Subject _____

Date _____

Project No. _____

BY _____

Checked _____



III Schedule of VOC Emissions

Year	Tons	Offset	Cumulative
1985	390	-40	-40
1986	376	-26	-66
1987	209	+141	+75
1988	200	+150	+225
1989	228	+122	+347

Exhibit C

DBS 9-26-85

DETERMINATION OF LAER

Pursuant to applicable regulations, Ciba-Geigy Corporation has investigated various control technology and devices for the purposes of determining an appropriate proposal constituting the Lowest Achievable Emission Rate for its facility.

Reviewing the types of systems available, Ciba-Geigy investigated a number of systems to control or destroy VOC emissions. Following is a brief description of each system reviewed:

Water Scrubber - the Ciba-Geigy facility experiences high air flows at an ambient temperature that would only be 70% efficient with this type of technology. To improve this efficiency, chillers would be required, which in turn would increase the complexity of operations. The sizing of the chilling system likely would result in the production of ice because of the humid conditions in Miami. This type of system also would produce aqueous waste that requires disposal.

Carbon Adsorption - Initially, Ciba-Geigy investigated the Purasiv made by Union Carbide. This system could provide an approximately 90% efficiency. However, the system requires a complex regeneration system and disposal of spent carbon could result in additional environmental problems.

Condensation System - With this system, the air flow concentration would make the system extremely large. The humid conditions existing in Miami likely would produce ice accumulations that could cause intermediate shutdowns of the system.

Catalytic-Thermal Insulation - At the Ciba-Geigy facility the IPA adds fuel value. The destruction rate of 95% is equal to or better than any system under investigation. The simplicity and reliability of operations is a primary factor in the selection of this method of destruction. The destruction of IPA is clean and should not cause a corrosive problem. The manufacturer has installed numerous systems that have achieved the target efficiency of 95%.

The type of facility that Ciba-Geigy operates has not been classified by the Environmental Protection Agency as a category of sources for which new source performance standards (NSPS) have been established. This appears to be a result of the relative uniqueness of the product manufactured. Ciba-Geigy is aware of only one manufacturer with a similar process. This facility is located in an attainment area and is not restricted in a manner similar to our facility in Miami.

Notwithstanding the fact that the facility does not have an applicable NSPS, Ciba-Geigy has investigated, through the EPA BACT/LAER Clearinghouse, appropriate technology determinations that might be applicable. Although there are no identical facilities, the efficiency proposed by Ciba-Geigy compares favorably with those efficiencies that EPA has determined to be LAER for VOC emission control. The system Ciba-Geigy proposes is the installation of a thermal-catalytic incinerator system for the dip/purge operation. With a capture efficiency of 95%, plus a destruction efficiency of 95%, Ciba-Geigy believes that the sys-

tem would be very efficient and would meet the requirements of LAER being applied to the dip/purge system.

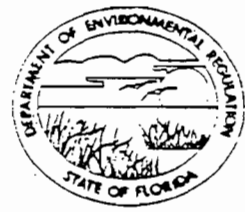
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AC 13-101000

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
DER

BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301



SEP 27 1985

BAQM

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Stationary New¹ Existing¹
APPLICATION TYPE: Construction Operation Modification
COMPANY NAME: CIBA-GEIGY Corporation COUNTY: Dade

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

SOURCE LOCATION: Street 3550 N.W. 49th Street City Miami
UTM: East 575307 North 2856387
Latitude 25 ° 49 ' 05 "N Longitude 80 ° 15 ' 16 "W

APPLICANT NAME AND TITLE: Douglas B. Buchanan, Site Manager
APPLICANT ADDRESS: 3550 N.W. 49th Street, Miami, FL 33142

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of CIBA-GEIGY Corporation
I certify that the statements made in this application for a modification
permit are true, correct and complete to the best of my knowledge and belief. Further,
I agree to maintain and operate the pollution control source and pollution control
facilities in such a manner as to comply with the provision of Chapter 403, Florida
Statutes, and all the rules and regulations of the department and revisions thereof. I
also understand that a permit, if granted by the department, will be non-transferable
and I will promptly notify the department upon sale or legal transfer of the permitted
establishment.

*Attach letter of authorization

Signed: Douglas B. Buchanan
Douglas B. Buchanan, Site Manager
Name and Title (Please Type)

Date: 9/26/85 Telephone No. (305) 633-9066

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have
been designed/examined by me and found to be in conformity with modern engineering
principles applicable to the treatment and disposal of pollutants characterized in the
permit application. There is reasonable assurance, in my professional judgment, that

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

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed Antonio P. Mazpule

Antonio P. Mazpule

Name (Please Type)

CIBA-GEIGY Corporation

Company Name (Please Type)

3550 N.W. 49th Street, Miami, FL 33142

Mailing Address (Please Type)

Florida Registration No. PE0023368 Date: 9/26/85 Telephone No. (305)633-9066

SECTION II: GENERAL PROJECT INFORMATION

- A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

This request of for the installation of two new dipping-purging machines to replace existing dip tanks and purge boxes; and associated emission control device, i.e., incinerator to thermally degrade the isopropanol from process. This construction permit is in support of our request for a variance.

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

Start of Construction May 1986 Completion of Construction May 1987

- C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Thermal incinerator	\$200,000.00
Dipping-Purging Machines (2 each)	250,000.00
Miscellaneous	50,000.00
Engineering	100,000.00
Total	\$600,000.00

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

AC 13-65839 (Dipping Rooms & Ovens)
AC 13-44507 (Sawing Operation)

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 50 ;
if power plant, hrs/yr _____ ; if seasonal, describe: _____

F. If this is a new source or major modification, answer the following questions.
(Yes or No)

- | | |
|---|-------------------|
| 1. Is this source in a non-attainment area for a particular pollutant? | <u>Yes, Ozone</u> |
| a. If yes, has "offset" been applied? | <u>Yes</u> |
| b. If yes, has "Lowest Achievable Emission Rate" been applied? | <u>Yes</u> |
| c. If yes, list non-attainment pollutants. | <u>VOC</u> |
| 2. Does best available control technology (BACT) apply to this source?
If yes, see Section VI. | <u>No</u> |
| 3. Does the State "Prevention of Significant Deterioration" (PSD)
requirement apply to this source? If yes, see Sections VI and VII. | <u>No</u> |
| 4. Do "Standards of Performance for New Stationary Sources" (NSPS)
apply to this source? | <u>No</u> |
| 5. Do "National Emission Standards for Hazardous Air Pollutants"
(NESHAP) apply to this source? | <u>No</u> |

- H. Do "Reasonably Available Control Technology" (RACT) requirements apply
to this source? No
- a. If yes, for what pollutants? -----
- b. If yes, in addition to the information required in this form,
any information requested in Rule 17-2.650 must be submitted.

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

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

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

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Nomex/Fiberglass			144	
Isopropanol			105	
Phenolic Resin			248	
Acetone			1.5	

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

- Total Process Input Rate (lbs/hr): 497
- Product Weight (lbs/hr): 309

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

Name of Contaminant	Current Emission ¹		Allowed Emission Rate per Rule 17-2 ²	Allowable Emission lbs/hr ³	-LAER- Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
P.M.	.9	2.03	-		.9	3.78	
IPA	184	368	329.4 TPY		42.6	178.92	
Phenol	8.6	17.2	15.7 TPY		8.6	36.12	
Formaldehyde	1.2	2.4	.7 TPY		1.2	5.04	
Acetone	1.5	3	4.4 TPY		2.6	10.92	

¹See Section V, Item 2.

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

³Calculated from operating rate and applicable standard.

⁴Emission, if source operated ~~without~~ ^{after} control (See Section V, Item 3). (LAER applied)

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Thermal Incenerator	Isopropanol	Avg. 95%	N/A	See Exhibit N
McGill Incorporated				
or				
Equilavent				

(Information will be provided when available)

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Natural Gas	.00345		3.7

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

Fuel Analysis:

Percent Sulfur: None Percent Ash: _____
 Density: ----- lbs/gal Typical Percent Nitrogen: _____
 Heat Capacity: 1070 BTU/lb _____ BTU/gal
 Other Fuel Contaminants (which may cause air pollution): -----

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

Annual Average None Maximum -----

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

None

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

Stack Height: 35 ft. Stack Diameter: 27 in. ft.
 Gas Flow Rate: 9000 ACFM DSCFM Gas Exit Temperature: 500 °F.
 Water Vapor Content: 1.3 % Velocity: 70 FPS

SECTION IV: INCINERATOR INFORMATION

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

Description of Waste Isopropanol
 Total Weight Incinerated (lbs/hr) 144 Design Capacity (lbs/hr) to be determined
 Approximate Number of Hours of Operation per day 24 day/wk 7 wks/yr. 50
 Manufacturer McGill Incorporated, Tulsa, OK
 Date Constructed ----- Model No. FMSYS4

	Volume (ft) ³	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber	-	-	-	-	-
Secondary Chamber	-	-	-	-	-

Stack Height: ft. Stack Diameter: Stack Temp.
 Gas Flow Rate: ACFM DSCFM* Velocity: FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: Cyclone Wet Scrubber Afterburner
 Other (specify)

Brief description of operating characteristics of control devices: Two totally enclosed dipping-purging machines collect and direct the IPA from process to an incinerator to be thermally degraded.

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

None

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

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.
10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

Yes No

Contaminant	Rate or Concentration
_____	_____
_____	_____
_____	_____

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

Yes No

Contaminant	Rate or Concentration
_____	_____
_____	_____
_____	_____

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

Contaminant	Rate or Concentration
_____	_____
_____	_____
_____	_____

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

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

*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height:

ft.

b. Diameter:

ft.

c. Flow Rate:

ACFM

d. Temperature:

°F.

e. Velocity:

FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:²

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

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

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:²

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

¹Explain method of determining efficiency.

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

j. Applicability to manufacturing processes:

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

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:²

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

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

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:²

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

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

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:¹

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:²

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

¹ Explain method of determining efficiency.

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

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant	Rate or Concentration
_____	_____
_____	_____
_____	_____

(8) Process Rate:¹

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant	Rate or Concentration
_____	_____
_____	_____
_____	_____

(8) Process Rate:¹

10. Reason for selection and description of systems:

¹Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ () SO₂* _____ Wind spd/dir

Period of Monitoring _____ / _____ / _____ to _____ / _____ / _____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

Specify bubbler (B) or continuous (C).

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? Yes No

b. Was instrumentation calibrated in accordance with Department procedures?

Yes No Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from _____ / _____ / _____ to _____ / _____ / _____
month day year month day year

2. Surface data obtained from (location) _____

3. Upper air (mixing height) data obtained from (location) _____

4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

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

E. Emission Data Used in Modeling

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

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

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

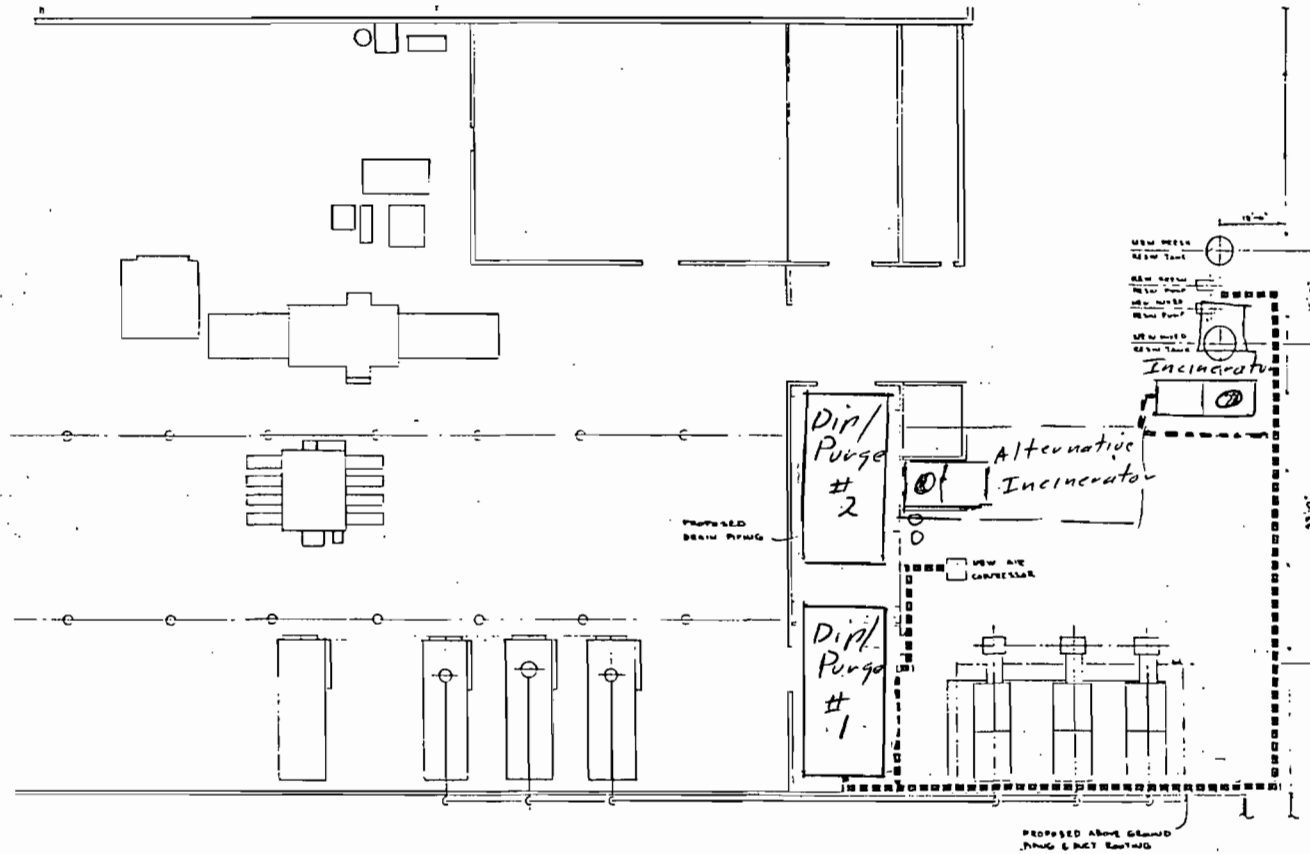
August 16, 1982

I hereby certify that Mr. Douglas Buchanan is the authorized representative of CIBA-GEIGY Corporation at the Miami Site.

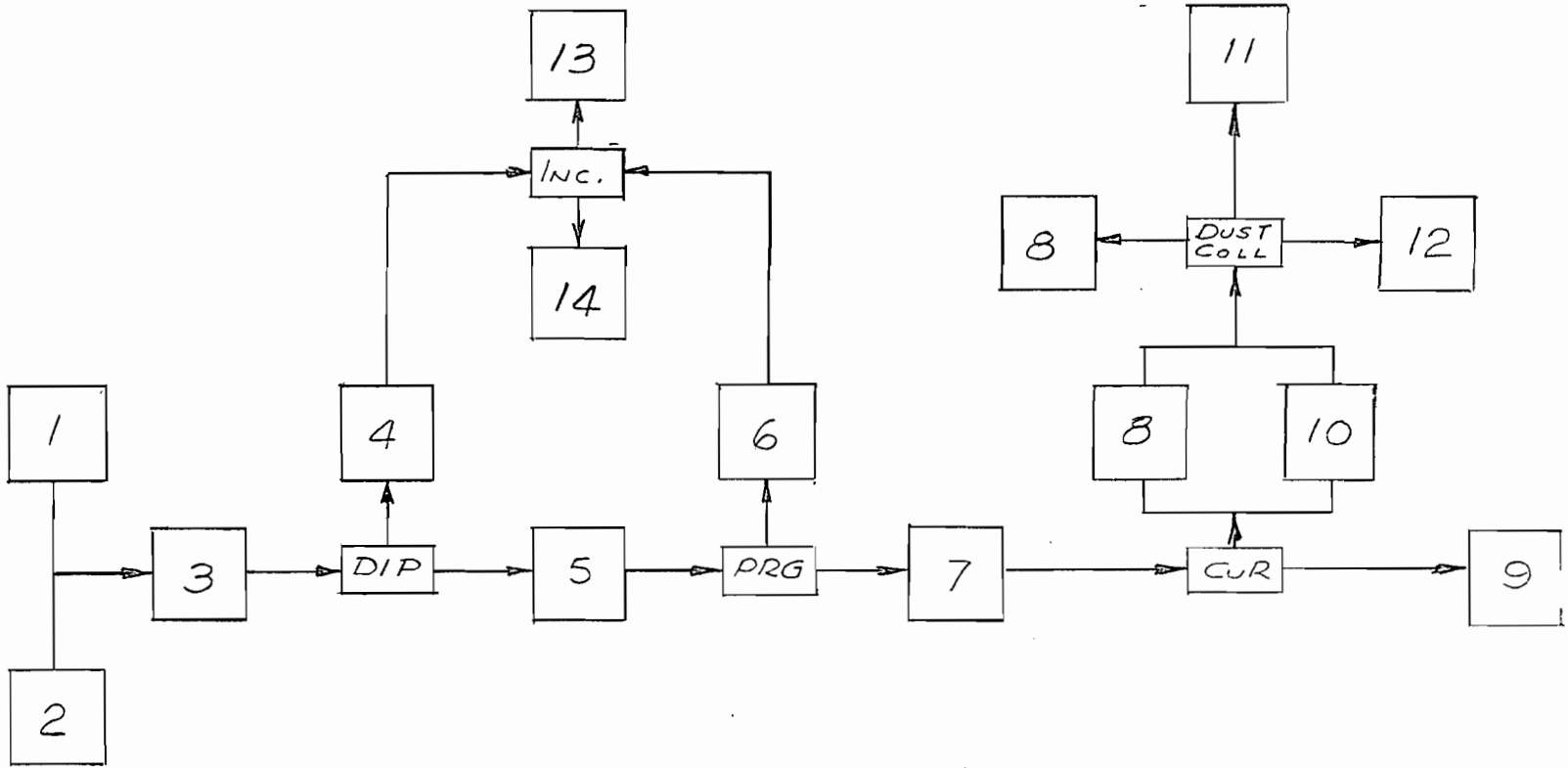
JS:rd



Jack Schneller
President
Plastics & Additives Division
CIBA-GEIGY Corporation



DATE	REVISIONS	BY	CHK'D	APP'D	REFERENCES	NO.	RELEASED FOR	BY	DATE	DRAWN BY	DATE	SCALE	Brown & Root U.S.A., Inc. ENGINEERS & CONSTRUCTORS	PROPOSED EQUIPMENT ARRANGEMENT CIBA-GIEGY COMPOSITE MATERIAL DIVISION MIAMI, FLORIDA	CONTRACT NO.	ORDER NO.
																JR-0757
															APPROVED BY	DATE
															APPROVED BY	DATE
															DRAWING NO.	REV
														EA-P-001	0	



MASS BALANCE

<u>ID NUMBER</u>	<u>COMPONENT</u>
(1)	Solvent added to resin
(2)	Resin
(3)	Mixture of resin & solvent in dip tanks
(4)	Solvent evaporated from dip tanks
(5)	Mixture in blocks after purging
(6)	Solvent evaporated while purging
(7)	Mixture in blocks after purging
(8)	Solvents evaporated while curing
(9)	Solid in blocks after curing
(10)	Particulate emission - before control
(11)	Particulate emission from ESP after control
(12)	Particulate collection from ESP
(13)	IPA Penetration from incinerator
(14)	IPA Thermally degraded by incineration

Mass balance is based on "Mixture in Dip Tanks" equals 1.00

(3) Mixture in Dip Tanks 1.00

Basic Formula in Mixture (Lab Analysis) .49

Solvent in Mixture .51

Solids in Resin equals Solids in Mixture

Resin (as received)

Base formula 70%

Solvent 30%

(2) Base Formula in Resin .49

Solvent in Resin $\frac{.49 \times .30}{.70}$.21

Resin (total) .70

Solvent added to Resin .51 - .21 = .30

Solvent evaporated (Dip Tanks Purge Boxes & Cure Ovens): (4) + (6) + (8)

$$(4) + (6) + (8) = (3) - (9)$$

$$1.00 - .49 = .51$$

$$(4): 60\% \text{ of total solvent evaporated} = .306$$

$$(6): 30\% \text{ of total solvent evaporated} = .153$$

$$(8): 10\% \text{ of total solvent evaporated} = .051$$

Mixture in blocks after dipping = mixture in dip tanks minus evaporation from dip tanks.

$$(5) = (3) - (4)$$

$$(5) = 1.00 - .306 = .694$$

Mixture in blocks after purging = mixture in blocks after dipping minus evaporation during purging.

$$(7) = (5) - (6)$$

$$(7) = .694 - .153 = .541$$

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
BASE FORMULA	-	.490	.490	-	.490	-	.490	-	-	-	-	-	-	-
SOLIDS	-	-	-	-	-	-	-	-	.357	.003	<.001	<.001	-	-
IPA	.300	.210	.510	.306	.204	.153	.051	.051	-	-	-	-	.002	.436
PHENOL	-	-	-	-	-	-	-	.036	-	-	-	-	-	-
FORMALDEHYDE	-	-	-	-	-	-	-	.005	-	-	-	-	-	-
WATER	-	-	-	-	-	-	-	.077	-	-	-	-	-	-
TOTAL	.300	.700	1.000	.306	.694	.153	.541	.184	.357	.003	<.001	<.001	.002	.436

THE FOLLOWING TABLE IS BASED ON 200 LBS./HR. ACTUAL VOC USAGE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
BASE FORMULA	-	174	174	-	174	-	174	-	-	-	-	-	-	-
SOLIDS	-	-	-	-	-	-	-	-	123	1.2	.9	.3	-	-
IPA	105	74.	179	107	72	54	18	18	-	-	-	-	7.6	14.
								6						
PHENOL	-	-	-	-	-	-	-	13	-	-	-	-	-	-
FORMALDEHYDE	-	-	-	-	-	-	-	1.7	-	-	-	-	-	-
WATER	-	-	-	-	-	-	-	30	-	-	-	-	-	-
TOTAL	105	248	353	107	246	54	192	68.7	123	1.2	.9	.3	7.6	14.

VOC EMISSION: BEFORE CONTROL 200 lbs/Hr.
 AFTER CONTROL PHASE 1 128 lbs/Hr.
 AFTER CONTROL PHASE 2 56 lbs/Hr.

ATTACHMENT 2



Interoffice Memorandum

FOR ROUTING TO OTHER THAN THE ADDRESSEE

To: _____ LOCTN: _____
To: _____ LOCTN: _____
To: _____ LOCTN: _____
FROM: _____ DATE: _____

TO: Marshall Matt Smith
FROM: Stephanie S. Brooks *SB for SB*
DATE: October 15, 1985
SUBJECT: Request for Variance
File No. VE-13-230
Ciba Geigy Corporation

RECEIVED
OCT 21 1985

DIVISION OF
ENVIRONMENTAL PERMITTING

Ciba Geigy's construction permit application is incomplete. To be complete it needs:

- 1) Exhibit N (not included in my copy) referenced on page 5 of the application.
- 2) To provide basis for efficiency (note 95% destruction efficiency for incinerator and 95% capture efficiency should be demonstrated by calculation &/or testing) and what overall efficiency is expected to be ($.95 \times .95 = .9025$ not $.95$).
- 3) Is the application for 2 identical dip/purge machines?
- 4) On process flow diagram the dust collector is a baghouse not an ESP as stated.

The construction permit should include:

- 1) The ability for both units to operate at full capacity with emissions controlled by LAER.
- 2) The single permit should require 2 tests for compliance.
1st test - 1 unit operating and tested for capture and destruction efficiency.
2nd test - both units operating and tested for capture and destruction efficiency.
- 3) Capture efficiency should be determined by mass balance.
- 4) Test protocol must be approved prior to the test.

Page 2
October 15, 1985

construction permit should include: (cont.)

- 5) Monitors for the temperature of the catalyst bed.
- 6) Pressure drop should be indicated for each dip tank
and for each purge area to demonstrate the negative air.

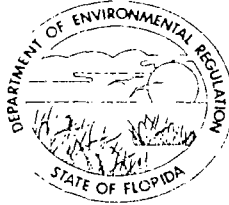
Also the construction permit should be issued before the variance
or simultaneously with the variance.

SSB/jms

ATTACHMENT 3

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

October 23, 1985

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Doug Buchanan
Plant Manager
CIBA-GEIGY Corporation
3550 N.W. 49th Street
Miami, Florida 33142

Dear Mr. Buchanan:

Re: Completeness Review for Application to Construct
Air Pollution Sources - Permit No. AC 13-109080

The department has received the above referenced application package to construct two dip and purge processes at your existing facility. The application has been reviewed and deemed incomplete and the following information will have to be submitted to the bureau before the status can again be ascertained:

1. Remit to the Department of Environmental Regulation the amount of \$1000, which is the processing fee for a construction permit pursuant to FAC Rule 17-4.
2. Is the application for two (2) identical dip/purge processing units?
3. Provide the basis for the overall efficiency for the collection and destruction of VOC (volatile organic compounds).
4. Submit Exhibit N, which was not attached and is referenced on page 5 of the application.

Mr. Doug Buchanan
Page Two
October 23, 1985

If there are any questions, please call Bruce Mitchell at
(904)488-1344 or write to me at the above address.

Sincerely,

Willard Hankins
for C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/BM/s

cc: Lawrence N. Curtin
Stephanie S. Brooks
Patrick Wong
Gary Early

ATTACHMENT 4

Composite Materials Department
Miami Plant

CIBA-GEIGY Corporation
3550 N.W. 49th Street
Miami, Florida 33142
Telephone 305 633 9066

CIBA-GEIGY

November 14, 1985

Dept. of Environmental Regulations
Bureau of Air Quality Management
Bruce Mitchell
2600 Blair Stone Road
Tallahassee, FL 32301-8241

Dear Mr. Mitchell:

Please find enclosed the VOC Material Balance after
the installation of the Emission Control.

Sincerely,



A. Mazpule
Sr. Project Engineer

AM/cln

Enclosure

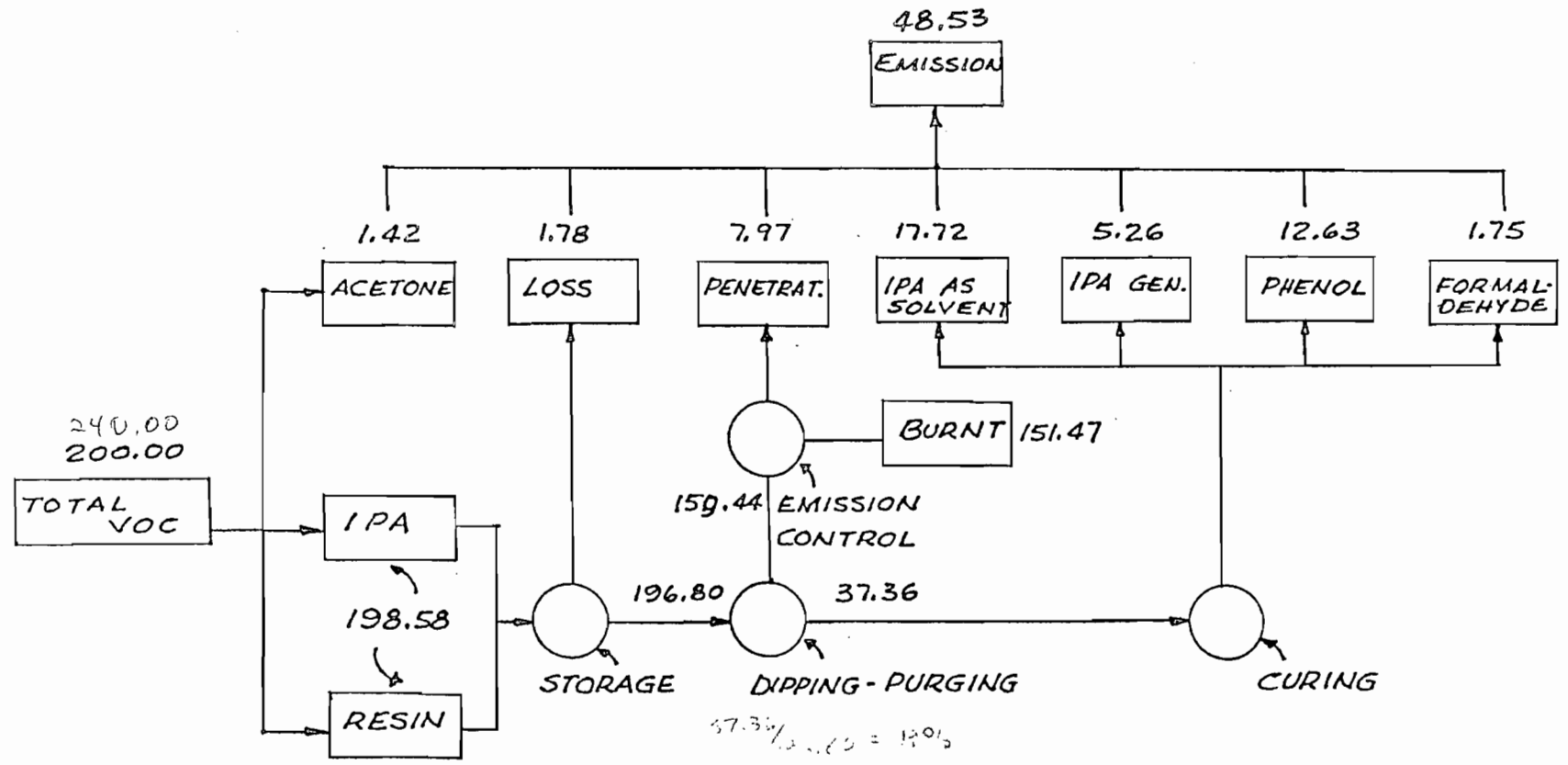
cc. Stephanie Brooks }
Pat Wong / Art Bellman } 11-19-85 AM

DER

NOV 15 1985

BAQM

VOC MATERIAL BALANCE [Lbs/HR.]



ATTACHMENT 5

Composite Materials Department
Miami Plant

CIBA-GEIGY Corporation
3550 N.W. 49th Street
Miami, Florida 33142
Telephone 305 633 9066

CIBA-GEIGY

November 20, 1985

Mr. Bruce Mitchell
Dept. of Environmental Regulations
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, FL 32301-8241

RE: OPERATING CRITERIA

Dear Mr. Mitchell:

The proposed project consists of two dipping-purging machines operating 8000 hours a year each one; and a common incinerator designed to operate with one or both machines.

The average total VOC consumption will be 250 lbs. per hour.

Please find enclosed the revised "VOC Material Balance".

If you have any further questions please feel free to call me.

Sincerely,



Antonio Mazpule
Sr. Project Engineer

AM/on

enclosure

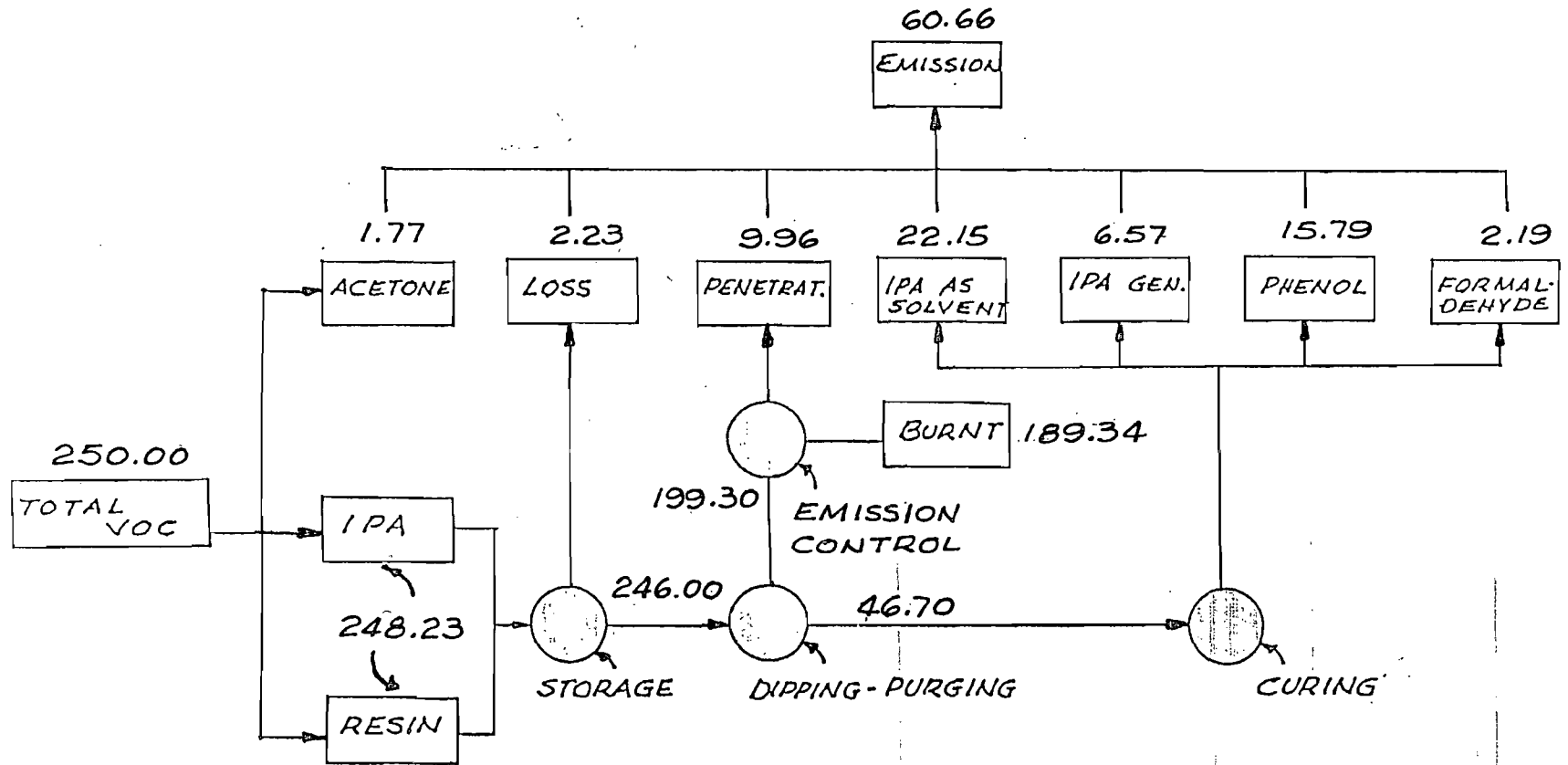
cc: Stephanie Brooks
Pat Wong

11/25/85 ean

DER
NOV 21 1985
BAQM

REVISION No 1
11-20-85

VOC MATERIAL BALANCE [Lbs/HR.]



DER

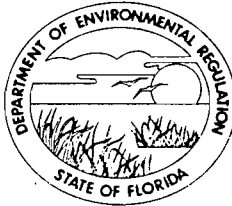
NOV 21 1985

BAQM

Bruce

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

July 1, 1985

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Douglas B. Buchanan
Site Manager
Ciba-Geigy Corporation
3550 N.W. 49th Street
Miami, Florida 33142

Dear Mr. Buchanan:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permit to authorize an increase of VOC usage at your facility in Miami, Dade County, Florida.

Before final action can be taken on your draft permit, you are required by Florida Administrative Code Rule 17-103.150 to publish the attached Notice of Proposed Agency Action in the legal advertising section of a newspaper of general circulation in Dade County no later than fourteen days after receipt of this letter. The department must be provided with proof of publication within seven days of the date the notice is published. Failure to publish the notice may be grounds for denial of the permit.

Please submit, in writing, any comments which you wish to have considered concerning the department's proposed action to Mr. Bill Thomas of the Bureau of Air Quality Management.

Sincerely,

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/pa

Attachments

cc: Antonio P. Mazpule, P.E.
Art Bolivar
Tom Tittle

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of an)
Application for Permit by:)
)
Ciba-Geigy Coporation) DER File No. AC 13-104266
3550 NW 49th Street)
Miami, Florida 33142)

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its Intent to Issue, and proposed order of issuance for, a permit pursuant to Chapter 403, Florida Statutes, for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Ciba-Geigy Corporation, applied on May 17, 1985, to the Department of Environmental Regulation for a permit to increase VOC usage by 39.9 tons per year at their existing facility in Miami, Dade County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The applicant was officially notified by the Department that an air construction permit was required for the proposed work.

This intent to issue shall be placed before the Secretary for final action unless an appropriate petition for a hearing pursuant to the provisions of Section 120.57, Florida Statutes, is filed within fourteen (14) days from receipt of this letter or

publication of the public notice (copy attached) required pursuant to Rule 17-103.150, Florida Administrative Code, whichever occurs first. The petition must comply with the requirements of Section 17-103.155 and Rule 28-5.201, Florida Administrative Code (copy attached) and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32301.


Petitions which are not filed in accordance with the above provisions are subject to dismissal by the Department. In the event a formal hearing is conducted pursuant to Section 120.57(1), all parties shall have an opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination of witnesses and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exceptions to any order or hearing officer's recommended order, and to be represented by counsel. If an informal hearing is requested, the agency, in accordance with its rules of procedure, will provide affected persons or parties or their counsel an opportunity, at a convenient time and place, to present to the agency or hearing officer, written or oral evidence in opposition to the agency's action or refusal to act, or a written statement challenging the grounds upon which the agency has chosen to justify its action or inaction, pursuant to Section 120.57(2), Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition, may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of

Administrative Hearings, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

Executed the 2 day of July, 1985, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

Copies furnished to:

Douglas B. Buchanan
Site Manager
Ciba-Geigy Corporation
3550 N.W. 49th Street
Miami, Florida 33142

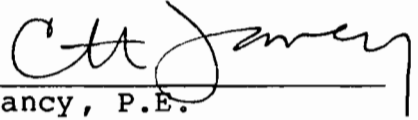
Antonio P. Mazpule, P.E.
Ciba-Geigy Corporation
3550 N.W. 49th Street
Miami, Florida 33142

Art Bolivar
Dade County Dept. of Environmental
Resources Management
909 Southeast 1st Ave., Brickell Plaza
Miami, Florida 33131

Tom Tittle
Dept. of Environmental Regulation
Southeast Florida District
3301 Gun Club Road
West Palm Beach, Florida 33402

CERTIFICATION

This is to certify that the foregoing Intent to Issue and all copies were mailed before the close of business on 2 July, 1985.



C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management
2600 Blair Stone Road
Tallahassee, Florida 32301

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

Patricia G. Adams July 2, 1985
Clerk Date

Technical Evaluation
and
Preliminary Determination

CIBA-GEIGY Corporation
Dade County
Miami, Florida

Permit Number:
AC 13-104266

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

June 28, 1985

State of Florida
Department of Environmental Regulation
Notice of Proposed Agency Action
on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a permit to Ciba-Geigy Corporation to authorize an increase of usage of volatile organic compounds by 39.9 tons per year at their existing facility located at 3550 Northwest 49th Street, Miami, Dade County, Florida. A determination of best available control technology (BACT) was not required.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period constitutes a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

The application 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:

Dept. of Environmental Regulation
Southeast Florida District
3301 Gun Club Road
West Palm Beach, Florida 33402

Dade County Department of Environmental Resources Management
909 Southeast 1st Avenue
Brickell Plaza
Miami, Florida 33131

Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

RULES OF THE ADMINISTRATIVE COMMISSION
MODEL RULES OF PROCEDURE
CHAPTER 28-5
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

- (1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.
- (2) All petitions filed under these rules should contain:
 - (a) The name and address of each agency affected and each agency's file or identification number, if known;
 - (b) The name and address of the petitioner or petitioners;
 - (c) All disputed issues of material fact. If there are none, the petition must so indicate;
 - (d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;
 - (e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;
 - (f) A demand for the relief to which the petitioner deems himself entitled; and
 - (g) Such other information which the petitioner contends is material.

I. PROJECT DESCRIPTION

A. Applicant

CIBA-GEIGY Corporation
3550 Northwest 49th Street
Miami, Florida 33142

B. Project and Location

At its existing facility, the applicant is requesting an increase in the usage of volatile organic compounds (VOC). It is assumed that all of the VOC emissions are exhausted into the atmosphere because there is no VOC control system associated with the dip room exhaust system and the curing ovens.

This increase in VOC usage will also increase the annual production throughput in the curing ovens. Consequently, there will be a slight increase in particulate matter (PM) emissions (0.28 TPY).

The existing facility is located at the above address in Dade County. The UTM coordinates are Zone 17, 575.307 km East and 2856.387 km North.

The source classification code for the processes involved is 4-02-007-06.

C. Process and Controls

At this facility, a Nomex or fiberglass material is bonded, dipped in a resin coating bath, purged with air, dried in a curing oven, and then cut and shaped according to specifications. Approximately 90% of the emissions of VOC are purged from the material prior to entering a curing oven. Acetone, a VOC, is used for house cleaning.

In-house preventive maintenance procedures, such as completely sealing the resin dip tanks with floating tank covers when not in use, will be utilized to minimize the emissions of VOC. The emissions of VOC will be accounted for by a material balance, which is an inventory balance. Since this facility has no VOC reclamation control devices at this time, the amount of VOC emitted into the atmosphere will be the difference between the beginning inventory, plus what has been delivered, and the ending inventory. Therefore, monthly logs shall be maintained and a quarterly report shall be compiled and submitted to the Dade County Environmental Resources Management (DERM) office and the DER's Southeast Florida District office.

II. RULE APPLICABILITY

The proposed modification is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4.

The application to modify the existing facility was complete May 30, 1985.

The existing facility is located in Dade County, which is an area designated nonattainment for the pollutant ozone in accordance with FAC Rule 17-2.410(1)(d). Volatile organic compounds are precursors to ozone.

The existing facility is a major emitting facility for VOC in accordance with FAC Rule 17-2.100(98). The permitted allowable VOC emissions are 311.5 tons per year (TPY).

The applicant is requesting an increase of 39.9 TPY of VOC, which is a minor modification and less than the significant emission rate of 40 TPY VOC pursuant to Table 500-2. Consequently, the emissions are not subject to preconstruction review requirements of FAC Rule 17-2.510(4) in accordance with FAC Rule 17-2.510(2)(d)4.a. Therefore, the emissions shall be reviewed pursuant to FAC Rule 17-2.520, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements.

Since there are no NSPS, NESHAP, nor any applicable emission limiting standard in FAC Rules 17-2.600 and 17-2.650(1), the proposed modification shall be permitted in accordance with FAC Rules 17-2.610, General Particulate Emission Limiting Standards, and 17-2.620, General Pollutant Emission Limiting Standards.

Using the process weight equation and the total phenolic resin input rate of 195 pounds per hour (lb/hr), equivalent to 0.10 tons per hour, the total allowable emission rate for particulate matter (PM) calculates to be 0.9 lb/hr and 2.03 TPY (at 4512 hr/yr operation) in accordance with 17-2.610(1). Per curing oven, the maximum allowable emission rates for PM are 0.30 lb/hr and 0.68 TPY. This represents a total increase of PM of 0.23 TPY from the permitted allowable emission limit.

According to 17-2.610(2)(a), no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere any air pollutants from new, or existing sources, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart the opacity of which is equal to or greater than 20 percent.

According to 17-2.620(1)(a), 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. At present, only in-house preventive maintenance procedures and crew efficiency will be utilized and deemed necessary to keep VOC emissions minimized.

Proposed and acceptable in-house preventive maintenance procedures shall include, but not be limited to: 1) seal the resin-dip tanks with floating-tank covers when the process is not being used; 2) keep lids and caps on all VOC containers when not being used; 3) maintain a monthly accounting of the volatile organic compounds per type such that the beginning inventory and deliveries are accounted for; and, 4) a quarterly report, compiled from #4, is to be submitted to the DER's Southeast Florida District office and Dade County's Department of Environmental Resources Management office no later than 15 days after the closing date of each quarter.

According to 17-2.620(2), 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 according to 17-2.100(108). Therefore, objectionable odors shall not be allowed off plant property.

Compliance testing shall be in accordance with FAC Rule 17-2.700. For PM mass emissions compliance testing, the compliance test method shall be DER Method 5. For visible emissions compliance testing, the compliance test method shall be DER Method 9.

III. SUMMARY OF EMISSIONS AND AIR QUALITY ANALYSIS

A. Emission Limitations

The regulated pollutant emissions from the requested modification are VOC and PM. The following table reflects the maximum allowable emissions, including the modifications, from the facility in TPY.

Source Facility	Pollutant	Maximum Allowable Emissions (TPY)
	VOC	
	IPA	330.2
	Acetone	3.9
	Phenol	15.6
	Formaldehyde	1.7
	TOTAL:	351.4
Curing Ovens	PM	2.03
	VE	less than 20% opacity

NOTE: °The 330.2 TPY of IPA reflects a 38.2 TPY increase.

°The 15.5 TPY of phenol reflectss a 1.7 TPY increase.

°The 2.03 TPY of PM reflects a 0.23 TPY increase.

The permitted emissions are in compliance with all applicable requirements of FAC Rules 17-2 and 17-4.

B. Air Quality Analysis

From a technical review of the application, an air quality analysis was not required for the proposed modification.

IV. CONCLUSIONS

The emission limits proposed by the applicant are acceptable by the department. An inventory/material balance scheme, crew efficiency, and in-house preventive maintenance procedures proposed by the applicant should be adequate to assess the actual emissions of VOC and to keep the emissions of VOC at a minimum. However, if the proposed in-house preventive maintenance procedures are not adhered to, a review as to what the department deems necessary to minimize the emissions of VOC may be in order and shall be initiated by the DER's Southeast Florida District office and the Dade County Department of Environmental Resources Management office.

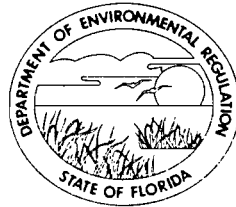
The baghouse control system associated with the curing ovens should be capable of continued compliance with the PM mass emission limit and the visible emission limit.

The permitted emissions from the proposed modification should not cause any violation of Florida's ambient air quality standards.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all applicable requirements of FAC Rules 17-2 and 17-4.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
CIBA-GEIGY Corporation
3550 NW 49th Street
Miami, Florida 33142

Permit Number: AC 13-104266
Expiration Date: December 31, 1985
County: Dade
Latitude/Longitude: 25° 49' 25" N/
80° 15' 16" W
Project: Modification to increase
VOC usage by 39.9 TPY

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

The proposed modification is to increase the usage of volatile organic compounds by 39.9 TPY. The UTM coordinates are Zone 17, 575.307 km East and 2856.387 km North.

The modification shall be in accordance with the attached permit application except as otherwise noted on pages 5-6 of the Specific Conditions.

Attachments are as follows:

1. Application to Construct/Modify an Air Pollution Source, DER Form 17-1.202(1), received May 17, 1985, from Mr. Douglas B. Buchanan.
2. Doug Buchanan's letter with attachment dated May 29, 1985.
3. Construction Permit No. AC 13-65839, issued January 6, 1984.

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-104266
Expiration Date: December 31, 1985

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

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), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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 does not constitute 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 the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement 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, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, 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.

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-104266
Expiration Date: December 31, 1985

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or 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 or 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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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 notify and provide the department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact 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.

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC 13-104266
Expiration Date: December 31, 1985

GENERAL CONDITIONS:

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 revocation of this permit.

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 arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

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 Florida Administrative Code Rules 17-4.12 and 17-30.30, 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 is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD).
- () Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC13-104266
Expiration Date: December 31, 1985

GENERAL CONDITIONS:

- b. The permittee shall retain 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 instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - 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 that 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 submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. This permit does not replace any existing permits.
2. Maximum allowable increase of VOC (volatile organic compounds) usage shall not exceed 39.9 TPY above the existing permitted levels. The 39.9 TPY VOC increase is based on increases of 38.2 TPY of isopropyl alcohol and 1.7 TPY of phenol.
3. All VOC operating, maintenance, accounting, compliance and reporting procedures contained in construction permit No. AC 13-65839, issued January 6, 1984, shall apply to this modification/construction permit.

PERMITTEE:
CIBA-GEIGY Corporation

Permit Number: AC13-104266
Expiration Date: December 31, 1985

SPECIFIC CONDITIONS:

4. Particulate matter shall not exceed 0.3 lb/hr/curing oven and shall not exceed a total of 2.03 TPY from all curing ovens.
5. The visible emissions limit from the curing ovens shall be less than 20 percent opacity.
6. For particulate matter and visible emissions, compliance testing and reporting shall be as that required in the construction permit No. AC 13-65839.
7. Maximum hours of VOC related activities shall not exceed 4512 hours per year.
8. Objectionable odors shall not be allowed off plant property.
9. Prior to 90 days before the expiration date of this permit a complete application for an operating permit and compliance test results, if retesting is required, shall be submitted to the DER's Southeast Florida District office or its designee. Full operation of the sources may then be conducted in compliance with the terms of this permit until its expiration date or receipt of an operating permit.

Issued this _____ day of _____,
19____.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

VICTORIA J. TSCHINKEL, Secretary

_____ pages attached.

ATTACHMENT 1

BEST AVAILABLE COPY

CIBA-GEIGY

Composite Materials Department
Miami Plant

CIBA-GEIGY Corporation
3550 N.W. 49th Street
Miami, Florida 33142
Telephone 305 633 9066

May 16, 1985

Mr. Bruce Mitchell
Dept. of Environmental Regulations
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, FL 32301-8241

DER

MAY 17 1985

BAQM

Dear Mr. Mitchell:

Enclosed please find the completed application forms and the check
for the amount of \$250.00

Sincerely,

D. Buchanan

Douglas B. Buchanan
Site Manager

DBB/on

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



DER

BOB GRAHAM
GOVERNOR

MAY 17 1985

VICTORIA J. TSCHINKEL
SECRETARY

BAOM

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Stationary New¹ Existing¹

APPLICATION TYPE: Construction Operation Modification

COMPANY NAME: CIBA-GEIGY Corporation COUNTY: Dade

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

SOURCE LOCATION: Street 3550 N.W. 49th Street City Miami

UTM: East 575307 North 2856387

Latitude 25 ° 49 ' 05 "N Longitude 80 ° 15 ' 16 "W

APPLICANT NAME AND TITLE: Douglas B. Buchanan, Site Manager

APPLICANT ADDRESS: 3550 N.W. 49th Street, Miami, FL 33142

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of CIBA-GEIGY Corporation

I certify that the statements made in this application for a modification permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: *Douglas B. Buchanan*
Douglas B. Buchanan, Site Manager
Name and Title (Please Type)

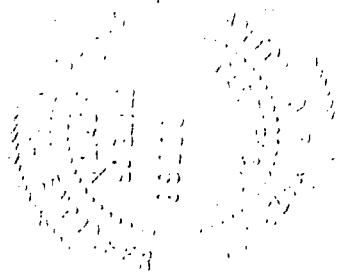
Date: 05/16/85 Telephone No. (305)633-9066

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

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

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.



Signed Antonio P. Mazpule

Antonio P. Mazpule
Name (Please Type)

CIBA-GEIGY Corporation
Company Name (Please Type)

3550 N.W. 49th Street, Miami, FL 33142
Mailing Address (Please Type)

Florida Registration No. PE0023368 Date: 5-16-85 Telephone No. (305)633-9066

SECTION II: GENERAL PROJECT INFORMATION

- A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

This request is for an additional 39.9 tons of IPA required for increased demand for production.

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

Start of Construction N/A Completion of Construction N/A

- C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

N/A

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

AC 13-65839, Dade County 25° 49' 05" N, 80° 15' 16" W

Expires May 31, 1985: Operating permit being processed.

E. Requested permitted equipment operating time: hrs/day 20 ; days/wk 6 ; wks/yr 51 ;
if power plant, hrs/yr - ; if seasonal, describe: Operating times vary, plant is
down for periodic maintenance and overtime is used for increase in demand
for product.

F. If this is a new source or major modification, answer the following questions.
(Yes or No)

- | | |
|---|-----------|
| 1. Is this source in a non-attainment area for a particular pollutant? | <u>No</u> |
| a. If yes, has "offset" been applied? | <u>"</u> |
| b. If yes, has "Lowest Achievable Emission Rate" been applied? | <u>"</u> |
| c. If yes, list non-attainment pollutants. _____ | <u>"</u> |
| 2. Does best available control technology (BACT) apply to this source?
If yes, see Section VI. | <u>"</u> |
| 3. Does the State "Prevention of Significant Deterioration" (PSD)
requirement apply to this source? If yes, see Sections VI and VII. | <u>"</u> |
| 4. Do "Standards of Performance for New Stationary Sources" (NSPS)
apply to this source? | <u>"</u> |
| 5. Do "National Emission Standards for Hazardous Air Pollutants"
(NESHAP) apply to this source? | <u>"</u> |
| H. Do "Reasonably Available Control Technology" (RACT) requirements apply
to this source? | <u>"</u> |
| a. If yes, for what pollutants? _____ | |
| b. If yes, in addition to the information required in this form,
any information requested in Rule 17-2.650 must be submitted. | |

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

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

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

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Nomex & Fiberglass	-	-	114	
Isopropyl Alcohol	-	-	84	
Phenolic Resin	-	-	195	

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

1. Total Process Input Rate (lbs/hr): 393
2. Product Weight (lbs/hr): 245

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

Name of Contaminant	Emission ¹		Allowed Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
Particulates	.52*	1.04		.90	.9	1.8	
VOC	155.8**	311.5		311.5**	155.8	311.5	

* As per compliance tests

¹See Section V, Item 2. ** As per construction permit AC 13-65839

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

³Calculated from operating rate and applicable standard.

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

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Dust Collectors		99.9%		
Torit Model No.		at .1 Micron	Down	Mfg.
9200-255			1 Micron	Lab
Serial No. BB 8651 BB 8644 BB 8652	Particulate Matter			Test

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Natural Gas	.00252	-	2.70

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

Fuel Analysis:

Percent Sulfur: None Percent Ash: ----
 Density: ---- lbs/gal Typical Percent Nitrogen: ----
 Heat Capacity: 1070 BTU/CF ----- BTU/gal
 Other Fuel Contaminants (which may cause air pollution): -----

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

Annual Average None Maximum ----

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

Particulate matter collected in plastic bags and placed in trash container
 for pick up.

Brief description of operating characteristics of control devices: _____

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

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

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.
10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

Yes No

Contaminant	Rate or Concentration
_____	_____
_____	_____
_____	_____

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

Yes No

Contaminant	Rate or Concentration
_____	_____
_____	_____
_____	_____

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

Contaminant	Rate or Concentration
_____	_____
_____	_____
_____	_____

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

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

*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

10. Stack Parameters

- a. Height: ft.
- b. Diameter: ft.
- c. Flow Rate: ACFM
- d. Temperature: °F.
- e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:

¹Explain method of determining efficiency.

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

j. Applicability to manufacturing processes:

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

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:²

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

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

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:²

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

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

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:¹

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:²

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

¹Explain method of determining efficiency.

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

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

(8) Process Rate:¹

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

(8) Process Rate:¹

10. Reason for selection and description of systems:

¹Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ () SO₂* _____ Wind spd/dir

Period of Monitoring _____ / _____ / _____ to _____ / _____ / _____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

2. Instrumentation, Field and Laboratory

- a. Was instrumentation EPA referenced or its equivalent? [] Yes [] No
- b. Was instrumentation calibrated in accordance with Department procedures?
[] Yes [] No [] Unknown

B. Meteorological Data Used for Air Quality Modeling

- 1. _____ Year(s) of data from _____ / _____ / _____ to _____ / _____ / _____
month day year month day year
- 2. Surface data obtained from (location) _____
- 3. Upper air (mixing height) data obtained from (location) _____
- 4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

- 1. _____ Modified? If yes, attach description.
- 2. _____ Modified? If yes, attach description.
- 3. _____ Modified? If yes, attach description.
- 4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

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

E. Emission Data Used in Modeling

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

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

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

August 16, 1982

I hereby certify that Mr. Douglas Buchanan is the authorized representative of CIBA-GEIGY Corporation at the Miami Site.

JS:rd



Jack Schneller
President
Plastics & Additives Division
CIBA-GEIGY Corporation

ATTACHMENT 2

Composite Materials Department
Miami Plant

CIBA-GEIGY Corporation
3550 N.W. 49th Street
Miami, Florida 33142
Telephone 305 633 9066

CIBA-GEIGY

May 29, 1985

Bureau of Air Quality Management
Dept. of Environmental Regulations
Attn: Bruce Mitchell
2600 Blair Stone Road
Tallahassee, FL 32301-8241

Dear Mr. Mitchell:

Enclosed are pages Nos. 3 & 4 from 12 of our construction permit applications. They have been corrected to reflect the proportional changes of raw materials, contaminants and hours per year associated with the requested 39.9 TPY allowance.

Sincerely,



Doug Buchanan
Site Manager

DB/TM/on

DER

MAY 30 1985

BAQM

E. Requested permitted equipment operating time: hrs/day 15 ; days/wk 6 ; wks/yr 50 ;
 if power plant, hrs/yr ; if seasonal, describe: Operating times vary, plant
is down for periodic maintenance and overtime is used for increases in
demand for product. The operating time above is our best estimate for
512 hours/year Increase associated with the 39.9 TYP of VOC requested

F. If this is a new source or major modification, answer the following questions.
 (Yes or No)

- | | |
|---|-------------------|
| 1. Is this source in a non-attainment area for a particular pollutant? | <u>Yes, ozone</u> |
| a. If yes, has "offset" been applied? | <u>No</u> |
| b. If yes, has "Lowest Achievable Emission Rate" been applied? | <u>No</u> |
| c. If yes, list non-attainment pollutants. | <u>VOC</u> |
| 2. Does best available control technology (BACT) apply to this source?
If yes, see Section VI. | <u>No</u> |
| 3. Does the State "Prevention of Significant Deterioration" (PSD)
requirement apply to this source? If yes, see Sections VI and VII. | <u>No</u> |
| 4. Do "Standards of Performance for New Stationary Sources" (NSPS)
apply to this source? | <u>No</u> |
| 5. Do "National Emission Standards for Hazardous Air Pollutants"
(NESHAP) apply to this source? | <u>No</u> |
| H. Do "Reasonably Available Control Technology" (RACT) requirements apply
to this source? | <u>No</u> |
| a. If yes, for what pollutants? | <u>No</u> |
| b. If yes, in addition to the information required in this form,
any information requested in Rule 17-2.650 must be submitted. | |

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

DER
 MAY 30 1985
 BAQM

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

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

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Nomex - F/G	-	-	114	
IPA	-	-	84	(1)
Resin	-	-	195	(2)
Acetone	-	-	1.97	

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

- Total Process Input Rate (lbs/hr): 393
- Product Weight (lbs/hr): 245

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

Name of Contaminant	Emission ¹ **		Allowed ² Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr**	
Partic. Mtr.	.9	* 2.03 1.01	-	.9*	.9	1.01	(11) (10) (12)
IPA	146	330.2	-	(Total for three ovens)	146	330.2	(4) (6) (8)
Phenol	6.96	115.6	-	-	6.96	115.6	(8)
Formaldehyde	.84	1.7	-	-	.84	1.7	(8)
Acetone	1.97	3.9	-	-	1.97	3.9	

¹See Section V, Item 2.

* As per construction permit AC 13-65839

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

³Calculated from operating rate and applicable standard.

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

**The hours per year have been proportionally increased to reflect the 39.9 TPY of VOC requested: $\frac{311.5 + 39.9}{311.5} \times 4000 = 4512 \text{ HRS/YR}$

* PM $4512 \times .9 \div 2000 = 2.03 \text{ TPY}$

ATTACHMENT 3

Available Upon Request.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

November 8, 1984

Mr. Doug Buchanan
Site Manager
Ciba-Geigy Corporation
3550 Northwest 49th Street
Miami, Florida 33142

Mr. Robert A. Naidus
Ciba-Geigy Corporation
Legal Department
Sawmill River Road
Ardsley, New York
10502

Dear Mr. Buchanan:

Re: Expiration Date Extension for the Construction Permit,
AC 13-65839

The Department is in receipt of your letter dated October 31, 1984, which requested an extension of your expiration date for the above referenced permit. The bureau is in agreement with the request and the following shall be changed and added:

Expiration Date:

From: December 31, 1984
To: May 31, 1985

Attachment to be Incorporated:

14. Doug Buchanan's letter dated October 31, 1984.

This letter must be attached to your construction permit, No. AC 13-65839, and shall become a part of that permit.

Sincerely,


Victoria J. Tschinkel
Secretary

VJT/ks

enclosure

cc: Tom Tittle
A. Bolivar
R. Naidus
D. Thompson

ATTACHMENT 14

Composite Materials Department
Miami Plant

CIBA-GEIGY Corporation
3550 N.W. 49th Street
Miami, Florida 33142
Telephone 305 633 9066

CIBA-GEIGY

October 31, 1984

Mr. Claire Fancy
Bureau of Air Quality Management
State of Florida
Dept. of Environmental Regulation
2600 Blair Stone Rd.
Twin Towers Office Building
Tallahassee, FL 32301

DER

NOV 01 1984

BAQM

Dear Mr. Fancy:

As a result of our last meeting with Mr. Tom Tittle, we agreed on his recommendation to postpone the compliance test until oven #1 relocation and overhaul are completed.

We have estimated that the test can be conducted no later than March 15, 1985, therefore we are asking for a permit extension until May 31, 1985. (This includes two weeks to get the test results and sixty days to apply for the operating permit after the March 15, 1985 date).

A performance evaluation of oven #1 must be made prior to its relocation. The results will be used to improve the ovens.

Temporary repair on minor leaks are being made to keep the oven operational.

The oven will be then relocated, repaired and tested. Should the oven be ready before the date requested for the compliance test, we would re-schedule it to an earlier date.

Sincerely,



Doug Buchanan
Site Manager

DB/ok

cc: Bruce Mitchell
Tom Tittle
Arturo Bolivar
Robert Naidus

021-B-010

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

January 6, 1984

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

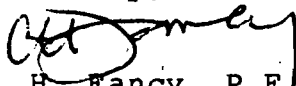
Mr. Doug Buchanan
Site Manager
Ciba-Geigy Corporation
3550 N.W. 49th Street
Miami, Florida 33142

Dear Mr. Buchanan:

Enclosed is Permit Number AC 13-65839, dated January 6, 1984, to Ciba-Geigy Corporation, issued pursuant to Section 403, Florida Statutes.

Acceptance of this permit constitutes notice and agreement that the department will periodically review this permit for compliance, including site inspections where applicable, and may initiate enforcement actions for violation of the conditions and requirements thereof.

Sincerely,


C. H. Fancy, P.E.
Deputy Bureau Chief
Bureau of Air Quality
Management

CHF/bjm

Enclosure

cc: Antonio P. Mazpule, Ciba-Geigy Corporation
Paul H. Amundsen, Peeples, Earl, Reynolds & Blank
Roy Duke, DER Southeast Florida District
Rafael Rodon, Dade County Department of Environmental
Resources Management

FINAL DETERMINATION

Ciba-Geigy Corporation Dade County

The construction permit application has been reviewed by the bureau. Public notice of the department's intent to issue was published in The Miami Herald on November 25, 1983. The technical evaluation and preliminary determination were available for public inspection at the Dade County Department of Environmental Resources Management office, the DER's Southeast Florida District office, and the DER's Bureau of Air Quality Management office.

Comments were received from Mr. Doug Buchanan, who is with Ciba-Geigy Corporation, and the DER's Southeast Florida District office. Before addressing each of their comments, which will follow, it is appropriate to state that several meetings were held with the applicant prior to the public notice of the department's intent to issue and the drafting of the bureau's technical evaluation and preliminary determination. Even though some of the "Specific Conditions" are not specifically defined in the FAC Chapter 17-2, they were finalized by negotiations and in agreement with the attendees. Also, the bureau feels that the "Specific Conditions" in the proposed construction permit, No. AC 13-65839, are enforceable conditions and are at least as stringent as any applicable rule.

Comments received from Mr. Doug Buchanan:

Mr. Buchanan requests an increase of the annual usage of acetone, which is used for clean-up purposes, from 3.9 to 4.4 tons per year. The 4.4 tons per year was the average annual usage at the existing facility during the years 1980-1982. Since acetone, a volatile organic compound (VOC), is independent of the total VOC's used for production, the bureau agrees with the request and the following will be changed and added as follows:

Specific Condition:

3. Based on #1, the maximum allowable pollutant emissions are:

Source	Pollutant	Maximum Allowable Emissions	
		(lb/hr)	(TPY)
Facility	VOC		
	IPA		292.0
	Acetone		4.4
	Phenol		13.9
	Formaldehyde		1.7
No. 1 curing oven	PM	0.30	0.60
	VE	less than 20% opacity	
No. 2 curing oven	PM	0.30	0.60
	VE	less than 20% opacity	
No. 3 curing oven	PM	0.30	0.60
	VE	less than 20% opacity	

Note: VOC - volatile organic compounds; PM - particulate matter;
VE - visible emissions

Attachment to be incorporated is:

12. Mr. Doug Buchanan's letter dated December 15, 1983.

Comments received from the Southeast Florida District office:

To avoid restating each comment and since the comments were numbered, the comment (C) will be identified from the text (see attachment 13) and the bureau's response (R) will follow:

C.1.a:

R: It was decided in a meeting to incorporate the existing facility's emissions with their proposed modification/new construction application.

C.1.b.:

R: Since the particulate matter (PM) emissions are dependent on VOC related activities and the projected annual pollutant emissions are necessary for rule applicability, the 4000 annual hours of operation are pertinent. However, after PM mass emissions and visible emissions (VE) compliance tests have been conducted in accordance with Specific Condition No. 4, the applicant may apply to the bureau for an Alternate Standard and Procedure in accordance with FAC Rule 17-2.700(3). If approved, Specific Condition No. 1 can be deleted and Specific Condition No. 4 will have to be

modified. Also, Specific Condition No. 5 does require a quarterly VOC inventory and usage report.

C.1.c.:

R: Specific Condition No. 2 reflects the guidelines for in-house operations submitted and/or negotiated by the applicant and were incorporated into the Specific Conditions. However, the bureau agrees that too much judgment would be required of the field inspector and that Specific Condition No. 2.(a) and (d) will be deleted. Consequently, Specific Condition No. 2 shall read:

Specific Condition:

2. In-house preventive maintenance procedures shall include, but not be limited to:

- (a) seal each resin-dip tank with a floating-tank cover when the process is not being used;
- (b) keep lids and covers on all containers of VOC when not being used; and
- (c) maintain a monthly accounting of the VOC per type such that the beginning inventory and deliveries are accounted for.

C.2:

R: All allowable pollutant mass emissions are required to be compliance tested and in accordance with FAC Rule 17-2.700, which is what Specific Condition No. 4 requires. Also, Alternate Standards and Procedures has already been discussed in the Response to C.1.b. Finally, the applicant did not want to increase any actual pollutant emissions above the previous operating levels, thereby establishing pollutant baselines and allowing for future pollutant increases at the facility.

C.3:

R: The bureau agrees and Specific Condition No. 4 shall read:

Specific Condition:

4. Compliance tests shall be conducted on each of the baghouse systems associated with the Nos. 1-3 curing ovens and shall be DER Method 5 for PM and DER Method 9 for VE in accordance with FAC Rule 17-2.700. Compliance tests shall be conducted with the curing oven fully loaded with material being processed to achieve maximum potential pollutant emissions. The DER's Southeast Florida District office and Dade County's Department of Environmental Resources

Management office shall be notified in writing 10 working days prior to compliance testing and the compliance testing reports shall be submitted to the referenced agencies within 45 days after completion of the last compliance test run.

C.4:

R: At the request of the bureau, OSHA performed an inspection on Ciba-Geigy Corporation and did not report any health and/or welfare related violations. Since previous actions against the applicant were based on off-plant property complaints, the bureau feels that Specific Condition No. 6 is an enforcement tool and the object is to avoid spurring complaints from the local community.

C.5:

R: The applicant amended the application package with a letter and attachments to incorporate the baghouse systems as the control equipment for the curing ovens, Nos. 1-3. The documentation was discussed in a meeting prior to submittal.

Attachment to be incorporated is:

13. Southeast Florida District office's comments dated December 16, 1983.

It is recommended that the construction permit be issued as drafted, with the above revisions incorporated.

ATTACHMENT 12

COMPOSITE MATERIALS DEPARTMENT
FOUNTAIN VALLEY • MIAMI • LANSING

CIBA--GEIGY

DER
DEC 19 1983
BAQM

December 15, 1983

R. Bruce Mitchel
Bureau of Air Quality Management
State of Florida
Dept. of Environmental Regulation
2600 Blair Stone Rd.
Twin Towers Office Building
Tallahassee, Florida 32301

Dear Mr. Mitchel:

In one of our conferences we discussed and agreed to a reduction in hours of operation from 4433 hours to 4000 hours. We also agreed it would be appropriate to reduce the VOC's as they would be directly affected by hours of operation.

The actual use of acetone is for cleaning the printer, and other equipment. Use of this material is not directly related to hours of operation. We originally requested 4.4 tons per year and this was prorated down, with the other VOC's to 3.9 tons/year. We would request that this be increased to 4.4 tons/yr.

Sincerely yours,



Doug Buchanan

ATTACHMENT 13

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee		
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
From: _____	Date: _____	
Reply Optional []	Reply Required []	Info. Only []
Date Due: _____	Date Due: _____	

TO: Bill Thomas/Clair Fancy - BAQM
FROM: I. Goldman/Tom Tittle/John Guidry - SEFD
DATE: December 16, 1983
SUBJECT: Comments on Preliminary Determination - Ciba-Geigy
Construction Permit No. AC 13-65839

DER

DEC 22 1983

BAQM

1. As a matter of academic interest only:

a) Wouldn't a Consent Order have been a more appropriate way for Ciba-Geigy to get an operating permit, rather than through a construction permit.

b) Even though the applicant requested a restriction in operating hours to the number used in the previous 3 years (4000 hrs/year), is such restriction warranted or necessary? What is its purpose? If the intent is to restrict VOC emissions to previous levels, then the annual emissions limitations should be adequate, without limiting hours of operation. This can be verified by the annual operation report.

Rather than restrict to previous emission levels, it may be more appropriate to limit the facility to the actual capacity of the original 2 ovens (i.e. if only 1 oven could be operated at any given time, the capacity should reflect that situation). Although the design capacity has theoretically been increased threefold (separate controls being provided for each oven) this permit will restrict the facility to 0 Tons/hr increase. Does DER have the authority to restrict VOC emissions increase to an amount less than the VOC deminimus of 40 Tons/yr?

c) How can this office enforce Specific Condition 2(a), which requires Ciba-Geigy to minimize purging air after the resin-dip process? How does an inspector know when the air is at a minimum? Condition 2(d) likewise requires minimization of surface turbulence. When is turbulence at a minimum? These provisions are too vague to be enforceable.

2. Is particulate testing in accordance with EPA Method 5 economically justified when the estimated emission rate for particulates is so small? The emission limit of 0.3 lb/hr and 0.6 Tons/yr imposed by Specific Condition 3 requires a compliance test at least every 5 (five) years in accordance with Florida Administrative Code (F.A.C.) Rule 17-2.700(2)(a)3. It appears

MEMO

Page 2 of 2

December 16, 1983

that one test for each oven could be necessary to demonstrate the accuracy of the estimates, even though no test seems warranted. Besides, Method 5 should not be used for stack diameters less than 1 ft. (see 40 CFR 60, Appendix A, Method 1,1.2). On the basis of the dimensions for the dust collector blower outlet being estimated as 5" x 8" on the Torit Dust Collector drawings submitted, the outlet would have about half the specified minimum equivalent diameter. In addition, if the Department deems stack testing necessary, have provisions for sampling in accordance with F.A.C. Rule 17-2.700(4) been made for the Torit Dust Collector? Sketches showing proper provisions should have been requested when the Department realized that stack testing was deemed necessary.

There is no alternate method specified in the permit that could relieve the facility of doing Method 5 testing at least once every 5 years for each oven.

As with the comments on the VOC, what is the justification in the rules for setting an emission limit for particulates at a value less than de minimus (25 T/yr).

3. In accordance with Specific Condition 4, test reports shall be submitted 15 days after completion of the last test run. This is understood to mean within 15 days of the last test run, not exactly 15 days after the last test run. F.A.C. Rule 17-2.700(7)(b) allows within 45 days after the last test run. Why the shorter time?

4. Specific Condition 6 seems to allow objectionable odors on Ciba-Geigy property. F.A.C. Rule 17-2.620(2) generalizes to "no objectionable odor allowed". Is Specific Condition 6, as stated, DER present policy?

5. For the application to be properly updated, pages 2 and 3 on the application form should be modified to reflect the use of dust collectors, revised emission rates, and stack data for Units 1, 2 and 3.

IG: jh/12

[Handwritten mark]

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
Ciba-Geigy Corporation
3550 NW 49th Street
Miami, Florida 33142

Permit Number: AC 13-65839
Date of Issue:
Expiration Date: December 31, 1984
County: Dade
Latitude/Longitude: 25° 49' 25"N/
80° 15' 16"W
Project: Permit existing facility,
install No. 3 curing oven, and
install a baghouse system per curing
oven (Nos. 1, 2, and 3).

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

The project consists of permitting the existing facility for all pollutants not currently permitted, install a new No. 3 curing oven, and install a baghouse system on each curing oven, Nos. 1, 2, and 3. Natural gas is the exclusive fuel for the curing ovens. The UTM coordinates for the existing facility are Zone 17, 575.307 km East and 2856.387 km North.

Construction shall be in accordance with the attached permit application, plans, amendments, documents and drawings except as otherwise noted on pages 5 - 7 of the Specific Conditions.

Attachments are as follows:

1. Application to Construct an Air Pollution Source, DER Form 17-1.122(16).
2. Letter from Mr. Patrick Wong dated February 24, 1983.
3. Incompleteness letter from Mr. C. H. Fancy dated March 17, 1983.
4. Letter from Mr. Rafael Rodon dated April 11, 1983.
5. Letter from Mr. Paul H. Amundsen dated June 10, 1983.
6. Interoffice memorandum from Mr. Tom Tittle dated June 27, 1983.
7. Incompleteness letter from Mr. C. H. Fancy dated July 13, 1983.
8. Letter from Mr. Paul H. Amundsen dated August 10, 1983.
9. Letter from Mr. Doug Buchanan dated August 25, 1983.
10. Data submitted by Mr. Doug Buchanan dated October 7, 1983.
11. Letter from Mr. Doug Buchanan dated October 12, 1983.
12. Mr. Doug Buchanan's letter dated December 15, 1983.
13. SE Florida District office's comments dated Dec. 16, 1983.

PERMITTEE:
Ciba-Geigy Corporation

I. D. Number:
Permit Number: AC 13-65839
Date of Issue:
Expiration Date: December 31, 1984

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

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), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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 does not constitute 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 the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement 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, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, 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.

PERMITTEE:
Ciba-Geigy Corporation

I. D. Number:
Permit Number: AC 13-65839
Date of Issue:
Expiration Date: Dec. 31, 1984

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or 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 or 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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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 notify and provide the department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact 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.

PERMITTEE:
Ciba-Geigy Corporation

I. D. Number:
Permit Number: AC 13-65839
Date of Issue:
Expiration Date: Dec. 31, 1984

GENERAL CONDITIONS:

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 revocation of this permit.

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 arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

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 Florida Administrative Code Rules 17-4.12 and 17-30.30, 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 is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

PERMITTEE:
Ciba-Geigy Corporation

I. D. Number:
Permit Number: AC 13-65839
Date of Issue:
Expiration Date: Dec. 31, 1984

GENERAL CONDITIONS:

- b. The permittee shall retain 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 instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:
- the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - 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 that 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 submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. Maximum annual hours of operation of VOC (volatile organic compounds) related activities shall not exceed 4000 hours.
2. In-house preventive maintenance procedures shall include, but not be limited to:
 - (a) seal each resin-dip tank with a floating-tank cover when the process is not being used;

PERMITTEE:
Ciba-Geigy Corporation

I. D. Number:
Permit Number: AC 13-65839
Date of Issue:
Expiration Date: Dec. 31, 1984

SPECIFIC CONDITIONS:

- (b) keep lids and covers on all containers of VOC when not being used;
- (c) maintain a monthly accounting of the VOC per type such that the beginning inventory and deliveries are accounted for.

If the above procedures are not adhered to, a review as to what the department deems necessary to minimize the emissions of VOC may be in order and shall be initiated by the DER's Southeast Florida District office and the Dade County's Department of Environmental Resources Management office.

3. Based on #1, the maximum allowable pollutant emissions are:

Source	Pollutant	Maximum Allowable Emissions	
		(lb/hr)	(TPY)
Facility	VOC		
	IPA		292.0
	Acetone		4.4
	Phenol		13.9
	Formaldehyde		1.7
No. 1 curing oven	PM	0.30	0.60
	VE	less than 20% opacity	
No. 2 curing oven	PM	0.30	0.60
	VE	less than 20% opacity	
No. 3 curing oven	PM	0.30	0.60
	VE	less than 20% opacity	

Note: VOC - volatile organic compounds; PM - particulate matter;
VE - visible emissions

4. Compliance tests shall be conducted on each of the baghouse systems associated with the Nos. 1-3 curing ovens and shall be DER Method 5 for PM and DER Method 9 for VE in accordance with FAC Rule 17- 2.700. Compliance tests shall be conducted with the curing oven fully loaded with material being processed to achieve maximum

PERMITTEE:
Ciba-Geigy Corporation

Permit Number: AC 13-65839
Date of Issue:
Expiration Date: Dec. 31, 1984

SPECIFIC CONDITIONS:

potential pollutant emissions. The DER's Southeast Florida District office and Dade County's Department of Environmental Resources Management office shall be notified in writing 10 working days prior to compliance testing and the compliance testing reports shall be submitted to the referenced agencies within 45 days after completion of the last compliance test run.

5. Emissions of volatile organic compounds will be accounted for by utilizing a material balance scheme and submitted in a quarterly report. The report shall contain the beginning quarterly inventory per type, the monthly deliveries per type, and an ending quarterly inventory per type. The quarterly report shall be submitted to the DER's Southeast Florida District office and the Dade County's Department of Environmental Resources Management office no later than 15 days after the closing date of each quarter.

6. Objectionable odor shall not be allowed on off-plant property.

7. Natural gas is an exclusive fuel for the curing ovens.

8. Prior to 90 days before the expiration date of this permit a complete application for an operating permit and compliance test results shall be submitted to the DER's Southeast Florida District office or its designee. Full operation of the sources may then be conducted in compliance with the terms of this permit until its expiration or receipt of an operating permit.

Issued this 6 day of Jan, 1987

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION



VICTORIA J. TSCHINKEL, Secretary

_____ pages attached.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

July 7, 1986

Mr. Doug Buchanan
Plant Manager
CIBA-GEIGY Corporation
3550 Northwest 49th Street
Miami, Florida 33142

Dear Mr. Buchanan:

Re: Amendment to the Construction Permit, AC 13-109080

The department is in receipt of your letter dated June 19, 1986, which requested an amendment to the above referenced permit. The bureau is in agreement with the request and the following shall be changed and added:

Specific Condition:

From:

- B. Dip and Purge (DPU) #1 and Associated Incinerator System
- 1. The first DPU and the associated incinerator system shall be constructed/installed, debugged, and compliance tested prior to September 1, 1986.

To:

- B. Dip and Purge (DPU) #1 and Associated Incinerator System
- 1. The DPU and the associated incinerator system shall be constructed/installed, debugged, and compliance tested prior to November 30, 1986.

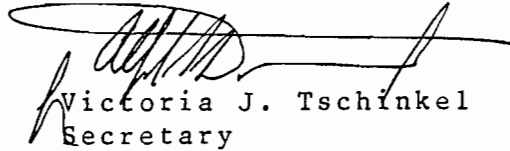
Attachment to be Incorporated:

- 6. Mr. Doug Buchanan's letter dated June 19, 1986.

Mr. Doug Buchanan
Page Two
July 7, 1986

This letter must be attached to your construction permit, No. AC 13-109080, and shall become a part of that permit.

Sincerely,



Victoria J. Tschinkel
Secretary

VJT/ks

enclosure

cc: Stephanie Brooks
Patrick Wong

Attachment 6

Composite Materials Department
Miami Plant

CIBA-GEIGY Corporation
3550 N.W. 49th Street
Miami, Florida 33142
Telephone 305 633 9066

CIBA-GEIGY

June 19, 1986

DER

JUL 26 1986

BAQM

C. H. Fancy, P. E.
State of Florida
Department of Environmental Regulation
Twin Towers Office Bldg.
2600 Blair Stone Road
Tallahassee, FL 32301-8241

Reference: Permit Number AC 13-109080

Dear Mr. Fancy:

This is a request for an extension of the phase one of the construction permit. The first DPU and the associated incinerator were scheduled to be installed and compliance tested prior to September 1, 1986, as stated in B.1 of the permit.

We will be unable to meet this schedule due to delays in engineering, equipment deliveries and construction. Therefore, we request for an extension of the construction permit Part B-1 to November 30, 1986 for the installation and compliance test of the DPU # 1.

We will be able to dismantle one dip tank and purge operation, as stated in B.2. of the permit, prior to September 1, 1986. This will have to be done to install the new unit.

The overall project completion will not be affected by this delay in the first phase.

At the present time the construction has begun at the plant; and the first machine is being built at the vendors manufacturing facility using extensive overtime. We are arranging for mechanical check at the factory in July. We are making frequent visits to expedite the fabrication of the equipment.

Claire H. Fancy, P.E.
Page 2

We very much appreciate your cooperation in the handling of this matter and look forward to hearing from you in the near future as to the final disposition of the extension. In the event you have any questions concerning the foregoing or require additional information, please do not hesitate to contact me.

Very truly yours,



Doug Buchanan
Plant Manager

/zvc

CLAIREFA

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

December 12, 1986

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Doug Buchanan
Plant Manager
CIBA-GEIGY Corporation
3550 Northwest 49th Street
Miami, Florida 33142

Dear Mr. Buchanan:

Re: Extension of the Final Compliance Date of Phase One
Construction Permit: AC 13-109080

The department is in receipt of your letter dated November 26, 1986, which requested an amendment to the above referenced permit. The bureau is in agreement with the request and the following shall be changed and added:

Specific Condition:

From:

- B. Dip and Purge (DPU) #1 and Associated Incinerator System
- 1. The first DPU and the associated incinerator system shall be constructed/installed, debugged, and compliance tested prior to November 30, 1986.

To:

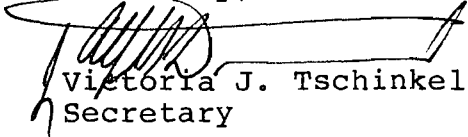
- B. Dip and Purge (DPU) #1 and Associated Incinerator System
- 1. The first DPU and the associated incinerator system shall be constructed/installed, debugged, and compliance tested prior to March 31, 1987.

Attachment to be Incorporated:

- 7. Mr. Doug Buchanan's letter dated November 26, 1986.

Mr. Doug Buchanan
Page Two
December 12, 1986

This letter shall be attached to your construction permit,
No. AC 13-109080, and shall become a part of that permit.

Sincerely,

Victoria J. Tschinkel
Secretary

VJT/ks

attachment

cc: S. Brooks
P. Wong

ATTACHMENT 7

Composite Materials Department
Miami Plant

CIBA-GEIGY Corporation
3550 N.W. 49th Street
Miami, Florida 33142
Telephone 305 633 9066

CIBA-GEIGY

DER

November 26, 1986

DEC 4 1986

BAQM

Claire H. Fancy, P.E.
State of Florida
Dept. of Environmental Regulation
Twin Towers Office Bldg.
2600 Blair Stone Road
Tallahassee FL 32301-8241

Dear Mr. Fancy:

This is a request for a further extension of the phase one of the construction permit. The first DPU and the associated incinerator were scheduled to be installed and compliance tested prior to November 30th, 1986 as stated in B.1 of the permit.

The first DPU and the associated incinerator will be operational by January 1987; and we will start, that month, debugging the equipment and training the operators. By the end of January we will be able to confirm the date for the compliance test of this first unit.

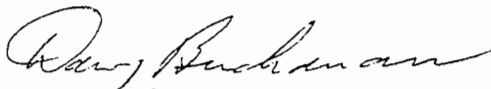
The dip tank #1 and associated purge operation was dismantled prior to September 1st, 1986, as stated in B.2.

At the present time the construction at the plant has been completed. The DPU and associated incinerator have been installed, electrical and duct installation will be completed by the end of next month.

We very much appreciate your cooperation in the handling of this matter and look forward to hearing from you in the near future as to the final disposition of the extension.

In the event you have any questions concerning the foregoing or require additional information, please do not hesitate to contact me.

Very truly yours,



Doug Buchanan
Plant Manager

DB:on

029-A-029

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY

April 9, 1987

Mr. Doug Buchanan
Plant Manager
CIBA-GEIGY Corporation
3550 N.W.49th Street
Miami, Florida 33142

Dear Mr. Buchanan:

Re: Expiration Date Extension for the Construction Permit:
AC 13-109080

The department is in receipt of Mr. Doug Buchanan's letter with attachments dated March 25, 1987, which requested an extension of the expiration date for the above referenced permit. The following shall be changed and added:

Expiration Date:

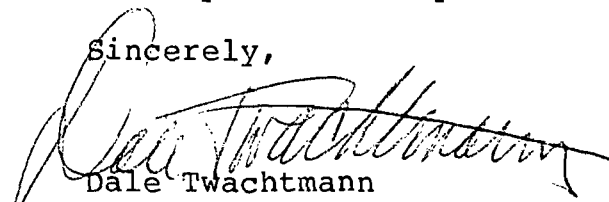
From: May 31, 1987
To: May 31, 1988

Attachment to be Incorporated:

8. Mr. Doug Buchanan's letter with attachments dated March 25, 1987, and received March 31, 1987.

This letter must be attached to your construction permit No. AC 13-109080 and shall become a part of the permit.

Sincerely,



Dale Twachtmann
Secretary

DT/ks

cc: S. Brooks
P. Wong
J. Costas, Esq.

3-31-87

CIBA-GEIGY

Composite Materials Department
Miami Plant

CIBA-GEIGY Corporation
3550 N.W. 49th Street
Miami, Florida 33142
Telephone 305 633 9066

DER

MAR 31 1987

BAQM

March 25, 1987

Claire H. Fancy, P.E.
State of Florida
Dept. of Environmental Regulation
Twin Towers Office Bldg.
2600 Blair Store Road
Tallahassee, FL 32301-8241

Dear Mr. Fancy:

This is to request for an extension of the phase two of the construction permit. The first DPU and associated incinerator have been already installed and ready to be compliance tested. The second unit was scheduled to be installed and compliance tested prior to May 31, 1987, as stated in C.1 of the permit.

We will be unable to meet this schedule due to difficulties in negotiations with the firm that fabricated the first unit. The original company that built the first machine has shut down their original fabricating facility. They will relocate at another facility in South Houston. This would seriously effect their projected delivery. Our confidence in their ability to meet schedules has been diminished due to past performance. The first machine was late by thirty weeks. We are presently evaluating proposals from other contractors to construct the 2nd unit. The contract should be awarded in 8 weeks. We feel confident that in 12 months the second DPU will be installed and compliance tested. Therefore, we request an extension of the construction permit part C-1 to ~~March 1~~, 1988.

May 31, *DBD*

We will be able to dismantle and retire a second dip/purge operation as stated in C.2 prior to May 31, 1987. This leaves two dip tanks and two purge vents still in operation in the second dip room which we request to remain in operation until the 2nd machine is ready for testing.

Claire H. Fanch, P.E.
Page 2

In the event you have any questions concerning the foregoing or require additional information, please do not hesitate to contact me.

Very truly yours,

A handwritten signature in cursive script that reads "Doug Buchanan". The signature is written in dark ink and is positioned above the typed name.

Doug Buchanan
Plant Manager

DB:on

FANCY

Hand Delivered
3-31-87

DER

MAR 31 1987

BAQM

PROJECT # 65139 DIP/PURGE ENVIRONMENTAL PROJECT AT CIBA-GEIGY IN MIAMI,FLA
DIP/PURGE MACHINE No. 1
CHRONOLOGICAL HISTORY

DESCRIPTION	1985			1986						1987						
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

PROJECT APPROVED BY
CIBA-GEIGY *****

RECEIVED D.E.R. PERMIT
AC-13-109080 *****

DETAIL DESIGN AND
CONSTRUCTION IN HOUSTON, TX *****

FIRST PROMISED DELIVERY
OF MACHINE TO MIAMI (4/7) *****

SECOND PROMISED DELIVERY
OF MACHINE TO MIAMI (6/16) *****

MACHINE DELIVERED TO
THE MIAMI PLANT *****

INSTALLATION, PROCESS
PIPING, DUCTING *****

DRY BLOCK
CHECKOUT *****

REDESIGN AND SOLVING
DESIGN ERRORS *****

WET BLOCK
CHECKOUT *****

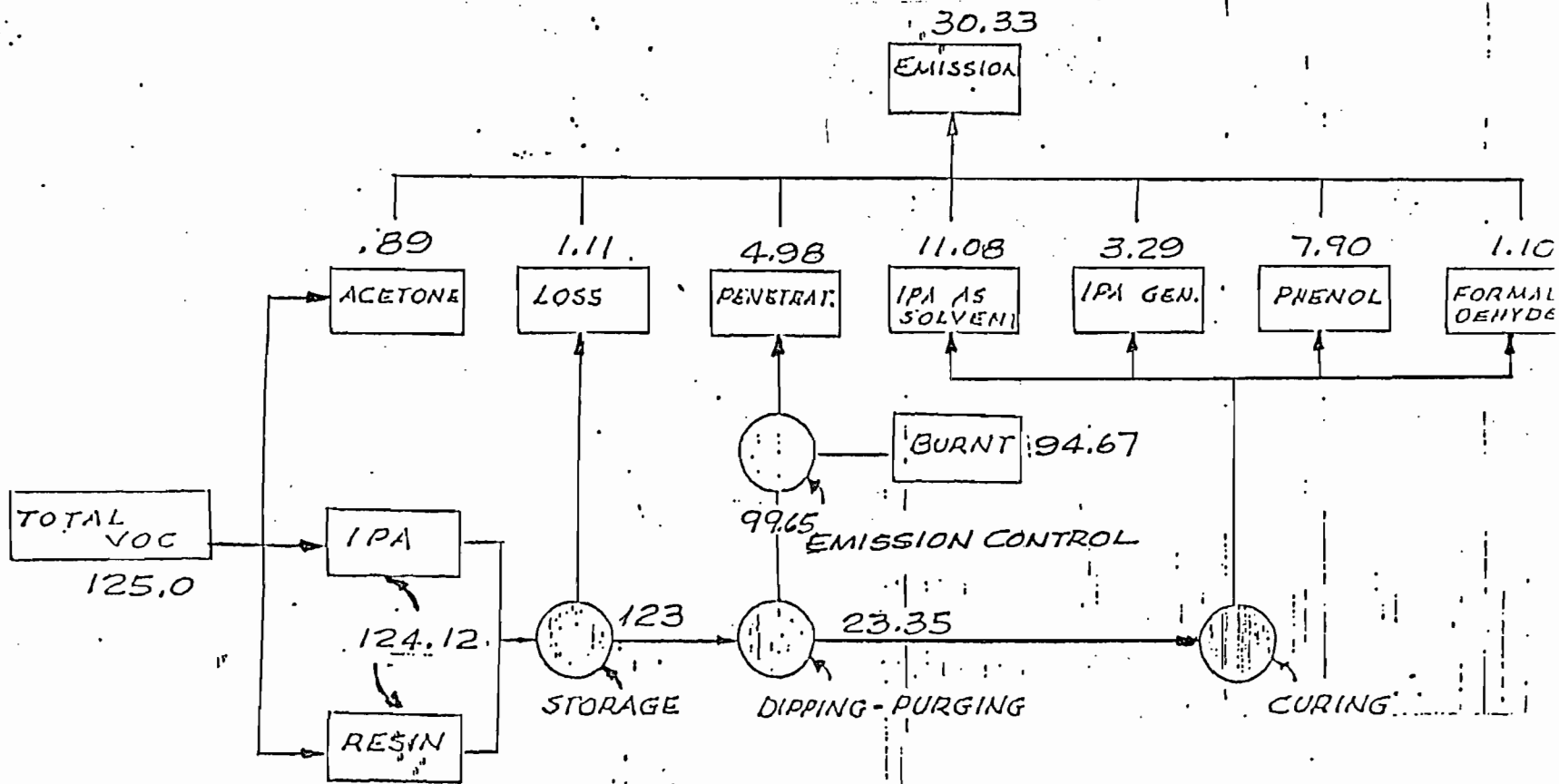
BEGIN PRODUCING
BLOCKS AT REDUCED RATE *****

SCHEDULED V.O.C COMPLIANCE
TESTING (3/31) *

4/7

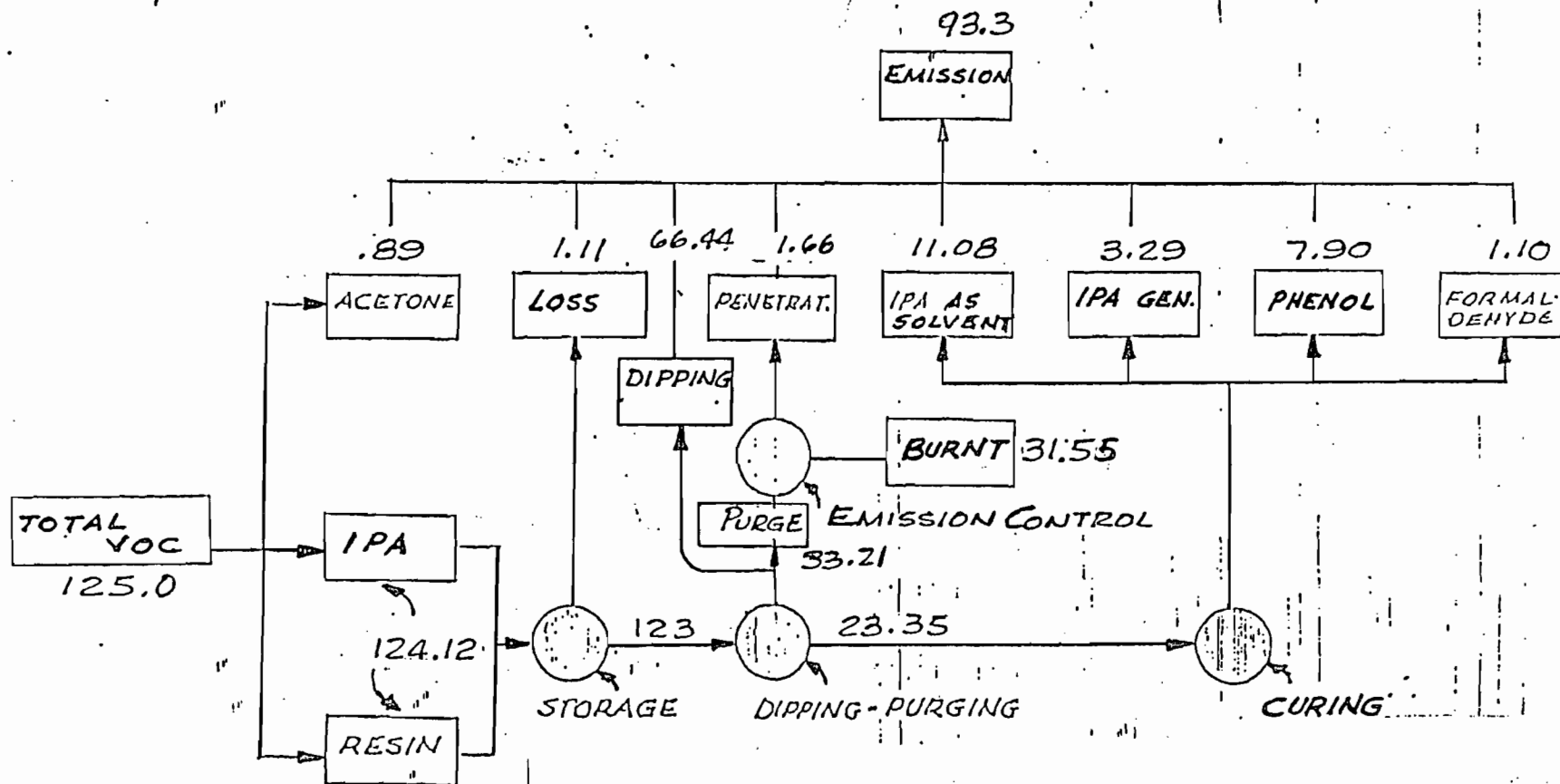
DIP-PURGE UNIT No 1

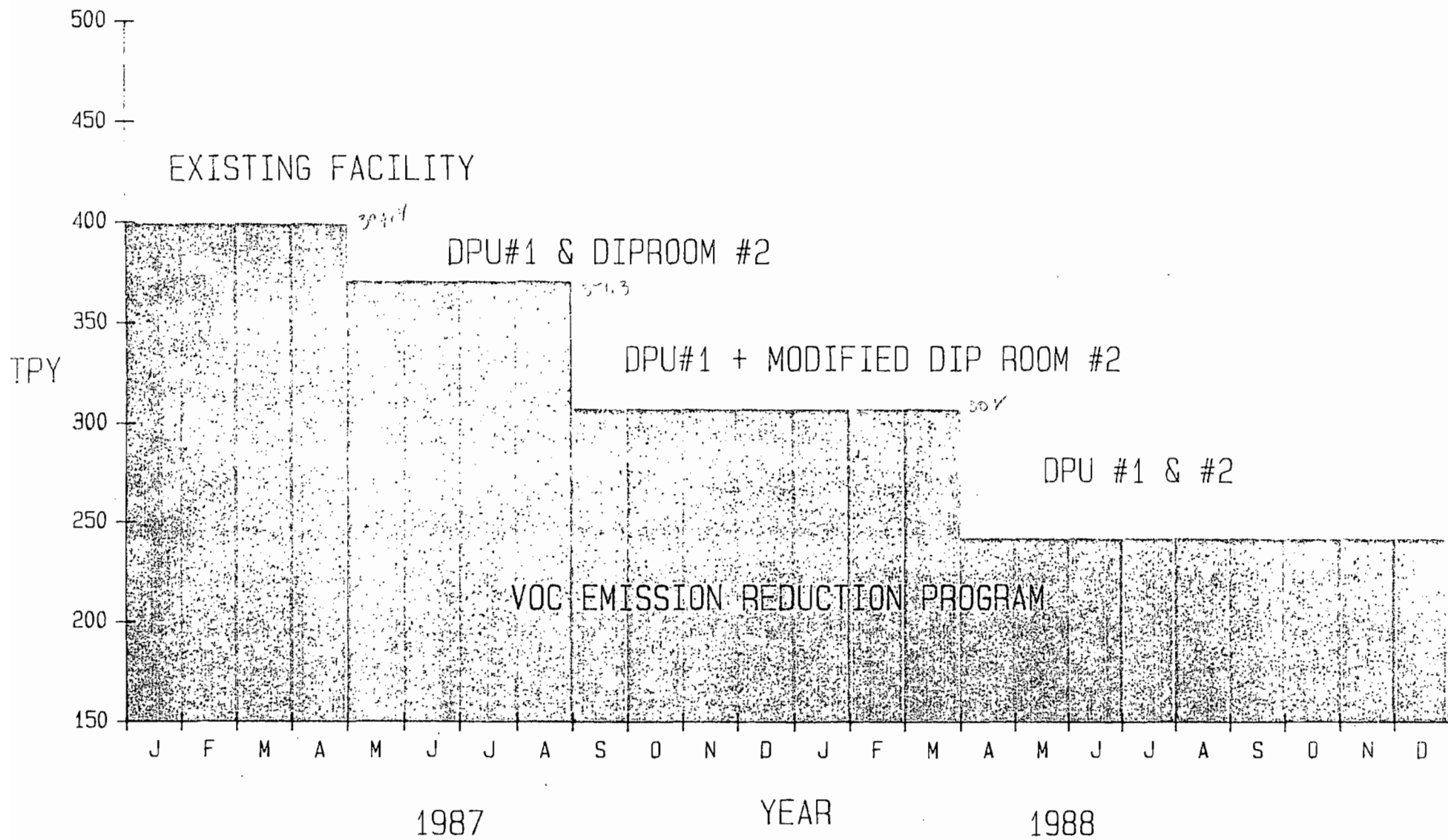
VOC MATERIAL BALANCE [LBs/HR]



DIPPING - ROOM No 2 - MODIFIED -

VOC MATERIAL BALANCE [Lbs/Hr]





3-31-87

Meeting @ BAQM @ CIBA-GEIGY Corp.

Bill Thomas	FDER/BAQM/CAPs	(904)488-1344
Bruce Mitchell	"	"
Doug Buchanan	Ciba Geigy	305-633-9066
Tony Mazpala	"	"
Tim Hall	"	"



Bruce's Copy

Kim Letters
BM/BUCH

Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

June 3, 1988

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Douglas B. Buchanan
Plant Manager
CIBA-GEIGY Corporation
3550 Northwest 49th St.
Miami, Florida 33142

Dear Mr. Buchanan:

Re: Permitting Request for the Existing Uncontrolled
No. 2 Dip Tank

The Department received your letter dated April 1, 1988, requesting an extension of the expiration date for the construction permit, No. AC 13-109080, and to allow an additional year of use of the existing uncontrolled No. 2 Dip Tank. An extension of the expiration date has already been processed.

In regard to the uncontrolled No. 2 Dip Tank, the following facts are pertinent:

- 1) Pursuant to the construction permit, No. AC 13-109080, the No. 2 Dip Tank was to be removed from service and the permits (existing Nos. 1 & 2 Dip Tanks) surrendered to the Department by May 31, 1988.
- 2) The source may not be operated uncontrolled.
- 3) For permitting purposes, the No. 2 Dip Tank will be considered a new source and subject to the current regulations.
- 4) If you desire to obtain a construction permit for the referenced source, an application and the appropriate processing fee will have to be submitted to the Department.
- 5) A minimum of 90% overall VOC reduction (capture and destruction) efficiency will be applied.

Mr. Douglas B. Buchanan
Page Two
June 3, 1988

- 6) If, at the 90% overall reduction efficiency of VOC, the total VOC potential emissions are 40 tons per year or more (must include all contemporaneous VOC emission increases), then the VOC emissions are subject to new source review pursuant to FAC Rule 17-2.510(4). A LAER (lowest achievable emission rate) determination is part of the requirements of this section and would probably require a more stringent overall VOC reduction efficiency than the minimum 90%.

If the Bureau can be of further assistance regarding this issue, please write to me at the above address or call Bruce Mitchell at (904)488-1344.

Sincerely,



C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/BM/s

cc: S. Brooks, SE FL Dist.
P. Wong, DERM
T. Mazpule, CIBA-GEIGY Corp.
B. Pittman, Esq., DER



Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

May 27, 1988

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Douglas B. Buchanan
Plant Manager
CIBA-GEIGY Corporation
3550 N. W. 49th Street
Miami, Florida 33142

Dear Mr. Buchanan:

Re: Amendments to a Construction Permit
AC 13-109080: Dip/Purge Units Nos. 1 & 2

The Department received your letter dated April 1, 1988, requesting an extension of the expiration date to the above referenced construction permit in order to upgrade the Dip/Purge Unit No. 1.

A. Since there will not be any increases in pollutant emissions or in the raw material and chemical input rates associated with the request, the following will be changed and added:

(1) Expiration Date:

From: May 31, 1988
To: April 14, 1989

B. The April 14, 1989 expiration date includes the following intermediate milestones:

- o By November 30, 1988, upgrade the Dip/Purge Unit No. 1 and perform compliance tests on both units, if not already performed.
- o By January 14, 1989 (45 days from November 30, 1988, pursuant to FAC Rule 17-2.700(7)), submit compliance test results for both units to the DER's Southeast Florida District office and Dade County's Environmental Resources Management (DERM) office.
- o By April 14, 1989 (90 days from January 14, 1989), submit for and obtain an operating permit for both units from the DER's Southeast District and DERM.

Mr. Doug Buchanan
Page Two
May 27, 1988

- o The above dates supercede all of the previously established phased construction dates for being in and demonstrating final compliance except for the existing uncontrolled Dip/Purge Tank No. 2, which is to be phased out by May 31, 1988, and all associated permits surrendered to the Department by that date.

Therefore, the following will be added:

Specific Condition

(1) D.15.: (New)

The Dip/Purge Units Nos. 1 & 2 shall be in compliance with all terms of the permit by November 30, 1988, and the permittee shall provide proof of final compliance to the DER's Southeast District office and the DERM office by January 14, 1989.

C. Attachments to be Incorporated:

11. Mr. Douglas B. Buchanan's letter dated April 1, 1988, and received April 4, 1988
12. Mr. H. Patrick Wong's letter dated April 26, 1988, and received May 2, 1988.

This letter must be attached to your construction permit, No. AC 13-109080, and shall become a part of the permit.

Sincerely,



Dale Twachtmann
Secretary

DT/bm

attachments

cc: S. Brooks, SE Dist.
P. Wong, DERM
B. Pittman, Esq., DER

ATTACHMENT 11

Composite Materials Department
Miami Plant

CIBA-GEIGY Corporation
3550 N.W. 49th Street
Miami, Florida 33142
Telephone 305 633 9066

CIBA-GEIGY

Miami, FL

RECEIVED

APR 4 1988

April 1, 1988

CERTIFIED MAIL

DER-BAQM

Mr. Claire H. Fancy, P.E.
State of Florida
Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

Re: Modifications and Expiration Date Extension -
Construction Permit No. AC 13-109080

Dear Mr. Fancy:

This is a request for extension of the above captioned Construction Permit to allow us time to modify Dip/Purge Unit No. 1 and to study the material balance using the new system.

We are also requesting modification of the permit to allow us to retain a manual Dip/Purge Unit for R&D and manufacturing development. The extension is requested for the period beginning May 31, 1988 to May 31, 1989. During this period we will comply with the facility emissions as stated in Specific Condition D-1.

The extension would allow us time to modify Dip/Purge Unit No. 1 to improve the purge hood and refine computer control devices. Prior to making these changes, the new machine would be performance tested and operated for a period of time to insure operational durability. During the requested time period, we need to study the material balance based upon the new operating conditions. The new unit will be compliance tested as scheduled on or before May 31, 1988.

A modification of C.2 is requested to dismantle one Dip/Purge, uncontrolled unit and retain permanently one dip vat and purge hood for research and manufacturing development. The present room will be reduced in size to accommodate this pilot operation. Emissions associated with this unit will be accounted for separately. Use of the uncontrolled unit would not exceed 2000 hours annually.

April 1, 1988
Mr. Claire H. Fancy, P.E.
Page 2

We would like to schedule a meeting to review the requested permit modifications and extension at a mutually satisfactory time.

Very truly yours,

Douglas B Buchanan

Douglas B. Buchanan
Site Manager

DBB/gr

cc: M. B. Mitchell
H. P. Wong

PERMIT2

Forwarded through
CHFIBT } 488807
Bruce Mitchell }
Duplicate letter rec'd 4.8.88

ATTACHMENT 12

METROPOLITAN DADE COUNTY, FLORIDA

METRO-DADE

RECEIVED

METRO-DADE CENTER

MAY 02 1988

ENVIRONMENTAL RESOURCES MANAGEMENT
SUITE 1310
111 N.W. 1st STREET
MIAMI, FLORIDA 33128-1971
(305) 375-3376

DER - BAQM

April 26, 1988

Mr. Claire Fancy, P.E.
State of Florida
Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

RE: Ciba-Geigy - Request for Modification and Expiration Date Extension of
Construction Permit AC13-109080

Dear Mr. Fancy:

Reference the recent letter from Ciba-Geigy Corporation requesting an extension of the expiration date of the subject construction permit. They have also requested a permit modification that would allow the retention of an open manual Dip/Purge unit for continued use for manufacturing development.

In view of the long standing non-compliance of this source and the fact that this operation is in close proximity to residential areas, which results in complaints from neighbors, DERM is recommending denial of the latter request to retain the manual Dip/Purge unit. Furthermore, the Department does not feel it would be appropriate to grant an additional extension to install Dip/Purge Unit No. 1. However, we would be agreeable to granting them the extension as requested to allow more time in which to conduct the necessary compliance tests on the units.

If you should need any additional information please contact us.

Sincerely,


H. Patrick Wong
Chief, Air Section
Environmental Monitoring Division

ELA/aas

cc: Douglas Buchanan
Ciba-Geigy Corp.

Stephanie Brooks
Florida Department of Environmental Regulation

Copy Bruce Mitchell }
CHF/ST }
I. Goldman SEDG } 5/3/88 mr