



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

July 31, 1989

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. James D. Phillips
Director of Engineering Development
John F. Kennedy Space Center
Kennedy Space Center, FL 32899

Dear Mr. Phillips:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit for John F. Kennedy Space Center to modify a spray cure cell No. 5 to use polyurethane foam spray application to be located at the KSC, vehicle assembly building (Low Bay), Brevard County, Florida.

Please submit any written comments 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/TH/t

Attachments

cc: J. Turner, Central District

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Application for Permit by:

National Aeronautics and
Space Administration - NASA
Kennedy Space Center - KSC
Kennedy Space Center, FL 32899

DER File No. AC 05-166071

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit (copy attached) 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, NASA, applied on June 8, 1989, to the Department of Environmental Regulation for a permit to construct/modify cell No. 5 to use polyurethane foam application to be located at the vehicle assembly building facility (Low Bay) at the Kennedy Space Center, Brevard 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 Department has determined that an air construction permit is required for the proposed work.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days, in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department, at the address specified within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The Department will issue the permit with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person 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 contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

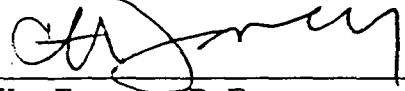
- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

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 position taken by it in this notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the applicant have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office in General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such

person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed 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:

J. Turner, C District

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on July 31, 1989.

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.

Martha Allise July 31, 1989
Clerk Date

State of Florida
Department of Environmental Regulation
Notice of Intent to Issue

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to construct/modify a spray cure cell No. 5 to use polyurethane foam application spray to be located at the vehicle assembly facility (Low Bay) at KSC, Brevard County, Florida. A determination of Best Available Control Technology (BACT) was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person 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 contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

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 position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

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:

Department of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dept. of Environmental Regulation
Central District Office
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803-3767

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

Technical Evaluation
and
Preliminary Determination

Vehicle Assembly Building Facility (Low Bay)
John F. Kennedy Space Center
Brevard County

Spray/Cure Cell No. 5
Polyurethane Foam Spray Application
Permit No. AC 05-166071

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

July 28, 1989

I. SYNOPSIS OF APPLICATION

I.1 National Aeronautics and Space Administration - NASA
John F. Kennedy Space Center
DF-EMS
Kennedy Space Center, Florida 32899

I.2 Reviewing and Process Schedule

Date of Receipt of Application: June 8, 1989
Completeness Review (30 days): July 8, 1989
Applications Completeness Date: June 8, 1989

II. FACILITY INFORMATION

II.1 Facility Location

The proposed facility will be located at the Vehicle Assembly Building (Low Bay) at the Kennedy Space Center in Brevard County, Florida. The latitude and longitude of this facility are 28° 35' 05" North and 80° 39' 00" West, respectively,

II.2 Standard Industrial Classification Code (SIC) and Source Classification Code (SCC)

This new facility will be classified as follows:

Group No. 966, Space Research and Technology
Industry No. 9661, Space Research and Technology

II.3 Facility Category

The Kennedy Space Center (KSC) is classified as a major emitting facility for sulfur dioxide (SO₂) and volatile organic compounds (VOC).

This facility category is not in the list of the 28 Major Facility Categories, Chapter 17-2, Table 500-1, Florida Administrative Code.

III. PROJECT DESCRIPTION

This project consists of the use of spray/cure cell No. 5 to provide personnel/operator training and certification in foam spray application and qualification testing.

Spray/Cure Cell No. 5, will be utilized for all training process exercises.

Personnel/operator training procedures will include surface preparation, consisting of primer application, cleaning and adhesive application, prior to final polyurethane foam spray application. Aluminum test panels, varying in size and shape depending on test requirements, will be staged adjacent to where actual foam spray application will be performed, for surface preparation exercises. The test panels will be painted with Epoxy Primer, using brush or spray can applicators. After ambient cure of the primer, the test panels will be clean wiped with Freon TMC to remove any surface contamination prior to adhesive application. A thin film of either Isochem or Conathane Adhesive will be applied to the test panel surface to complete surface preparation procedures. Polyurethane Foam (both Stephan-Foam and Insta-Foam) will then be sprayed onto the test panel to a thickness of approximately one-inch using a Gusmer D Spray Cart. Training exercises will utilize an estimated maximum of 50 square feet of aluminum test panels per week.

Air conditioners and exhaust fans will be turned off prior to spraying application. When foam spraying operations are completed, Spray Cell No. 5 exhaust fans will be turned on and vapors will be vented to the atmosphere via the VAB south multi-fan/stack system.

IV. RULE APPLICABILITY

The proposed project is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code (F.A.C.).

The proposed facility, Kennedy Space Center, is located in an area (Brevard County) currently designated attainment for all criterial pollutants in accordance with F.A.C., 17-2.420.

This facility, a major emitting facility for SO₂ and VOC, is not on the list of the 28 Major Facility Categories, F.A.C., Table 500-1. Therefore, this project is exempt from provisions of F.A.C. 17-2.500, Prevention of Significant Deterioration.

The proposed source shall be permitted under F.A.C. 17-2.520, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements and shall comply with F.A.C. 17-2.610(2) General Particulate Emission Limiting Standards and F.A.C. 17-2.600(6)(b) and (c).

V. SOURCE IMPACT ANALYSIS

V.1. Emission Limitations

The air pollutants emitted from the proposed operation will be volatile organic compounds (VOC). Table No. 1 summarizes VOC emissions from the proposed source.

The permitted emission, in compliance with all applicable requirements of Chapter 17-2, Florida Administrative Code.

Table 1
Summary of Emissions

Raw Material/ Chemical	% VOC	Utilization Rate (Tons/Yr)	Potential Emissions (Tons/Yr)
Stephan-Foam A	Nil	0.260	-
Stephan-Foam B	30	0.260	0.078
Insta-Foam A	7	0.260	0.018
Insta-Foam B	16	0.230	0.037
Isochem Adhesive A	<30**	0.004	0.001**
Isochem Adhesive B	Nil	0.003	-
Conathane Adhesive A	Nil	0.003	-
Conathane Adhesive B	Nil	0.003	-
Epoxy Primer A	57	0.020	0.011
Epoxy Primer B	58	0.007	0.004
Solvent Reducer	100	0.019	0.019
Freon TMC	100	0.011	0.011
Total VOC Emissions			= 0.179 tons/yr
			= 356 lbs/yr

* Emissions estimates conservatively assume that all volatiles are emitted to the atmosphere, and does not consider the recovery of waste materials.

** Either Isochem or Conathane Adhesive will be utilized: emissions estimates conservatively assume Isochem Adhesive with 30 percent VOC.

VI.2 Air Quality Analysis

From a technical review of the application, the Department has determined that the construction and operation of this source will not have a significant impact on Florida's ambient air quality standards.

VI. CONCLUSION

Based on the information provided by NASA, the Department has reasonable assurance that the proposed operation and spray application of polyurethane foam at the Spray/Cure Cell No. 5, as described in this evaluation, and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapter 17-2 of the Florida Administrative Code.

John Thomas
7/31/89