Check Sheet

Company Name: Olin Corporation
Permit Number: AC 165-140731
PSD Number:
Permit Engineer:

Cross References:
- ☐
- ☐
- ☐

Application:
- ☑ Initial Application
- ☐ Incompleteness Letters
- ☐ Responses
- ☐ Waiver of Department Action
- ☐ Department Response
- ☐ Other

Intent:
- ☑ Intent to Issue
- ☑ Notice of Intent to Issue
- ☑ Technical Evaluation
- ☒ BACT or LAER Determination
- ☑ Unsigned Permit
- Correspondence with:
  - ☐ EPA
  - ☐ Park Services
  - ☐ Other
- ☑ Proof of Publication
- ☐ Petitions - (Related to extensions, hearings, etc.)
- ☐ Waiver of Department Action
- ☐ Other

Final Determination:
- ☐ Final Determination
- ☑ Signed Permit
- ☒ BACT or LAER Determination
- ☐ Other

Post Permit Correspondence:
- ☑ Extensions/Amendments/Modifications
- ☐ Other

Revision #5

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.
1. ☐ Show to whom delivered, date, and addressee's address. *(Extra charge)* 2. ☐ Restricted Delivery *(Extra charge)*

3. Article Addressed to:
Mr. Dick Myers
Manager Environmental Control
Olin Corporation
P. O. Box 222
St. Marks, FL 32355

4. Article Number
P 274 010 407

Type of Service:
☐ Registered ☐ Insured
XX Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Address
X C. E. Carlson

6. Signature — Agent
X

7. Date of Delivery
4/25/89

8. Addressee's Address *(ONLY if requested and fee paid)*

PS Form **3811**, Mar. 1988 ★ U.S.G.P.O. 1988-212-865 **DOMESTIC RETURN RECEIPT**

P 274 010 407

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to Mr. Dick Myers, Olin Corp.	
Street and No. P.O. Box 222	
P.O., State and ZIP Code St. Marks, FL 32355	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date Mailed: 4-21-89 Permit: AC 65-140731	

☆ U.S.G.P.O. 1985-480-794
PS Form 3800, June 1985

orida Department of Enviro. mental Regulation
Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400
Bob Martinez, Governor Dale Twachtmann, Secretary John Shearer, Assistant Secretary

April 17, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Dick Myers
Manager Environmental Control
Olin Corporation
Post Office Box 222
St. Marks, Florida 32355

Dear Mr. Myers:

Re: Permit No. AC 65-140731, North Sweetie Barrell Scrubber with Exhaust Blower

This letter is to confirm your March 7, 1989 telephone conversation with Mr. Bill Thomas, Chief Engineer for the New Source Review Section. Your request for using EPA test Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography, to comply with specific permit condition No. 2 of the subject permit is approved.

Specific Condition No. 2 will be changed as follows:

From:

Compliance with VOC standard will be determined by Method 25 or other method approved by the Department. Concentration data and calculated mass emission rate will be reported to the Northwest District. Thereafter, compliance with the VOC emission limitations will be maintained based on the monitoring and recording of the scrubber water flow rate previously established during the initial compliance tests. The district office shall be notified 15 days prior to the test.

To:

Compliance with the VOC standard will be determined by EPA Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography, or other methods only if approved by the Department. Concentration data and calculated mass emission rate will be reported to the Northwest District. Thereafter,

compliance with the VOC emission limitations will be maintained based on the monitoring and recording of the scrubber water flow rate previously established during the initial compliance tests. The district office shall be notified at least 15 days prior to the test.

A copy of this letter shall be attached to your permit AC 65-140731 and shall become a part of the permit.

Sincerely,

Dale Twachtmann
Secretary

DT/ks

cc: J. Preece, NW District

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee

To: _____ Location: _____

To: _____ Location: _____

To: _____ Location: _____

From: _____ Date: _____

Interoffice Memorandum

RECEIVED
APR 17 1989
Office of the Secretary

TO: Dale Twachtmann

FROM: Steve Smallwood

DATE: April 17, 1989

SUBJ: Modification of AC 65-140731
North Sweetie Barrel Scrubber with Exhaust Blower
Olin Corporation

Attached for your approval and signature is a letter to modify the construction permit for the above mentioned company.

This modification is not controversial and I recommend your approval.

SS/TH/s

attachments

RECEIVED
APR 20 1989
DER - BAQM

Please call Patty Adams when signed 8-1344

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☒ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery.

3. Article Addressed to:

Mr. D.E. Findley, Director
St. Marks Operation
P.O. Box 222
St. Makrs, FL 32355

4. Article Number
P 274 010 463

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X

7. Date of Delivery
1/28/88

8. Addressee's Address *(ONLY if requested and fee paid)*

PS Form 3811, Feb. 1986 **DOMESTIC RETURN RECEIPT**

P 274 010 463

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to D.E. Findley, Director ~~Olin Corporation~~	
Street and No. P.O. Box 222	
P.O., State and ZIP Code St. Marks, FL 32355	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date Mailed: 01/27/88 Permit: AC 65-140731	

☆ U.S.G.P.O. 1985-480-794

PS Form 3800, June 1985

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

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

Mr. D. E. Findley, Director
St. Marks Operation
Olin Corporation
Post Office Box 222
St. Marks, Florida 32355

January 27, 1988

Enclosed is permit No. AC 65-140731, for the Olin Corporation to construct a BESCO Multi-Micro Venturi Scrubber in series with a second stage packed column at the facility's location in St. Marks, Wakulla 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 32399-2400; 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.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

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

Copy furnished to:

E. Middleswart, NW Dist.
A. F. McElfresh, P.E.

Final Determination

Olin Corporation
Wakulla County

North Sweetie Barrel-Scrubber with Exhaust Blower

Permit No. AC 65-140731
APIS No. 10TLH65000301

Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting
New Source Review Section

January 20, 1988

Final Determination

Olin Corporation's application for a permit to construct a BECO Multi-Micro Venturi Scrubber in series with a second stage packed column has been reviewed by the Bureau of Air Quality Management. Olin Corporation's facility is located in St. Marks, Wakulla County, Florida.

Public Notice of the Department's Intent to Issue the construction permit was published in the Tallahassee Democrat on December 10, 1987.

Comments were received from Jack Preece, Engineer, NW District Office. Mr. Preece requested that the permit be modified as per his memo of December 11, 1987.

The Bureau has considered his request and the Specific Conditions No. 2 and No. 7 are changed as follows:

Specific Condition No. 2
From:

Compliance with the VOC emission standard will be determined by Method 25 or other methods approved by the Department. Concentration data and calculated mass emission rate will be reported. Thereafter, compliance with the VOC emission limitations will be maintained based on the VOC inventory. The District office shall be notified 15 days prior to test.

To:

Compliance with VOC standard will be determined by Method 25 or other method approved by the Department. Concentration data and calculated mass emission rate will be reported to the Northwest District. Thereafter, compliance with the VOC emission limitations will be maintained based on the monitoring and recording of the scrubber water flow rate previously established during initial compliance tests. The district office shall be notified 15 days prior to test.

Specific Condition No. 7

From:

Upon obtaining an operating permit, the permittee will be required to submit annual reports on the actual operation and emissions of the facility. Annual material balance reports (24-hour) shall be required and sent to the Department's district office to assess emissions and maintain VOC inventory. Visible emissions test shall be performed on an annual basis.

To:

Upon obtaining an operating permit, the permittee will be required to submit annual reports on the actual operation and emissions of the facility. The scrubber water flow rate data shall be monitored and recorded. This data must be based on written operation and maintenance instructions and logs.

The final action of the Department will be to issue the permit with the changes described above.

Attachment

Mr. Jack Preece's memo of December 11, 1987.

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

PERMITTEE:
Olin Corporation
P. O. Box 222
St. Marks, Florida 32355

Permit Number: AC 65-140731
Expiration Date: July 31, 1989
County: Wakulla
Latitude/Longitude: 30° 10' 48"N/
84° 13' 24" W
Project: Installation of a North Sweetie Barrel with Exhaust Blower

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 construction/installation of BECO Multi-Micro Venturi Scrubber in series with a second stage packed column to be located at the Olin Corporation Complex, in St. Marks, Wakulla County, Florida.

Attachments:

1. Application to construct Air Pollution Sources, DER Form 17-1.122(16) dated October 13, 1987.

2. Mr. Jack Preece's memo of December 11, 1987.

PERMITTEE:
Olin Corporation

Permit Number: AC 65-140731
Expiration Date: July 31, 1989

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.

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.

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 noncompliance 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.

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. Total volatile organic emissions (VOC) from this source shall not exceed 13.5 lbs/hr and 21.4 tons/year.

2. Compliance with VOC standard will be determined by Method 25 or other method approved by the Department. Concentration data and calculated mass emission rate will be reported to the Northwest District. Thereafter, compliance with the VOC emission limitations will be maintained based on the monitoring and recording of the scrubber water flow rate previously established during initial compliance tests. The district office shall be notified 15 days prior to test.

PERMITTEE:
Olin Corporation

Permit Number: AC 65-140731
Expiration Date: July 31, 1989

SPECIFIC CONDITIONS:

3. No objectionable odors are allowed from this facility.

4. This permit replaces current operation permit No. AO 65-79867.

5. 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 date of the construction permit and submit a new schedule and request for an extension of the construction permit. (Rule 17-4.09 Florida Administrative Code)

6. 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 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. (Rule 17-4.22 and 17-4.23, Florida Administrative Code.)

7. Upon obtaining an operating permit, the permittee will be required to submit annual reports on the actual operation and emissions of the facility. The scrubber water flow rate data shall be monitored and recorded. This data must be based on written operation and maintenance instructions and logs.

8. 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 can take up to 90 days to process a complete application. (Rule 17-4.10 Florida Administrative Code)

PERMITTEE:
Olin Corporation

Permit Number: AC 65-140731
Expiration Date: July 31, 1989

Issued this 25 day of Jan,
1988

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Dale Twachtmann

Dale Twachtmann, Secretary

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

Interoffice Memorandum

For Routing To Other Than The Addressee

To: _____ Location: _____

To: _____ Location: _____

To: _____ Location: _____

From: _____ Date: _____

RECEIVED
JAN 25 1988
Office of the Secretary

TO: Dale Twachtmann

THRU: Howard Rhodes

FROM: Clair Fancy

DATE: January 19, 1988

SUBJ: Approval of Olin Corporation
State Construction Permit Number: AC 65-140731

Attached for your approval and signature is a permit for the above mentioned company to construct a BESCO Multi-Micro Venturi Scrubber in series with a second stage packed column at the facility's location in St. Marks, Wakulla County, Florida. Comments were received during the public notice period.

Day 90 after which these permits will be issued by default is February 10, 1988.

The Bureau recommends approval and signature.

CHF/MJ/s

attachments

DER
JAN 27 ..
BAQM

PM
1·21·88
St. Marks, FL

File Copy

Olin
ORDNANCE

ST. MARKS OPERATIONS

January 21, 1988

DER
JAN 25, 1988
BAQM

Mr. Claire Fancy, P.E.
Bureau of Air Quality Management
State of FL, Dept. of Env. Regulation
Twin Towers Office Building
2600 Blairstone Road
Tallahassee, Florida 32301-8241

RE: SIC Code Classifications for Olin's St. Marks, Florida Operation

Dear Mr. Fancy:

In your letter of December 3, 1987, you state that FDER files indicate our entire operation is classified in Major Group 28, Chemical and Allied Products, of the SIC Code. Olin feels this is not a totally correct classification. Our plant is a chemical complex in which several operating facilities are located. In addition we have support facilities providing utilities such as compressed air, drinking water, and steam. The steam boilers are the only support facility requiring an Air Operations Permit, and we feel it should fall under a different SIC Code.

The following is a listing of our current different facilities along with our recommended SIC Code and comments:

	Facility	SIC Code	Comments
1.	BALL POWDER Facility	2892	Major Group 28 is one of the 28 major facilities categories listed in Chapter 17-2, FAC, Table 500-1. (100 ton per year major facility.)
2.	Combustible Cartridge Facility (Initial Production Facility)	2892	Major Group 28 is one of the 28 major facilities categories listed in Chapter 17-2, FAC, Table 500-1. (100 ton per year major facility.)
3.	Boiler Facility	4961	This is <u>not</u> one of the 28 major facilities categories because the facility is a fossil fuel boiler plant totaling less than 250,000,000 BTU/hr. (250 ton per year facility.)

Olin

St. Marks, Florida 32355

1·26·88

CHF:
BT: } FYI

JAN 21'88

Mr. Claire Fancy, P.E.
Bureau of Air Quality Management
State of FL, Dept. of Env. Regulation
Twin Towers Office Building
2600 Blairstone Road
Tallahassee, FL 32301-8241

We have also attached a sheet indicating the individual facilities at St. Marks requiring air permits and the regulating agency.

Please review our recommendations for the correct SIC classification of each facility in the Olin St. Marks chemical complex and revise the existing classification accordingly if you agree with our assessment.

Sincerely,

R. L. Myers

R. L. Myers
Manager, Environmental Control

RLM/WGC/jah

Attachment

cc: Mr. Jack Preece
State of Florida
Dept. of Environmental Regulation
Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

Copied Teresa Heron
CHF/BT

	FACILITY	GOVERNING REGULATIONS	PERMIT NUMBER	POLLUTANTS	EMISSIONS
1.	BALL POWDER Facility				
	- North Sweetie Barrel Exhaust	FDER	A065-114702 (Existing Operating Permit)	VOC	8.2
			AC65-140731 (Pending Construction Permit - Minor Mods.)	VOC	21.4
	- North Coater Exhaust	FDER	A065-136175 (Existing Operating Permit)	VOC	18.0
	- Mixing Ventilation System	FDER	A065-114702 (Existing Operating Permit)	VOC	-
2.	Combustible Cartridge Case Facility (Initial Production Facility)	FDER	A065-136176 (Existing Operating Permit)	VOC	12.2
3.	Steam Plant or Boiler Facility	FDER	A065-113388 (Existing Operating Permit)	Sulfur Dioxide	245.0

File Copy

Olin
ORDNANCE

ST. MARKS OPERATIONS

December 16, 1987

Mr. C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management
Dept. of Environmental Regulation
2600 Blairstone Road
Tallahassee, Florida 32301-8241

Re: Permit No. AC-65-140731, APIS No. 1OTLH65000301

Dear Mr. Fancy:

The public notice of FDER's Notice of Intent to issue the subject permit was published December 10, 1987 in the Tallahassee Democrat. Proof of that publication is enclosed and is being forwarded to you prior to the required seven days after publication.

Sincerely,

D. E. Findley, Director
St. Marks Operations

DEF/RLM/jah

Enclosure

DER
DEC 18 1987
BAQM

Olin

St. Marks, Florida 32355

DEC 17 '87

E022

Mr. C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management
Dept. of Environmental Regulation
2600 Blairstone Road
Tallahassee, FL 32301-8241

OL

Tallahassee Democrat
PUBLISHED DAILY
TALLAHASSEE - LEON - FLORIDA

STATE OF FLORIDA
COUNTY OF LEON:

Before the undersigned authority personally appeared Linda Weinberg who on oath says that she is Legal Control Clerk of the Tallahassee Democrat, a daily newspaper published at Tallahassee in Leon County, Florida; that the attached copy of advertising being a Legal Ad in the matter of

State of Florida
Department of Environmental
Regulation...

in the Court, was published in said newspaper in the issues of:

December 10, 1987

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

Linda Weinberg

Linda Weinberg, Legal Control Clerk

Sworn To And Subscribed Before Me
This 15

Day of December

A.D. 1987

(SEAL)

Lady Haskins
Notary Public

Notary Public, State of Florida
My Commission Expires Sept. 27, 1988
Bonded thru Troy Fain Insurance Inc.

State of Florida
Department of Environmental Regulation
Notice of Intent

The Department gives notice of its intent to issue a permit to Olin Corporation for the construction/installation of BECO Multi-Micro Venturi Scrubber in series with a second stage packed column to be located at the Olin Corporation Complex in St. Marks, Wakulla County, Florida.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative determination (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapter 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within this time period constitutes a waiver of any right such person has 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 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 32399-2400. 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 for legal holidays, at:

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

Dept. of Environmental Regulation
Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

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 publication of this notice will be considered in the Department's final determination.

December 10, 1987 Ad No. C8640050

Copied: Ed Middlesworth - NW Dist.
Teresa Heron

12.28.87 (MP)

Inter Office Mail

file copy

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

Interoffice Memorandum

FOR ROUTING TO OTHER THAN THE ADDRESSEE

To: _____ Loctn: _____
To: _____ Loctn: _____
To: _____ Loctn: _____
From: _____ Date: _____

TO: Clair Fancy

FROM: Jack Preece Jack

DATE: December 11, 1987

SUBJECT: Comments on DRAFT Permit AC65-140731

I object to the third sentence of Specific Condition 2 and the last two sentences of Specific Condition 7. Please consider striking these sentences.

Verifying VOC emissions limitations based upon VOC inventory and material balance reports (24-hour) would be very difficult for the permittee and impossible for the district office to verify. It is suggested that surrogate parameters such as scrubber water flow rate shall be established during initial compliance testing. The monitoring and recording of surrogate parameter data should be established by written operation and maintenance instructions and logs.

Annual visible emissions tests have no purpose without a standard. Particulate emissions would be expected to be negligible, IPA emissions invisible and water emissions may be visible but non-polluting.

JP/jpl

cc: Mr. D. E. Findley - Olin

Copied: CHF-BT, Teresa Heron } 12.23.87

DER

DEC 22 1987

BAQM

12·23·87

~~CHF~~
~~BT~~ FYI

P 274 007 641

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P.O., State and ZIP Code St. Marks, FL 32355	
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PS Form 3800, June 1985 ☆ U.S.G.P.O. 1985-480-794

PS Form 3811, July 1983 447-845

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1. ☒ Show to whom, date and address of delivery.
2. ☐ Restricted Delivery.

3. Article Addressed to: Dick Myers
Manager Environmental Control
Olin Ordinance Corporation
Post Office Box 222
St. Marks, FL 32355

4. Type of Service:	Article Number
☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail	P 274 007 641

Always obtain signature of addressee or agent and **DATE DELIVERED.**

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DOMESTIC RETURN RECEIPT

Jill

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

December 3, 1987

Mr. Dick Myers
Manager Environmental Control
Olin Ordinance Corporation
Post Office Box 222
St. Marks, Florida 32355

Dear Mr. Myers:

In response to your letter dated November 2, 1987, we are attaching a copy of the two different Standard Industrial Classification Codes that may be applicable to your facility:

1) Major Group 34 - Fabricated Metals Products, Except Machinery and Transportation Equipment

   Industry Group No. 348 - Ordnance and Accessories, Except Vehicles and Guided Missiles

   Industry No. 3489 - Ordnance and Accessories, Not Elsewhere Classified

and

2) Major Group 28 - Chemicals and Allied Products

   Industry Group No. 289 - Miscellaneous Chemicals Products

   Industry No. 2892 - Explosives

In order to make the right classification of your facility, we request you quantify the potential emissions of all sources at your facility which have the same "Major Group" Standard Industrial Classification (SIC) Code, as described in those copies.

Please keep in mind that in a chemical complex, such as yours, different SICs codes will categorize your chemical complex in more than one facility. This facility category will affect the application of the Prevention of Significant Deterioration regulations.

Depending on the above analysis, your facility as a whole or each independent facility will be subject to the Prevention of Significant Deterioration (PSD) regulations, if the potential emission of all sources at the facility which have the same "Major Group" Standard Industrial Classification (SIC) Code is equal to or greater than 100 tons per year; and the facility belong to any of the facility categories listed in Table 500-1 Major Facility Categories, or if the net emission increase for a major facility is above the significant level Rule 17-2.500(2)(d)b, FAC and Rule 17-2.500(2)(e), FAC.

Otherwise, a facility will be considered major for purpose of PSD regulations, if the potential emission of all sources at the facility which have the same "Major Group" SIC code is equal or greater than 250 tons per year. Rule 17-2.500(2)(d)a., FAC or if the net emission increase for a major facility is above the significant level, Rule 17-2.500(2)(e), FAC.

Chapter 17-2, FAC, Table 500-1, lists as one of the 28 major facilities categories, all Chemical Process Plants (100 tons per year major facility). Basically, all sources under SIC Major Group 28 are considered a Chemical Process Plant.

Our current files show your facility, as a whole, is classified in Major Group 28, Chemicals and Allied products. Therefore, is a 100 tons per year major facility. This major group includes establishments producing basic chemicals, and establishments manufacturing products by predominantly chemical processes.

If you feel your facility has been incorrectly classified, please justify your position and let us know as soon as possible. Future reviews and applicable regulations will depend on the correct SIC classification.

If you have any questions, please call Bill Thomas, Chief Engineer or Teresa Heron, Review Engineer at (904)488-1344.

Sincerely,

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

CHF/TH/s

cc: J. Preece

Major GROUP 34 : Fabricated Metals Products, except Machinery and Transportation Equipment

Industry Group No. 347 | Industry No.

COATING, ENGRAVING, AND ALLIED SERVICES—Con.

3479 Coating, Engraving, and Allied Services, Not Elsewhere Classified—Con.

Painting (enameling and varnishing) of metal products, for the trade
Pan glazing, for the trade
Parkerizing, for the trade
Phosphate coating of metal and metal products, for the trade
Retinning of cans and utensils, not done in rolling mills
Rust proofing (hot dipping) of metals and formed products, for the trade
Sherardizing of metals and metal products, for the trade
Varnishing of metal products, for the trade

ORDNANCE AND ACCESSORIES, EXCEPT VEHICLES AND GUIDED MISSILES

3482 Small Arms Ammunition

Establishments primarily engaged in manufacturing ammunition for small arms having a bore of 30 mm. (or 1.18 inch) or less. Establishments primarily engaged in manufacturing ammunition, except for small arms, are classified in Industry 3483; those manufacturing blasting and detonating caps and safety fuses are classified in Industry 2892; and those manufacturing fireworks are classified in Industry 2899.

Ammunition and component parts, small arms: 30 mm. (or 1.18 inch) or less
Bullet jackets and cores, 30 mm. (or 1.18 inch) or less
Cartridge cases for ammunition, 30 mm. (or 1.18 inch) or less
Cartridges, 30 mm. (or 1.18 inch) or less
Cores, bullet: 30 mm. (or 1.18 inch) or less
Paper shells, 30 mm. (or 1.18 inch) or less
Pellets, ammunition: pistol and air rifle
Percussion caps, for ammunition of 30 mm. (or 1.18 inch) or less
Shells, small arms: 30 mm. (or 1.18 inch) or less
Shot, BB
Shot, lead
Shot, pellet
Shot, steel ammunition
Shotgun ammunition
Wads, ammunition: 30 mm. (or 1.18 inch) or less

3483 Ammunition, Except for Small Arms

Establishments primarily engaged in manufacturing ammunition, not elsewhere classified, or in loading and assembling ammunition more than 30 mm. (or more than 1.18 inch), including component parts. This industry also includes establishments primarily engaged in manufacturing bombs, mines, torpedoes, grenades, depth charges, chemical warfare projectiles, and their component parts. Establishments primarily engaged in manufacturing small arms ammunition are classified in Industry 3482; those manufacturing explosives are classified in Industry 2892; and those manufacturing military pyrotechnics are classified in Industry 2899.

Ammunition and component parts, more than 30 mm. (or more than 1.18 inch)
Ammunition loading and assembling plants
Arming and fusing devices for missiles
Bag loading plants, ammunition
Bomb loading and assembling plants
Bombcluster adapters
Bombs and parts
Boosters and bursters
Canisters, ammunition
Caps, bomb
Chemical warfare projectiles and components
Depth charges and parts (ordnance)
Detonators for ammunition more than 30 mm. (or more than 1.18 inch)
Detonators: mine, bomb, depth charge, and chemical warfare projectile
Fin assemblies, mortar: more than 30 mm. (or more than 1.18 inch)
Fin assemblies, torpedo and bomb
Fuses for ammunition more than 30 mm. (or more than 1.18 inch)
Fuses: mine, torpedo, bomb, depth charge, and chemical warfare projectile
Grenades and parts
Jet propulsion projectiles, complete
Loading and assembling bombs, powder bags, and shells: more than 30 mm. (or more than 1.18 inch)
Mines and parts (ordnance)
Missile warheads
Mortar shells, more than 30 mm. (or

Industry Group No. 348 — ORDNANCE AND ACCESSORIES, EXCEPT VEHICLES AND GUIDED MISSILES—Con.

3483 Ammunition, Except for Small Arms—Con.

more than 1.18 inch)
Primers for ammunition, more than 30 mm. (or more than 1.18 inch)
Projectile forgings, machined: for ammunition more than 30 mm. (or more than 1.18 inch)
Rockets (ammunition)
Shells, artillery: more than 30 mm. (or more than 1.18 inch)
Torpedoes and parts (ordnance)
Tracer igniters for ammunition more than 30 mm. (or more than 1.18 inch)

3484 Small Arms

Establishments primarily engaged in manufacturing small firearms having a bore 30 mm. (or 1.18 inch) or less, and parts for small firearms. Also included in this industry are establishments primarily engaged in manufacturing certain weapons more than 30 mm. which are carried and employed by the individual, such as grenade launchers and heavy field machine guns. Establishments primarily engaged in manufacturing artillery and mortars having a bore more than 30 mm. (or more than 1.18 inch), and component parts, are classified in Industry 3489.

Barrels, gun: 30 mm. (or 1.18 inch) or less
Carbines, 30 mm. (or 1.18 inch) or less
Carts, machine gun and machine gun ammunition
Clips, gun: 30 mm. (or 1.18 inch) or less
Cylinders and clips, gun: 30 mm. (or 1.18 inch) or less
Firearms, 30 mm. (or 1.18 inch) or less
Grenade launchers
Gun sights, except optical: 30 mm. (or 1.18 inch) or less
Guns, 30 mm. (or 1.18 inch) or less
Guns, dart: except toy
Guns: BB and pellet
Links, for ammunition 30 mm. (or 1.18 inch) or less
Machine gun belts, metallic: 30 mm. (or 1.18 inch) or less
Machine guns and parts, 30 mm. (or 1.18 inch) or less
Magazines, gun: 30 mm. (or 1.18 inch) or less
Mounts for guns, 30 mm. (or 1.18 inch) or less
Pistols and parts, except toy
Pyrotechnic pistols and projectors
Recoil mechanisms for guns, 30 mm. (or 1.18 inch) or less
Revolvers and parts
Rifles and parts, 30 mm. (or 1.18 inch) or less
Rifles, high compression pneumatic: 30 mm. (or 1.18 inch) or less
Rifles: BB and pellet
Rifles: pneumatic, spring loaded, and compressed air—except toy
Shotguns and parts
Submachine guns and parts

3489 Ordnance and Accessories, Not Elsewhere Classified

Establishments primarily engaged in manufacturing ordnance and accessories, not elsewhere classified, such as naval, aircraft, antiaircraft, tank, coast, and field artillery having a bore more than 30 mm. (or more than 1.18 inch), and components. Establishments primarily engaged in manufacturing small arms and parts 30 mm. (or 1.18 inch) or less are classified in Industry 3484; those manufacturing tanks are classified in Industry 3795; and those manufacturing guided missiles are classified in Industry Group 376.

Antisubmarine projectors (ordnance)
Antitank rocket launchers
Artillery parts for artillery more than 30 mm. (or more than 1.18 inch)
Artillery, more than 30 mm. (or more than 1.18 inch): aircraft, antiaircraft, field, naval, and tank
Barrels, gun: more than 30 mm. (or more than 1.18 inch)
Bofors guns
Cannons, more than 30 mm. (or more than 1.18 inch)
Carriages, gun: for artillery more than 30 mm. (or more than 1.18 inch)
Catapult guns
Depth charge release pistols and projectors
Flame throwers (ordnance)
Gun turrets and parts for artillery more than 30 mm. (or more than 1.18 inch)
Guns, more than 30 mm. (or more than 1.18 inch)
Howitzers, more than 30 mm. (or more than 1.18 inch)
Limbers, gun and caisson
Links for ammunition more than 30 mm. (or more than 1.18 inch)

Industry Group No. | Industry No.

348 ORDNANCE AND ACCESSORIES, EXCEPT VEHICLES AND GUIDED MISSILES—Con.

3489 Ordnance and Accessories, Not Elsewhere Classified—Con.

Livens projectors (ordnance)
Machine guns, more than 30 mm. (or more than 1.18 inch)
Mortars, more than 30 mm. (or more than 1.18 inch)
Oerlikon guns
Projectors: antisub, depth charge release, grenade, livens, and rocket
Recoil mechanisms for guns more than 30 mm. (or more than 1.18 inch)
Rifles, recoilless
Rocket launchers, hand-held
Smoke generators (ordnance)
Tampions for guns more than 30 mm. (or more than 1.18 inch)
Torpedo tubes (ordnance)

349 MISCELLANEOUS FABRICATED METAL PRODUCTS

3491 Industrial Valves

Establishments primarily engaged in manufacturing industrial valves. Establishments primarily engaged in manufacturing fluid power valves are classified in Industry 3492; those manufacturing plumbing fixture fittings and trim are classified in Industry 3432; and those manufacturing plumbing and heating valves are classified in Industry 3494.

Boiler gauge cocks
Compressed gas cylinder valve
Fire hydrant valves
Gas valves and parts, industrial
Pop safety valves, over 15 lbs. w.s.p.
Pressure valves, industrial: except power transfer
Steam traps, over 15 lbs. w.s.p.
Valves, automatic control: industrial, except fluid power
Valves, industrial: gate, globe, check, pop safety, and relief
Valves, nuclear
Valves, relief: over 15 lbs. w.s.p.
Valves, solenoid: except fluid power
Water works valves

3492 Fluid Power Valves and Hose Fittings

Establishments primarily engaged in manufacturing hydraulic and pneumatic valves, hose and tube fittings, and hose assemblies for fluid power systems. Establishments primarily engaged in manufacturing fluid power cylinders are classified in Industry 3593; those manufacturing fluid power pumps are classified in Industry 3594; and those manufacturing hydraulic intake and exhaust motor vehicle valves are classified in Industry 3592.

Control valves, fluid power: metal
Electrohydraulic servo valves, fluid power: metal
Hose fittings and assemblies, fluid power: metal
Hydraulic valves, including aircraft: fluid power—metal
Pneumatic valves, including aircraft: fluid power—metal
Pressure control valves, fluid power: metal
Solenoid valves, fluid power: metal
Tube fittings and assemblies, fluid power: metal
Valves, automatic control: fluid power—metal
Valves, hydraulic and pneumatic control: fluid power—metal

3493 Steel Springs, Except Wire

Establishments primarily engaged in manufacturing leaf springs, hot wound springs, and coiled flat springs. Establishments primarily engaged in manufacturing wire springs are classified in Industry 3495.

Automobile springs
Coiled flat springs
Flat springs, sheet or strip stock
Helical springs, hot wound: for railroad equipment and vehicles
Hot wound springs, except wire springs
Leaf springs: automobile, locomotive, and other vehicle
Railroad equipment springs
Steel springs, except wire
Torsion bar springs

Major Group 28.—CHEMICALS AND ALLIED PRODUCTS

The Major Group as a Whole

This major group includes establishments producing basic chemicals, and establishments manufacturing products by predominantly chemical processes. Establishments classified in this major group manufacture three general classes of products: (1) basic chemicals, such as acids, alkalies, salts, and organic chemicals; (2) chemical products to be used in further manufacture, such as synthetic fibers, plastics materials, dry colors, and pigments; and (3) finished chemical products to be used for ultimate consumption, such as drugs, cosmetics, and soaps; or to be used as materials or supplies in other industries, such as paints, fertilizers, and explosives. The mining of natural alkalies and other natural potassium, sodium, and boron compounds, of natural rock salt, and of other natural chemicals and fertilizers are classified in Mining, Industry Group 147. Establishments primarily engaged in manufacturing nonferrous metals and high-percentage ferroalloys are classified in Major Group 33; those manufacturing silicon carbide are classified in Major Group 32; those manufacturing baking powder, other leavening compounds, and starches are classified in Major Group 20; and those manufacturing artists' colors are classified in Major Group 39. Establishments primarily engaged in packaging, repackaging, and bottling of purchased chemical products, but not engaged in manufacturing chemicals and allied products, are classified in Wholesale or Retail Trade industries.

Industry Group No.	Industry No.	
281		INDUSTRIAL INORGANIC CHEMICALS

This industry group includes establishments primarily engaged in manufacturing basic industrial inorganic chemicals. Establishments primarily engaged in manufacturing formulated agricultural pesticides are classified in Industry 2879; those manufacturing medicinal chemicals, drugs, and medicines are classified in Industry Group 283; and those manufacturing soap and cosmetics are classified in Industry Group 284.

2812 Alkalies and Chlorine

Establishments primarily engaged in manufacturing alkalies and chlorine. Establishments primarily engaged in mining natural alkalies are classified in Mining, Industry 1474.

Alkalies, not produced at mines
Caustic potash
Caustic soda
Chlorine, compressed or liquefied
Potassium carbonate
Potassium hydroxide
Sal soda (washing soda)
Soda ash, not produced at mines
Sodium bicarbonate, not produced at mines
Sodium carbonate (soda ash), not produced at mines
Sodium hydroxide (caustic soda)
Washing soda (sal soda)

2813 Industrial Gases

Establishments primarily engaged in manufacturing industrial gases (including organic) for sale in compressed, liquid, and solid forms. Establishments primarily engaged in manufacturing fluorine and sulfur dioxide are classified in Industry 2819; those manufacturing household ammonia are classified in Industry 2842; those manufacturing other ammonia are classified in Industry 2873; those manufacturing chlorine are classified in Industry 2812; and those

Industry Group No. 287

AGRICULTURAL CHEMICALS—Con.

2879 Pesticides and Agricultural Chemicals, Not Elsewhere Classified—Con.

Cattle dips
Copper arsenate, formulated
DDT (insecticide), formulated
Defoliants
Elements, minor or trace (agricultural chemicals)
Exterminating products, for household and industrial use
Fly sprays
Fungicides
Growth regulants, agricultural
Herbicides
Household insecticides
Insect powder, household
Insecticides, agricultural
Lead arsenate, formulated
Lime-sulfur, dry and solution
Lindane, formulated
Moth repellants
Nicotine and salts
Nicotine bearing insecticides
Paris green (insecticide)
Pesticides, household
Phytoactin
Plant hormones
Poison: ant, rat, roach, and rodent—household
Pyrethrin bearing preparations
Pyrethrin concentrates
Rodenticides
Rotenone bearing preparations
Rotenone concentrates
Sheep dips, chemical
Sodium arsenite (formulated)
Soil conditioners
Sulfur dust (insecticide)
Thiocyanates, organic (formulated)
Trace elements (agricultural chemicals)
Xanthone (formulated)

Industry Group No. 289

MISCELLANEOUS CHEMICAL PRODUCTS

2891 Adhesives and Sealants

Establishments primarily engaged in manufacturing industrial and household adhesives, glues, caulking compounds, sealants, and linoleum, tile, and rubber cements from vegetable, animal, or synthetic plastics materials, purchased or produced in the same establishment. Establishments primarily engaged in manufacturing gelatin and sizes are classified in Industry 2899, and those manufacturing vegetable gelatin or agar-agar are classified in Industry 2833.

Adhesives
Adhesives, plastics
Caulking compounds
Cement (cellulose nitrate base)
Cement, linoleum
Cement, mending
Epoxy adhesives
Glue, except dental: animal, vegetable, fish, casein, and synthetic resin
Iron cement, household
Joint compounds
Laminating compounds
Mucilage
Paste, adhesive
Porcelain cement, household
Rubber cement
Sealing compounds for pipe threads and joints
Sealing compounds, synthetic rubber and plastics
Wax, sealing

2892 Explosives

Establishments primarily engaged in manufacturing explosives. Establishments primarily engaged in manufacturing ammunition for small arms are classified ir Industry 3482, and those manufacturing fireworks are classified in Industry 2899.

Amatol (explosives)
Azides (explosives)
Blasting powder and blasting caps
Carbohydrates, nitrated (explosives)
Cordeau detonant (explosives)
Cordite (explosives)
Detonating caps for safety fuses
Detonators (explosive compounds)
Dynamite
Explosive cartridges for concussion forming of metal
Explosive compounds
Explosives
Fulminate of mercury (explosive compounds)
Fuse powder
Fuses, safety
Gunpowder
High explosives
Lead azide (explosives)
Mercury azide (explosives)
Nitrocellulose powder (explosives)
Nitroglycerin (explosives)
Nitromannitol (explosives)
Nitrostarch (explosives)
Nitrosugars (explosives)
Pentolite (explosives)
Permissible explosives
Picric acid (explosives)
Powder, explosive: pellet, smokeless

Industry Group No. 289

MISCELLANEOUS CHEMICAL PRODUCTS—Con.

2892 Explosives—Con.

and sporting
RDX (explosives)
Squibbs, electric
Styphnic acid
TNT (trinitrotoluene)
Tetryl (explosives)
Well shooting torpedoes (explosives)

2893 Printing Ink

Establishments primarily engaged in manufacturing printing ink, including gravure ink, screen process ink, and lithographic ink. Establishments primarily engaged in manufacturing writing ink and fluids are classified in Industry 2899, and those manufacturing drawing ink are classified in Industry 3952.

Bronze ink
Flexographic ink
Gold ink
Gravure ink
Ink, duplicating
Letterpress ink
Lithographic ink
Offset ink
Printing ink: base or finished
Screen process ink

2895 Carbon Black

Establishments primarily engaged in manufacturing carbon black (channel and furnace black). Establishments primarily engaged in manufacturing bone and lamp black are classified in Industry 2816.

Carbon black
Channel black
Furnace black

2899 Chemicals and Chemical Preparations, Not Elsewhere Classified

Establishments primarily engaged in manufacturing miscellaneous chemical preparations, not elsewhere classified, such as fatty acids, essential oils, gelatin (except vegetable), sizes, bluing, laundry sours, writing and stamp pad ink, industrial compounds, such as boiler and heat insulating compounds, metal, oil, and water treating compounds, waterproofing compounds, and chemical supplies for foundries. Establishments primarily engaged in manufacturing vegetable gelatin (agar-agar) are classified in Industry 2833; those manufacturing dessert preparations based on gelatin are classified in Industry 2099; those manufacturing printing ink are classified in Industry 2893; and those manufacturing drawing ink are classified in Industry 3952.

Acid resist for etching
Acid, battery
Anise oil
Antifreeze compounds, except industrial alcohol
Bay oil
Binders (chemical foundry supplies)
Bluing
Boiler compounds, antiscaling
Bombs, flashlight
Caps, for toy pistols
Carbon removing solvent
Chemical cotton (processed cotton linters)
Chemical supplies for foundries
Citronella oil
Concrete curing compounds (blends of pigments, waxes, and resins)
Concrete hardening compounds
Core oil and binders
Core wash
Core wax
Correction fluid
Corrosion preventive lubricant, synthetic base: for jet engines
Deicing fluid
Desalter kits, sea water
Dextrine sizes
Drilling mud
Dyes, household
Essential oils
Ethylene glycol antifreeze preparations
Eucalyptus oil
Exothermics for metal industries
Facings (chemical foundry supplies)
Fatty acids: margaric, oleic, and stearic
Fire extinguisher charges
Fire retardant chemical preparations
Fireworks
Flares
Fluidifier (retarder) for concrete
Fluorescent inspection oil
Fluxes: brazing, soldering, galvanizing, and welding
Foam charge mixtures
Food contamination testing and screening kits
Foundry supplies, chemical preparations
Frit

Industry Group No. 289 — MISCELLANEOUS CHEMICAL PRODUCTS—Con.

Industry No. 2899 — Chemicals and Chemical Preparations, Not Elsewhere Classified—Con.

Fuel tank and engine cleaning chemicals, automotive and aircraft
Fusees: highway, marine, and railroad
Gelatin capsules, empty
Gelatin: edible, technical, photographic, and pharmaceutical
Glue size
Grapefruit oil
Grouting material (concrete mending compound)
Gum sizes
Gun slushing compounds
Heat insulating compounds
Heat treating salts
Hydrofluoric acid compound, for etching and polishing glass
Igniter grains, boron potassium nitrate
Incense
Industrial sizes
Insulating compounds
Jet fuel igniters
Laundry sours
Lemon oil
Lighter fluid
Magnetic inspection oil and powder
Margaric acid
Metal drawing compound lubricants
Metal treating compounds
Military pyrotechnics
Napalm
Oil treating compounds
Oleic acid (red oil)
Orange oil
Orris oil
Ossein
Oxidizers, inorganic
Packers' salt
Parting compounds (chemical foundry supplies)
Patching plaster, household
Penetrants, inspection
Peppermint oil
Plating compounds
Pyrotechnic ammunition: flares, signals, flashlight bombs, and rockets
Railroad torpedoes
Red oil (oleic acid)
Rifle bore cleaning compounds
Rosin sizes
Rubber processing preparations
Rust resisting compounds
Salt
Signal flares, marine
Sizes: animal, vegetable, and synthetic plastics materials
Sodium chloride, refined
Soil testing kits
Spearmint oil
Spirit duplicating fluid
Stearic acid
Stencil correction compounds
Tints and dyes, household
Torches (fireworks)
Vegetable oils, vulcanized or sulfurized
Water treating compounds
Water, distilled
Waterproofing compounds
Wintergreen oil
Wood, plastic
Writing ink and fluids

Major Grou

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purchased materia
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byproducts are cla

Industry Group No. 291 — PE

Industry No. 2911 — Pet

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Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☒ Show to whom, date and address of delivery.
2. ☐ Restricted Delivery.

3. Article Addressed to:
Mr. D. E. Findley, Dir.
St. Marks Operation
Olin Corporation
P.O. Box 222
St. Marks, FL 32355

4. Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Article Number
P 274 007 643

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
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6. Signature – Agent
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7. Date of Delivery
12/4/87

8. Addressee's Address *(ONLY if requested and fee paid)*

DOMESTIC RETURN RECEIPT

P 274 007 643

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
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Street and No. Post Office Box 222	
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Postage	$
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* U.S.G.P.O. 1985-480-794

PS Form 3800, June 1985

file

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

December 2, 1987

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. D. E. Findley, Director
St. Marks Operation
Olin Corporation
Post Office Box 222
St. Marks, Florida 32355

Dear Mr. Findley:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit to construct/insall a BECO Multi-Micro Venturi Scrubber in series with a second stage packed column to be located in at the Olin Corporation Complex, in St. Marks, Wakulla County, Florida.

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, or call him at (904) 488-1344.

Sincerely,

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

CHF/bm

Attachments

cc: Ed Middleswart, Northwest Dist.
A. F. McElfresh, P.E.

State of Florida
Department of Environmental Regulation
Notice of Intent

The Department gives notice of its intent to issue a permit to Olin Corporation for the construction/installation of BECO Multi-Micro Venturi Scrubber in series with a second stage packed column to be located at the Olin Corporation Complex in St. Marks, Wakulla County, Florida.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative determination (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 Department's Office of General Counsel, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within this time period constitutes a waiver of any right such person has 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 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 32399-2400. 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 32399-2400

Dept. of Environmental Regulation
Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

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.

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:

Olin Corporation
Post Office Box 222
St. Marks, Florida 32355

DER File Nos. AC 65-140731

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit (copies 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, Olin Corporation applied on October 16, 1987, to the Department of Environmental Regulation for a permit to construct/install a BECO Multi-Micro Venturi Scrubber in a series with a second stage packed column to be located at the Olin Corporation Complex, in St. Marks, Wakulla County, Florda.

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 was needed for the proposed work.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, FAC, you (the applicant) are required to publish at your own expense the enclosed Notice of Proposed Agency Action on permit application. The notice must be published one time only in a section of a major local newspaper of general circulation in the county in which the project is located and within thirty (30) days from receipt of this intent. Proof of publication must be

provided to the Department within seven days of publication of the notice. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits.

The Department will issue the permit with the attached conditions unless 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. Petitions must comply with the requirement of Florida Administrative Code Rules 17-103.155 and 28-5.201 (copies enclosed) and be filed with (received by) the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant must be filed within fourteen (14) days of receipt of this intent. Petitions filed by other persons must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this intent, whichever first occurs. 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, concerning the subject permit applications. Petitions which are not filed in accordance with the above provisions will be dismissed.

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:

Ed Middleswart, NW Dist.
A. F. McElfresh, P.E.

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 12-3-87.

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 J. Wise 12-3-87
Clerk Date

Technical Evaluation
and
Preliminary Determination

Olin Corporation
Wakulla County

North Sweetie Barrel Scrubber with Exhaust Blower
Permit No. AC 65-140731

APIS No. 10TLH65000301

Bureau of Air Quality Management
Central Air Permitting
New Source Review Section

December 3, 1987

I. NAME AND ADDRESS OF APPLICANT

Olin Corporation
P. O. Box 222
St. Marks, Florida 32355

II. REVIEWING AND PROCESS SCHEDULE

Date of Receipt of Application: October 16, 1987

Completeness Review:

Pre-submission meeting was held on October 6, 1987 between Olin Corporation's and Department's representatives

Application's Completeness Date: October 16, 1987

III. FACILITY INFORMATION

Facility Location

The proposed facility will be located at U.S. 98 and S.R. 363 (Olin Corporation) in St. Marks, Wakulla County, Florida. The latitude and longitude of this site are 30°, 11', 07" North and 84°, 13', 30" West, respectively.

Standard Industrial Classification

The Olin Corporation facility is classified as follows:

Major Group 28: Chemicals and Allied Products
Group 289: Miscellaneous Chemical Products
Industry No. 2892: Explosives

Facility Category

Olin Corporation is classified as a major emitting facility for sulfur dioxide (SO_2). Permitted SO_2 emissions are 245 tons per year. The proposed project to replace the existing glazing drum (Sweetie Barrel) exhaust air scrubber, will increase the overall VOC emissions at Olin Corporation's complex by 15.63 tons per year.

IV. PROCESS DESCRIPTION

Powder is pneumatically conveyed from a Packout Area to the Sweetie Barrel drum. Graphite is added to the powder in the drum. Air is exhausted from the drum by a fan which draws the exhaust through the scrubber. The powder is heated in the drum with hot water at 65°C in the drum jacket. Surface coating slurry or solution (using isopropyl alcohol, IPA, as the carrier)

is slowly injected into the powder. The injection line is cleaned by flushing with IPA into the drum. The powder and coating slurry or solution are then tumbled in the drum smearing the coating on the surface of the powder as the IPA is evaporated and exhausted through the scrubber system. After finishing the required tumble time, more graphite is added. The powder is then cooled with process water in the jacket. After cooling the powder is returned to the Packout Area by being dumped and then pneumatically conveyed. The exhaust fan is then shut down.

The new scrubber will use single-pass process water for scrubbing in order to get the required efficiency. The IPA-laden water will be discharged from the bottom of the scrubber to the area sump, from which it is then pumped to the Wastewater Treatment Plant. Scrubber water flow and exhaust air flow will be monitored to insure that scrubber efficiency is maintained.

One increment of powder will be coated at a time. The increment may be 1080, 1260, or 1440, pounds. The 1080-pound increment utilizes the most IPA and is used as the basis for determining both instanteous and yearly IPA emissions. The increment cycle time for a 1080-pound increment may be as short as three (3) hours and the IPA removal period as short as 68 minutes.

V. RULE APPLICABILITY

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

The proposed facility, is located at the Olin Corporation complex in an area (Wakulla County) currently designated attainment for all criteria pollutants in accordance with Florida Administrative Code Rule 17-2.420. This facility site is close to the St. Marks National Wildlife Refuge (Class I area).

The proposed project is exempt from provisions of Rule 12-2.500, Prevention of Significant Deterioration because the increase of emissions do not exceed the significant emission rate (Table 500-2).

The proposed project shall be permitted under Rule 17-2.520, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements.

The proposed facility shall comply with Rule 17-2.620(1) and (2) General Pollutant Emission Limiting Standard.

For a future modification, this facility (Olin Corporation) may be subject to a PSD review if the net emissions

increase of any criteria pollutant is equal to or greater than the significant emissions rate listed in Table 500-2.

VI. SOURCE IMPACT ANALYSIS

VI. 1 The operation of this facility will produce emissions of isopropyl alcohol (IPA) and particulate matter to the atmosphere.

The amount of solvent used during the process and its emission is limited by permit conditions. This permitted emission is in compliance with all applicable requirements of Chapter 17-2, Florida Administrative Code.

Table 1 summarizes potential to emit of all pollutants used in this process.

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 detrimental impact on Florida's ambient air quality standards.

VI. 3 Air Toxics Information

Currently, the Department is developing acceptable air emissions levels for toxic substances. Specifically, sources classified as Category A (high and moderate toxicity air contaminant) Category B (low toxicity air contaminant).

Isopropyl alcohol, is considered a Category A compound (moderately toxic air contaminant). The Threshold Limit Value (TLV's) are 400 ppm and 980 mg/m^3. The minimum safety factor than can be used for this compound is 1/100 of its TWA-TLV for a 8 hours per day operation or 1/420 of its TWA for a 168 hours per week operation.

VII. CONCLUSION

Based on a review of the data submitted by Olin, the Florida Department of Environmental Regulation (FDER) concludes that compliance with all applicable state air quality regulations will be achieved, provided certain specific conditions are met. The impact of installing a new glazing drum air scrubber at the Olin Corporation plant will not cause or contribute to a violation of any ambient air quality standards.

Table 1

Allowable Emissions

Contaminant	VOC Emissions lb/hr	ton/yr
Isopropanol (IPA) Vapors	13.5	21.40

Powder Dust & Graphite	PM Emissions lb/hr	ton/yr
	0.01	0.04

This proposed scrubber will replace existing scrubber which is currently permitted by AO 65-79867.

The net increase of emissions from this source is 15.63 tons per year (VOC).

	TPY
Existing Unit (AO 65-79867)	5.7
New Unit (AC 65-140731)	21.40
Net Increase	15.63

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

PERMITTEE:
Olin Corporation
P. O. Box 222
St. Marks, Florida 32355

Permit Number: AC 65-140731
Expiration Date: July 31, 1989
County: Wakulla
Latitude/Longitude: 30° 10' 48"N/
84° 13' 24" W
Project: Installation of a North Sweetie Barrel with Exhaust Blower

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 construction/installation of BECO Multi-Micro Venturi Scrubber in series with a second stage packed column to be located at the Olin Corporation Complex, in St. Marks, Wakulla County, Florida.

Attachments:

1. Application to construct Air Pollution Sources, DER Form 17-1.122(16) dated October 13, 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.

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.

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 noncompliance 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.

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. Total volatile organic emissions (VOC) from this source shall not exceed 13.5 lbs/hr and 21.4 tons/year.

2. Compliance with VOC emission standard will be determined by Method 25 or other methods approved by the Department. Concentration data and calculated mass emission rate will be reported. Thereafter, compliance with the VOC emission limitations will be maintained based on the VOC inventory. The District office shall be notified 15 days prior to test.

SPECIFIC CONDITIONS:

3. No objectionable odors are allowed from this facility.

4. This permit replaces current operation permit No. AO 65-79867.

5. 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 date of the construction permit and submit a new schedule and request for an extension of the construction permit. (Rule 17-4.09 Florida Administrative Code)

6. 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 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. (Rule 17-4.22 and 17-4.23, Florida Administrative Code.)

7. Upon obtaining an operating permit, the permittee will be required to submit annual reports on the actual operation and emissions of the facility. Annual material balance reports (24-hour) shall be required and sent to the Department's district office to assess emissions and maintain VOC inventory. Visible emissions test shall be performed on an annual basis.

8. 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 can take up to 90 days to process a complete application. (Rule 17-4.10 Florida Administrative Code)

PERMITTEE:
Olin Corporation

Permit Number: AC 65-140731
Expiration Date: July 31, 1989

Issued this_____day of_____,
19__.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

_____
Dale Twachtmann, Secretary

PM
4 Nov. 1987
St. Marks, FL

file copy

Olin
ORDNANCE

ST. MARKS OPERATIONS

November 2, 1987

Claire Fancy, P.E.
Bureau of Air Quality Management
State of FL, Dept. of Env. Regulation
Twin Towers Office Building
2600 Blairstone Road
Tallahassee, Florida 32301-8241

Re: Future PSD Reviews

Dear Mr. Fancy:

After our pre-application submission meeting with Mr. Bill Thomas and Ms. Theresa Heron, we were more than a little confused about whether 100 tons of total pollutants or 250 tons of total pollutants triggered the PSD review. On a previous potential submission, you agreed that "preconstruction ambient air monitoring, as well as other PSD new source review requirements will not be required if emissions of all pollutants from your existing facility at St. Marks are limited to less than 250 tons per year and the proposed modification will not result in an increase in emissions from the facility of 250 tons per year of any pollutant." (I am enclosing a copy of your letter.)

It is relatively simple for Olin to control emissions to a total of less than 250 tons by the use of more 1% sulfur bearing oil in our steam generators. In fact, in 1986, our emissions for the three permitted sources were as follows:

A065-113388 - 212.6 Tons SO_2
A065-79867 - 5.77 Tons VOC
A065-114702 - NIL

In our current application for a new scrubbing system at the Glazing Drum we project a maximum of 21.4 tons/yr of VOC, and this replaces the actual usage of 5.77 tons/yr VOC in 1986. We have also added the CCC production permit, A065-136176 at 12.23 tons/yr VOC and a Salt Coater A065-136175 at 12.9 tons/yr VOC. Assuming we use the maximum allowed for all VOC permits, emissions would be as follows:

Glazing Drum - 21.40
CCC - 12.23
Salt Coater - 12.90
TOTAL ALLOWED 46.53 tons VOC/yr

DER
NOV 5 1987
BAQM

A DIVISION OF OLIN DEFENSE SYSTEMS GROUP
P.O. BOX 222, ST. MARKS, FLORIDA 32355 • (904) 925-6111 • TELEX 4750119 OLIN UT
OLIN CORPORATION

We could then limit SO_2 emissions from the boilers to 200 tons/yr and stay well under the 250 tons/yr.

I would appreciate a review of this situation and an opinion of just what will trigger a PSD for our St. Marks facility based on your interpretation of the regulations. I also need a determination of the actual steps involved in a PSD review with an approximate time table for each step. As you can understand, this information is critical to Olin's financial and project planning.

We would certainly appreciate a response to these questions as soon as is reasonably possible.

Thanks,

Dick
D. Myers
Manager, Environmental Control

DM/jah

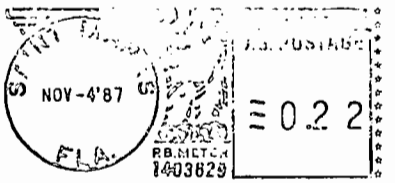
Enclosures

cc: Mr. Bill Thomas

Copied: CHF/BT
Teresa Heron
Ed. Middleswart - NW Dist } 11/6/87

Olin

St. Marks, Florida 32355



Mr. Claire Fancy, P.E.
Bureau of Air Quality Management
State of FL, Dept. of Env. Regulation
Twin Towers Office Building
2600 Blairstone Road
Tallahassee, FL 32301-8241

cc: Dick Myers

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

March 25, 1982

Mr. D. E. Findley, Director
Powder Operations
Olin Corporation
St. Marks, Florida 32355

Dear Mr. Findley:

We concur with your understanding of the prevention of significant deterioration (PSD) requirements of Florida Administrative Code Rule 17-2.500 as you outlined them in your letter to me of March 19, 1982. Specifically, we agree that preconstruction ambient air monitoring, as well as other PSD new source review requirements, will not be required if emissions of all pollutants from your existing facility at St. Marks are limited to less than 250 tons per year and the proposed modification will not result in an increase in emissions from the facility of 250 tons per year of any pollutant.

We also agree that the air quality issues involved in locating a source in close proximity to a Class I Area can be complex, and we look forward to working with you and your staff to insure that your permit application is complete and acceptable.

Sincerely,

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

CHF/LG/bjm

cc: T. Moody, Northwest District

RECEIVED
MAR 30 1982
D.E. FINDLEY

method 18 - Measurement of Benzene Organic Compounds Emissions by Gas Chromatography. 48 FR 48344

will be adopted April 26, 77

Receipt # 76186
AC 65-140731
$100.00

2069

Olin
ORDNANCE

ST. MARKS OPERATIONS

October 13, 1987

Mr. C. H. Fancy, P.E., Deputy Chief
Bureau of Air Quality Management
State of Florida, Dept. of Env. Regulation
Twin Towers Office Building
2600 Blairstone Road
Tallahassee, Florida 32301-8241

Re: Enclosed Construction Permit Application for
Glazing Drum/Air Scrubber

Dear Mr. Fancy:

Our Glazing Drum (Sweetie Barrel) exhaust air scrubber is currently permitted by A065-79867, which allows Olin to add a Vinsol surface deterrent coating to some propellants. This system is very efficient for particulate removal, but not for Isopropyl Alcohol (IPA) vapors. Our production schedules are now going to require additional surface coatings along with the current need for Vinsol coatings, and these coatings will be added to the propellant in the Glazing Drum in either an IPA solution or slurry. In either case, the temperature inside the Glazing Drum will be raised by addition of hot water to the drum jacket. The IPA will then be vaporized and passed through the air scrubber. Because of the inefficiencies of the present system, Olin proposes to replace the existing scrubber with a more efficient one.

Enclosed, please find six (6) copies of our Construction Permit Application along with the required application fee of $100. Since draft copies of this application were reviewed by Jack Preece, Theresa Heron and Bill Thomas of FDER and a pre-submission meeting was held with Ms. Heron and Mr. Thomas and Mr. Carroll and Mr. Myers of Olin Corporation, we are confident you will find this application complete.

If there are any questions, however, please contact the writer by letter or Messrs. Carroll or Myers by phone at (904)925-6111.

Sincerely,

D. E. Findley, Director
St. Marks Operations

DEF/RLM/jah
RLM

Enclosures

Copied: Ed Middlemart - NW Dist.

001031

RECEIVED
DER - MAIL ROOM
1987 OCT 16 AM 10: 39

A DIVISION OF OLIN DEFENSE SYSTEMS GROUP
P.O. BOX 222, ST. MARKS, FLORIDA 32355 • (904) 925-6111 • TELEX 4750119 OLIN UI
OLIN CORPORATION

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Glazing Drum/Air Scrubber [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: Olin Corporation COUNTY: Wakulla

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) North Sweetie Barrel/Scrubber with Exhaust Blower

SOURCE LOCATION: Street Interstate U.S. 98 & S.R. 363 City St. Marks

UTM: East 767389 North 3341808

Latitude 30 ° 10 ' 48 "N Longitude 84 ° 13 ' 24 "W

APPLICANT NAME AND TITLE: D. E. Findley, Director, St. Marks Operations

APPLICANT ADDRESS: Post Office Box 222, St. Marks, Florida 32355

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Olin 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: D E Findley

D. E. Findley, Director, St. Marks Operations
Name and Title (Please Type)

Date: 10/13/87 Telephone No. (904)925-6111

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 _____

A. F. McElfresh
Name (Please Type)

Olin Corporation
Company Name (Please Type)

Post Office Box 222, St. Marks, FL 32355
Mailing Address (Please Type)

Florida Registration No. 12892 Date: 9/17/87 Telephone No. (904)925-6111

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.

See Attachment II - Process Description (North Sweetie Barrel)

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

Start of Construction Feb., 1988 Completion of Construction November, 1988

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.)

Scrubber	$21,200	Installation-Mechanical	$9,448
Blower	3,949	Installation-Electrical	3,294
Instruments & Equipment	3,784	Engineering	4,218
		TOTAL	$45,893

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

Construction Permit AC65-64760

Operation Permit A065-79867

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 50 ;

if power plant, hrs/yr NA ; if seasonal, describe: NA

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? No

   a. If yes, has "offset" been applied? -

   b. If yes, has "Lowest Achievable Emission Rate" been applied? -

   c. If yes, list non-attainment pollutants. -

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. No

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII. No

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? No

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? No

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 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		
NA				

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

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

2. Product Weight (lbs/hr): NA

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/hr	T/yr	
Isopropanol Vapors	13.5	21.4	-	-	67.4	107.0	D-16-9-5 Sht 1, Rev. 10
Powder Dust & Graphite	0.009	0.038	-	-	0.299	1.25	D-16-9-5 Sht 1, Rev. 10

[1] See Section V, Item 2.

[2] Reference 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)

[3] Calculated from operating rate and applicable standard.

[4] Emission, 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 (minimum)	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
BECO Multi-MicroVenturi	Isopropyl Alcohol Vapors	80%	-	*
(MMV) Venturi Scrubber in series with a	Powder Dust & Graphite	92%	$\geq$ 4 micron	*
second stage packed	"	66%	$\geq$ 2 micron	*
column, Model	"	41%	$\geq$ 1 micron	*
* Vendor Guarantee				

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
NA			

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

Fuel Analysis:

Percent Sulfur: NA Percent Ash: NA

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ 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 NA Maximum NA

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

80% of the isopropanol will be absorbed by the scrubber water and routed to the waste treatment plant. There will also be very small quantities of powder and graphite in the scrubber water discharge. Anticipated flow from the scrubber is approximately 29 gpm.

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

Stack Height: Discharge to Floor Sump ft. Stack Diameter: 1'-7/16" x 0'-11-1/8" ft.

Gas Flow Rate: 3340 ACFM 3340 DSCFM Gas Exit Temperature: Ambient °F.

Water Vapor Content: Saturated % Velocity: 57.9 FPS

SECTION IV: INCINERATOR INFORMATION

Not Applicable

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 _____

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

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

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 Diamter: _____ 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.):

_____

_____

_____

_____

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 [X] No

Contaminant	Rate or Concentration
N/A	

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

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:

[1]Explain method of determining efficiency.
[2]Energy 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.
[2]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:

[1]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 N/A

1. _____no. sites _____ TSP _____( ) SO^{2}* _____ 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.

APPENDICES

OLIN ORDNANCE
ST. MARKS OPERATIONS
A DIVISION OF OLIN DEFENSE SYSTEMS GROUP

The Olin Corporation facility at St. Marks produces BALL POWDER® propellant for small and intermediate caliber ammunition. The basic raw material for the manufacture of this propellant is nitrocellulose. Part of the nitrocellulose is purchased from an outside vendor and the rest is obtained by recovering it from surplus smokeless powder propellants by extraction of non-nitrocellulose materials with a solvent, benzene, in the single-base extraction facility. In addition, off-specification BALL POWDER® propellants are processed to recover nitrocellulose by extraction of non-nitrocellulose materials with benzene in the double-base extraction facility. The waste residue from the extraction operations contains some or all of the following: benzene, di-n-butyl phthalate, dinitrotoluene, diphenylamine and nitroglycerine. These waste residues are disposed of by incineration in our hazardous waste incinerator.

The purchased and recovered nitrocellulose are both processed to form a lacquer by dissolving in ethyl acetate in a batch-operated lacquer make-up step. This lacquer is continuously processed into single-base, hardened spherical grains in the graining step. The aqueous solution used for suspension in the graining step contains bone glue and sodium sulfate which serve specific functions in grain control. The ethyl acetate used to form the lacquer is removed by distillation and recovered by condensation for re-use in the lacquer make-up step. The hardened grains are screened in Size Separation to segregate the grains into specific granulation ranges for further processing.

The next step is the coating operation in which single-base grains are processed, batch-wise, to incorporate nitroglycerine, followed in some cases by the addition of a deterrent for the purpose of energy potential modification and burning rate control. The carrying solvent, ethyl acetate for nitroglycerine, is removed by distillation, and recovered for re-use. Some of these coated powders require rolling to change the surface area and to further modify the burning rate. This is done in the rolling step by flowing the double-base grains in a water slurry between two opposing steel rolls.

The propellant is then dried in continuous flow dryers in which the propellant is contacted with hot air. Graphite is added during the drying operation for static control and improved flow characteristics.

Some powders receive surface coatings for control of ignition and as a flash suppressant. This coating is applied continuously in a rotating drum by the addition of a slurry using isopropyl alcohol as the carrier. In the Sweetie Barrel, a hot water jacket is used to evaporate the alcohol.

The propellant is then blended to meet final ballistic specifications and packed out ready for shipment.

All heat applied throughout the process is provided by steam from two Cleaver Brooks boilers. The boilers are fired with #6 Fuel Oil.

All waste waters from the plant are treated through a 786,000 gpd activated sludge waste treatment facility.

NORTH SWEETIE BARREL

PROCESS DESCRIPTION

Surface coating in the North Sweetie Barrel is performed as described below:

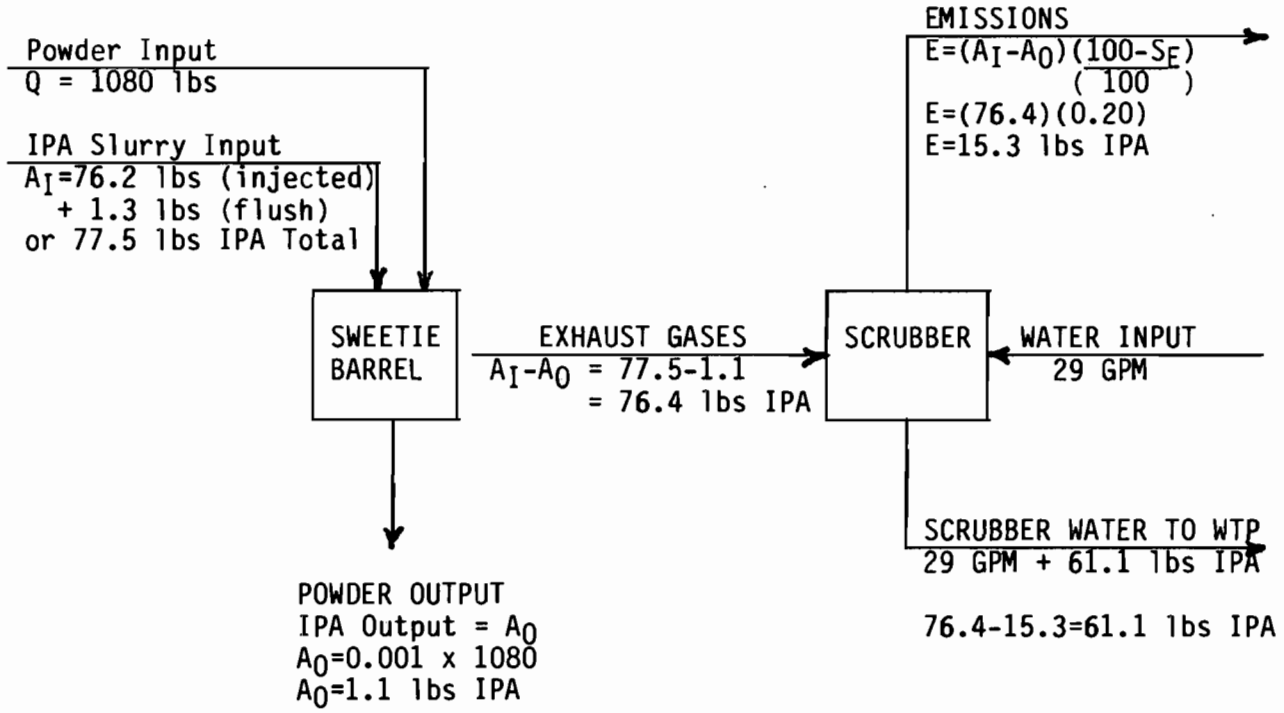
Powder is pneumatically conveyed from a Packout Area to the Sweetie Barrel drum. Graphite is added to the powder in the drum. Air is exhausted from the drum by a fan which draws the exhaust through the scrubber. The powder is heated in the drum with hot water at 65°C in the drum jacket. Surface coating slurry or solution (using isopropyl alcohol, IPA, as the carrier) is slowly injected into the powder. The injection line is cleaned by flushing with IPA into the drum. The powder and coating slurry or solution are then tumbled in the drum smearing the coating on the surface of the powder as the IPA is evaporated and exhausted through the scrubber system. After finishing the required tumble time, more graphite is added. The powder is then cooled with process water in the jacket. After cooling the powder is returned to the Packout Area by being dumped and then pneumatically conveyed. The exhaust fan is then shut down.

The new scrubber will use single-pass process water for scrubbing in order to get the required efficiency. The IPA-laden water will be discharged from the bottom of the scrubber to the area sump, from which it is then pumped to the Wastewater Treatment Plant. Scrubber water flow and exhaust air flow will be monitored to insure that scrubber efficiency is maintained.

One increment of powder will be coated at a time. The increment may be 1080, 1260, or 1440 pounds. The 1080-pound increment utilizes the most IPA and is used as the basis for determining both the instantaneous and yearly IPA emissions. The increment cycle time for a 1080-pound increment may be as short as three (3) hours and the IPA removal period as short as 68 minutes.

IPA MATERIAL BALANCE
(Per Increment Basis)

SCHEMATIC DIAGRAM



EMISSION CALCULATIONS

Below are the calculations for determination of emissions for isopropyl alcohol (IPA) and for particulates from the operation of surface coating BALL POWDER® propellant in the St. Marks North Sweetie Barrel facility:

E = IPA emissions, tons per year

A_I = IPA input to Sweetie Barrel, pounds per increment

A_O = Residual IPA in powder after surface coating, pounds per increment

$S_E = 80\%$ = Scrubber efficiency for absorption of IPA vapors from Sweetie Barrel exhaust gases.

N = Maximum number of increments of powder than can be processed in a year

R_{MAX} = Maximum IPA emissions, pounds per hour

T = 68 minutes = Minimum cycle time for IPA removal

T^1 = 3 hours = Minimum total cycle time for surface coating one increment

Q = 1080 lbs = Increment size

C = 0.1% by weight = Concentration of IPA in powder after surface coating.

1. Maximum Annual IPA Emissions

A_I = 76.2 lbs. (injected) + 1.3 lbs (flush)
A_I = 77.5 lbs/increment

A_0 = QC, lbs/increment
A_0 = 1080 lbs x 0.001
A_0 = 1.1 lbs/increment

N = (24 hrs/T[1] hrs/increment) x (350 days/year) = increments/year
N = 24/3 x 350
N = 2800 increments/year

$$E = \frac{(A_I - A_0)(\frac{100-S_E}{100})(N)\text{ lbs/year}}{2000\text{ lbs/ton}}, \text{ tons/year}$$

$$E = \frac{(77.5-1.1)(\frac{100-80}{100})(2800)}{2000}$$

E = 21.4 tons per year

2. Maximum IPA Emission Rate

$$R_{MAX} = \frac{(A_I - A_0)(\frac{100-S_E}{100})}{T}, \text{ lbs/hr}$$

$$R_{MAX} = \frac{(77.5-1.1)(0.2)}{68/60}$$

R_{MAX} = 13.4 lbs per hour

3. Potential IPA Emissions (w/o controls)

$$E = \frac{(A_I - A_0)(N)}{2000}, \text{ tons/year}$$

$$E = \frac{(77.5-1.1)(2800)}{2000}$$

E = 107.0 tons per year

$$R_{MAX} = \frac{(A_I - A_0)}{T}, \text{ lbs/hour}$$

$$RMAX = \frac{(77.5-1.1)\text{lbs/increment}}{(68\text{ min}/60\text{ min/hr})/\text{increment}}$$

R_{MAX} = 67.4 lbs per hour

4. Maximum Particulate Emissions Rate

A test was made on December 5, 1983 on the existing Sweetie Barrel scrubber which is specifically designed for particulate removal. The particulate removal rate was 0.009 pounds per hour. (Particulates consisted of BALL POWDER® dust and graphite. It was not possible to differentiate between them due to the small size of the sample collected, 0.005 grams.)

The IPA scrubber will maintain the 0.009 pound per hour rate, maximum.

5. Annual Particulate Emissions

$$\frac{0.009 \text{ lbs/hr}) \times (3 \text{ hrs/increment}) \times (2800 \text{ increments/yr})}{2000 \text{ lbs/ton}}$$

= 0.038 tons per year

6. Particulate Emissions Without Control

Estimates for particulate emissions without controls was based on powder losses of 0.003% observed in pneumatic conveying of BALL POWDER®. This would be considered to be on the high side for the Sweetie Barrel operation.

Powder Emission Rate = 1080 lbs/increment x 0.003%
= 0.0324 lbs/increment
= 0.0108 lbs/hr of powder over three-hour cycle.

A 0.1% retention of graphite on the powder is required by quality specifications. Approximately 20% of the graphite added adheres to the powder. Approximately 20% of the graphite that does not adhere to the powder is exhausted to the scrubber.

Graphite Retained on Powder = 1080 lbs/increment x 0.001
= 1.08 lbs/increment

Total Graphite Added = 1.08/.2 = 5.4 lbs/increment

Graphite Added but Not Retained on Powder = 5.4 - 1.08 = 4.32 lbs/incr.

Graphite Emission Rate = 4.32 x 0.2 = 0.864 lbs/increment
= 0.288 lbs/hr over three-hour cycle

Particulate Emissions = 0.0108 + 0.288 = 0.2988 lbs/hr

$$\text{Annual Particulate Emissions} = \frac{(0.0324 + 0.864 \text{ lbs/increment})(2800 \text{ incr.})}{2000 \text{ lbs/ton}}$$

= 1.25 tons per year

QUOTATION NO. P0337-1

Att: B. Paris
Purchasing Department
Olin Corporation
P. O. Box 222
St. Marks, Florida 32355

April 22, 1987

This proposal is in response to Olin Corporation Inquiry No. 1997-1 for the supply of an isopropyl alcohol (IPA) scrubber in accordance with Olin's Specification Number S-199771, Revision A. The General Requirements of the specifications indicated the acceptability of either a Venturi scrubber or a toroidal vortex scrubber. Both types of units are now manufactured by Beco Engineering. However, the baffle-vortex scrubber was previously bid to a similar problem at Olin and was not accepted. Accordingly, only the venturi scrubber option is now proposed for the IPA scrubber. The proposed unit is:

> A Multi-MicroVenturi (MMV) venturi scrubber with flooded elbow, in series with a second-stage packed column.

I. Design Considerations

A. Particulate Removal

The major scrubber duty is the removal of the 1 to 4-micron ball-powder/graphite dust load. The dust load at 2% by weight (maximum) of the gas rate is a particularly intense dust load. Although venturi scrubbing is the optimum means of handling the high dust load, the single-stage contact of a venturi will not satisfy the IPA absorption efficiency requirement. Additional downstream absorption capability must be provided in the form of spray or countercurrent packed contacting.

B. IPA Recovery

The efficiency of removal of isopropyl alcohol (IPA) from air by once-through water scrubbing is determined by the liquid temperature (equilibrium line) the water/gas ratio (operating line) and the contact efficiency and residence time. At a water scrub rate of 10 G/MCF, the theoretical number of transfer units (NTU) required for the specified 80% IPA removal is 4.0, whereas at 15 G/MCF, an NTU of only 2.1 is needed to meet the 80% removal efficiency specification. Design has been based on the use of 11.5 G/MCF.

P.O. BOX 39, GLENSHAW, PENNSYLVANIA, 15116 FAX: (412) 486-5453 TELEX: 812530 Phone: (412) 486-4900

The design proposed inherently has a total 4.0 NTU capability at the low water flow limit, so that 80% IPA removal is achievable at nominal water rates at the design ratio, using once-through water scrubbing.

II. Proposed Equipment: Venturi/Packed Column

The proposed equipment arrangement for the venturi-/packed tower scrubber is shown in Drawing No. P0495-1. The venturi section shall be Beco Engineering's "Multi-MicroVenturi" (MMV) unit, and the second-stage packed section shall be a 36" diameter countercurrent Brush-Pack/Mist-Master unit.

A. Multi-MicroVenturi:

The venturi design proposed is a new, field-proven, low-pressure-drop enhanced venturi design. The basic component of the Beco Multi-Microventuri (MMV) Scrubber is a "stacked" micro-venturi array, shown in cross-sectional view in the drawing inset. The array is typically a 4-row bank of staggered tubular elements arranged in a pattern similar to a bank of heat exchanger tubes. Thin partitions connect alternate rows of tubes, defining staggered parallel flow channels. In these channels, the tubes cause successive micro-venturi flows at the "pinch" sections. With continuous liquid injection upstream of the array, the multiple venturi contact yields high particulate removal efficiencies at extremely low pressure drop.

The MMV scrubber has been used successfully in a variety of particulate-removal applications; a partial installation list is appended. Although the MMV array is not susceptible to plugging because of its open structure, it is supplied as a removable module, removable through a side access door on the shell.

Water supply to the MMV shall total 15 GPM, with 10GPM supplied as a centrifugally-dispersed wetted-wall wash in the protected annular section between the 12" inlet and the 18" tapered outer shell. It should be noted that the wetted-wall water injection is designed to take place out of the main air stream and out of direct contact with the particulate entering the scrubber.

A secondary spray of 5 GPM shall be injected directly upstream of the MMV module to provide for full wetting of the MMV module. If accumulation of the dry powder on graphite on this spray header is considered to be a potential problem, then the spray can be re-located to the wall as twin side sprays. These nozzles will be in the wetted-wall irrigated zone, so that any particulate will be continuously rinsed off.

The downstream portion of the MMV stage shall be a flooded elbow connecting to the packed column stage. A 2-inch diameter drain nozzle shall be provided for removal of the main gunpowder-graphite particulate.

B. Packed Column:

The packed scrubber stage shall be a 36-inch i.d. vessel containing:

(a) gas entry
(b) 12-inch deep 304 SS Brush-Pack section,
(c) Mist-Master mist eliminator/polishing filter
(d) flanged gas exhaust section.

The packed column stage shall be comprised of a 12" deep bed of Brush-Pack packing and a final Mist-Master high-efficiency mist eliminator, with bi-directional sprays located between the two sections. The packed column has two functions: removal of the mist (i.e., "mud") carried over from the venturi section, and completion of the IPA removal.

Brush-Pack is intrinsically both a high-performance mist eliminator and a very high-surface area packing. Despite the fact that the Brush-Pack bed is only 12" deep in the proposed design, extensive field experience has shown that this depth is more than adequate for the achievement of 98% mist elimination on carryover from below the bed, and the provision of 1.5 to 2.0 NTU with the top spray irrigation rate of 7 GPM. The Brush-Pack shall be Type 304 stainless, with 8-mil filament.

The top Mist-Master stage shall be face-sprayed at a rate of 7 GPM. The Mist-Master provides the final stage of particulate and mist elimination, as well as providing the extended wetted surface area necessary for a final stage of polishing scrubbing for IPA removal.

The scrubber bottom shall be sloped as shown in the drawing, and a fan spray shall be provided for intermittent flushing of the sloped bottom.

The basic design details and operating parameters of the proposed scrubber are summarized in Table 1. Paragraphs 1.0 through 8.0 of the Olin specifications shall apply to the design and supply of the proposed scrubber system. The fabrication of the scrubber vessel shall be in accordance with Olin Standard S-4-6.

TABLE I

EQUIPMENT SPECIFICATIONS

I. EXIT GAS STREAM (Based on Olin Design Condition II and normal inlet temperature)

GAS FLOW RATE:	2370 ACFM
GAS TEMPERATURE:	84° F.
GAS PRESSURE:	6" W. C. < inlet pressure

II. PRESSURE DROP

Brush-Pack:	1.0" W.C.
Mist-Master:	0.75" W.C.
Venturi:	4.0" W.C.
Entrance and exit losses:	0.25" W.C.
TOTAL	6.0" W.C.

III. WATER FLOW

VENTURI	15 GPM
PACKED COLUMN	14 GPM
TOTAL	29 GPM

The specifications call for the provision of an 8-inch diameter access port for any packed section, while the Brush-Pack shown on the drawing has no direct access port. The depth of the Brush-Pack bed is only 12 inches, and this section shall be supplied as a modular, removable drop-in unit, supported by an annular lip. Because the Brush-Pack module is located only 24 inches from the top flange of the shell, the module can be easily removed for maintenance. However, if the 8-inch access door is preferred, then such a port will be provided, and the Brush -Pack shall be in loose, non-contained conventional packed bed form. The pricing is not affected by the optional modes of packing access.

III. Warranty

Beco Engineering guarantees that the system, when operated under the above specified design conditions, shall remove not less than 80% of the isopropyl alcohol entering the scrubber when the system is operated at Olin's specified design conditions. In addition, the scrubber shall provide minimum fine solids removal efficiencies as follows:

Particle Diameter microns	% Removal Efficiency
4	92
2	66
1	41

In the event the system fails to meet guaranty, the customer shall notify Beco Engineering and shall provide Beco all reasonable opportunity to make corrections. If, after such corrections, Beco shall be unable to bring the system within guaranteed limits, Beco will refund the cost of the system to the customer and the customer shall return the system to Beco.

IV. Price

Price $21,200.00

TERMS AND CONDITIONS

Price quoted above is FOB point of manufacture and is exclusive of all federal, state, local, municipal or other sales, use, personal property or similar taxes.

Freight charges are estimated at $1200. Shipment shall be by common carrier.

Delivery shall be 8-10 weeks after drawing approval.

Approval Drawings will be submitted 2 weeks after receipt of written purchase order.

Terms of Payment: 10% with order, 20% on purchaser's receipt of approval drawings, balance net on shipment of equipment. All invoices are payable net on receipt.

Field Supervision: The per diem rate for construction advisory and startup service, if required, is $425 plus justifiable travel and living expenses for each day the employee is away from his home office. All living and travel expenses will be billed separately at cost and are payable on receipt.

Mechanical Warranty: Beco Engineering warrants that the products sold will be free of defects in material and workmanship provided that operating and maintenance instructions are fully complied with. Beco shall replace or repair, at its sole option, any part or parts which are defective within twelve months following the date of initial utilization, but no later than 18 months following delivery of the equipment to customer. Parts and equipment furnished by others are guaranteed only to the extent of the original manufacturer's guarantee to Beco.

BECO ENGINEERING COMPANY

By B. J. Lerner

enc.
BJL/ws

CD 1169 Rev. 6/69

Olin

SPECIFICATION

PLANT	UNIT
St. Marks, Florida	Olin Defense Systems Group

GENERAL INFORMATION

1 ITEM NUMBER	SERVICE Water Scrubber IPA and Smokeless Powder Propellant Graphite Fines in Blender Exhaust
2 NUMBER REQUIRED	

TABLE OF CONTENTS

FAN

S-1997-2, REVISION A

CAR NUMBER	PO NUMBER	DATE	PURPOSE	BY	CHKD.	APP	SPEC. NUMBER	RE
		5-18-87	FOR INQUIRY	BKP			S-1997-2	0
SUPPLIER								
							SHEETS 1 OF 3	

1.0 GENERAL REQUIREMENTS

1.1 The vendor shall furnish one negative pressure, industrial exhaust fan per this specification and the General Terms and Conditions of the Standard Contract.

1.2 The exhaust fan will be used to pull air through a water scrubber.

1.3 The exhaust blower will draw the rotating drum dryer air, and ispropyl alcohol (IPA) vapors through a venturi type water scrubber and discharge the air to atmosphere.

2.0 SERVICE CONDITIONS

2.1 Design Service

Gas Handled:	Air**
Flow Rate:	3300 acfm
Inlet Temperature (Normal):	80°F
Inlet Temperature (Maximum)	158°F
Inlet Pressure (Gage):	-10°" W.C. (vac)
Gas MW:	28.560 #/# mole
Gas Density:	0.0697 #/ft.^{3}
Particulate Loading:	**
Site Elevation (Above Sea Level):	12 feet

**Normal particulate loading will be minimal amounts of Smokeless Powder Propellant® and trace quantities of graphite dust; see spark proof construction requirements in Section 3.0. In addition, normal conditions will include less than 0.2% volume IPA vapors in the air stream, with potential IPA vapor concentration excursions to above the lower explosion limit of 2.0% volume. This fan shall also have a fine water spray of less than one gpm at the inlet flange.

2.2 Ambient Air Design Basis

	Dry Bulb	Wet Bulb
Summer	95°F	80°F
Winter	33°F	(saturated)

3.0 DESIGN

3.1 The fans shall be AMCA, Class A, sparkproof construction. All parts of the fan in contact with the gas handled shall be fabricated of non-ferrous material. The impeller (wheel) shall be a radial type (paddle wheel). Fan flow turn-down shall be a radial type (paddle wheel). Fan flow turn-down shall be to 25% of design flow with discharge throttling.

3.2 The fans and drives shall be weatherproof, industrial type construction and will be located out doors.

3.3 The fans and drives shall be desgined for continuous, 24 hour per day, service.

3.4 Unit shall be direct drive and have a slide base motor mount and appropriate shaft/coupling guards. All drive assemblies shall be rated at a minimum 1.5 times the maximum operating force. All guards shall meet OSHA requirements as a minimum.

3.5 The fans shall be furnished with inlet and outlet flanges, housing drain with plug, and shall have a cleanout door and gasket.

3.6 The units shall be mounted on a painted carbon steel base and shall be shipped factory assemnbled.

3.7 All external metal surfaces other than stainless steel or aluminum shall receive one shop primed as specified in the attached Olin Paitning Specification S-2-6, Revision 1.

3.8 The motors shall be non-overloading for the winter air condition as specified in Section 2.0.

3.9 The motor shall be nomial 1800 rpm, explosion proof, 460 volts, 3 phase, 60 hertz; Class I, Group D, Class II, Group G, Division 1 per Olin Specification S-00-6-3, Revision 3, attached.

3.10 Motor starters will be provided by Olin.

4.0 NOTES

4.1 The equipment shall be free from defects in design, material, and workmanship for a period of 18 months from shipment or 12 months from start-up, whichever occurs first.

4.2 If any off-standard conditions are observed upon start-up or during testing, or if equipment fails to meet performance requirements, vendor shall furnish the labor and materials to make changes or replace equipment as required, at his expense.

July 9, 1987

OLIN CORP
P.O. BOX 222
ST. MARKS, FL 32355

Attention: Mr. Brian Paris - Engineering
cc: Mr. N. D. Lunn - Purchasing

Subject: EXAUST BLOWER inquiry #1997-2
JWH quotation #87QT-830TCBREVA

Gentlemen:

In reference to our conversation of July 8, 1987, we are pleased to confirm the following additional TWIN CITY FAN & BLOWER equipment to our previous quotation dated June 16, 1987.

ITEM 2A:

Quantity - 1, outlet discharge damper constructed with aluminum aero foil blades, stainless steel shafts and aluminum frames to be mounted on previously quoted size 913 RBA industrial exauster.

PRICE NET EXTRA .....$ 683.00
REVISED UNIT TOTAL PRICE $3949.00

Please note that delivery will be revised to 5-6 weeks after receipt of order due to discharge damper availability.

We are pleased to offer for your consideration the following recommended spare parts;

Quantity 1 size 913 RBA aluminum wheel $1047.00

Quantity 1 size 913 RBA mild steel .....$ 426.00
shaft with aluminum sleeve

8825 N.E. 2nd Avenue, Miami, Florida 33138, (305) 751-6259
Jacksonville (904) 724-0292
5445 Mariner Street, Suite 100, Tampa, Florida 33609, (813) 877-2411

Note: If wheel and shaft are ordered together, wheel will be mounted on shaft and shipped as one unit.

We appreciate the opportunity to quote TWIN CITY FAN & BLOWER CO. equipment on this project. Please contact the writer if we may be of further assistance.

Very truly yours,

JAY W. HARNED CO.

Derek S. Embody
Sales Representative, Tampa

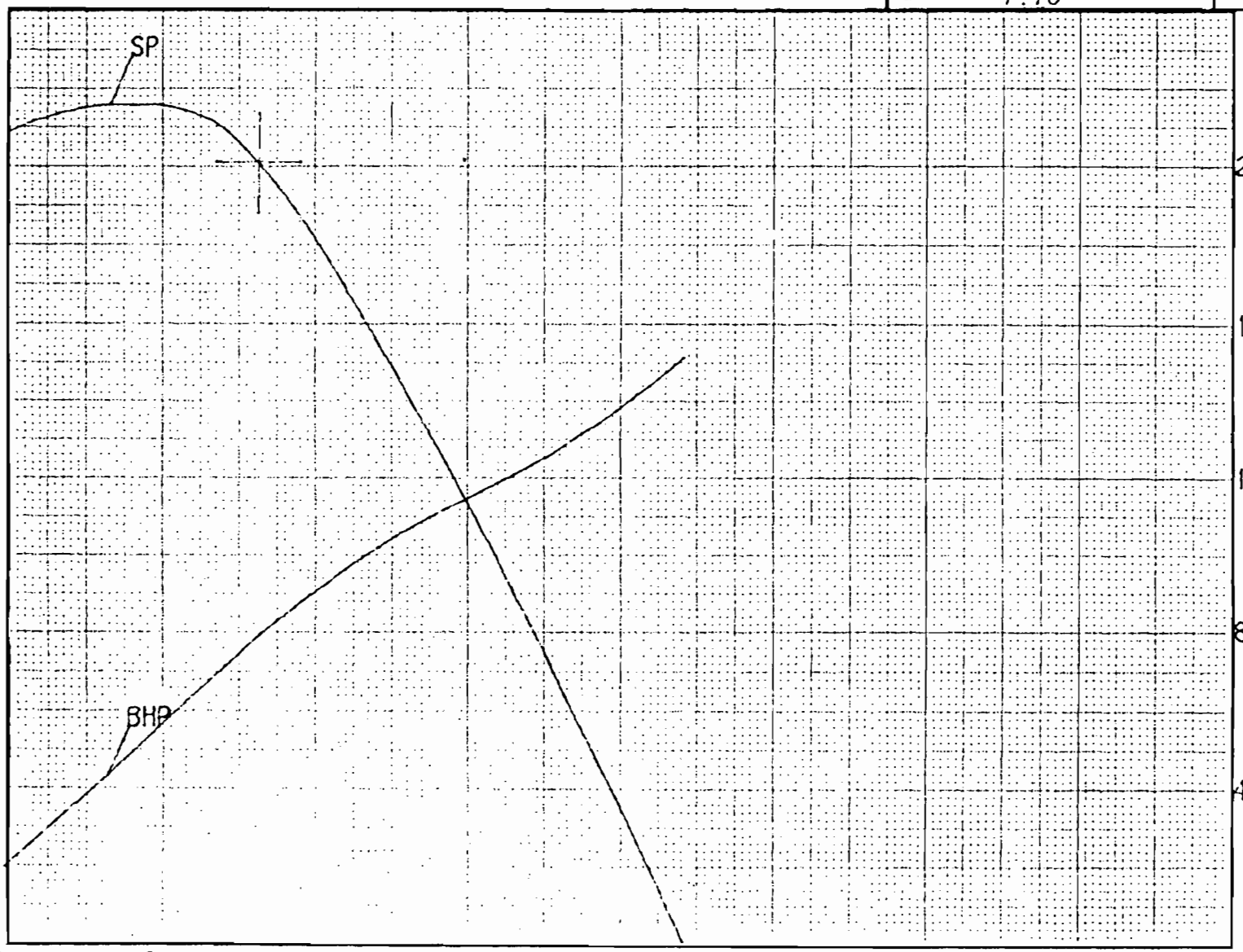
DSE/mw

PERFORMANCE CURVE

TWIN CITY FAN & BLOWER

PROJECT: Olin Corp. St. Marks, FL	
FAN I.D.: 913 RBA	
TAG #: Exhaust Blower Item # 2	
PERFORMANCE	
CFM: 3300	**SP:** 10
BHP: 7.76	**RPM:** 2007

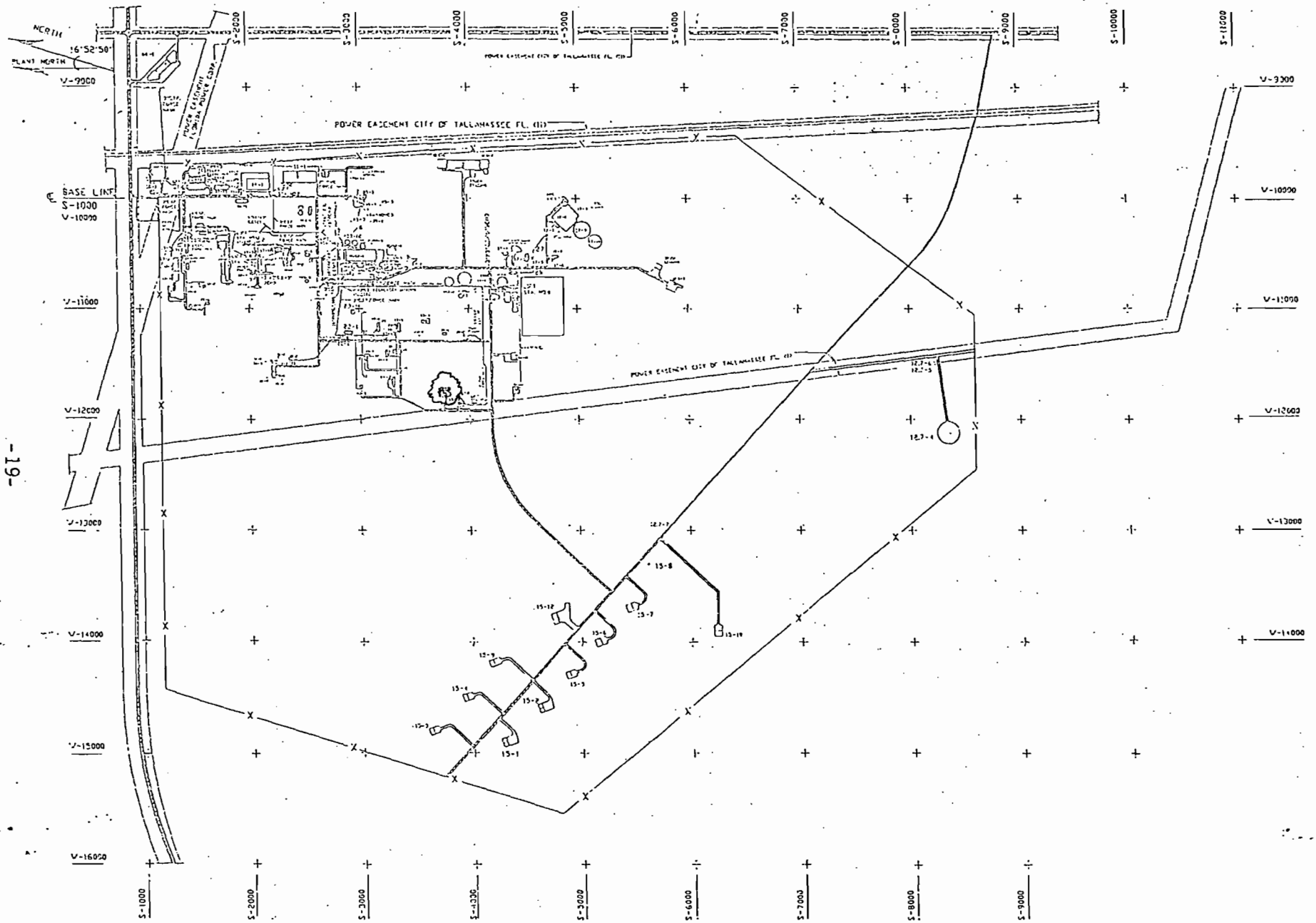
AIR DENSITY= .0690 **LB/FT³**

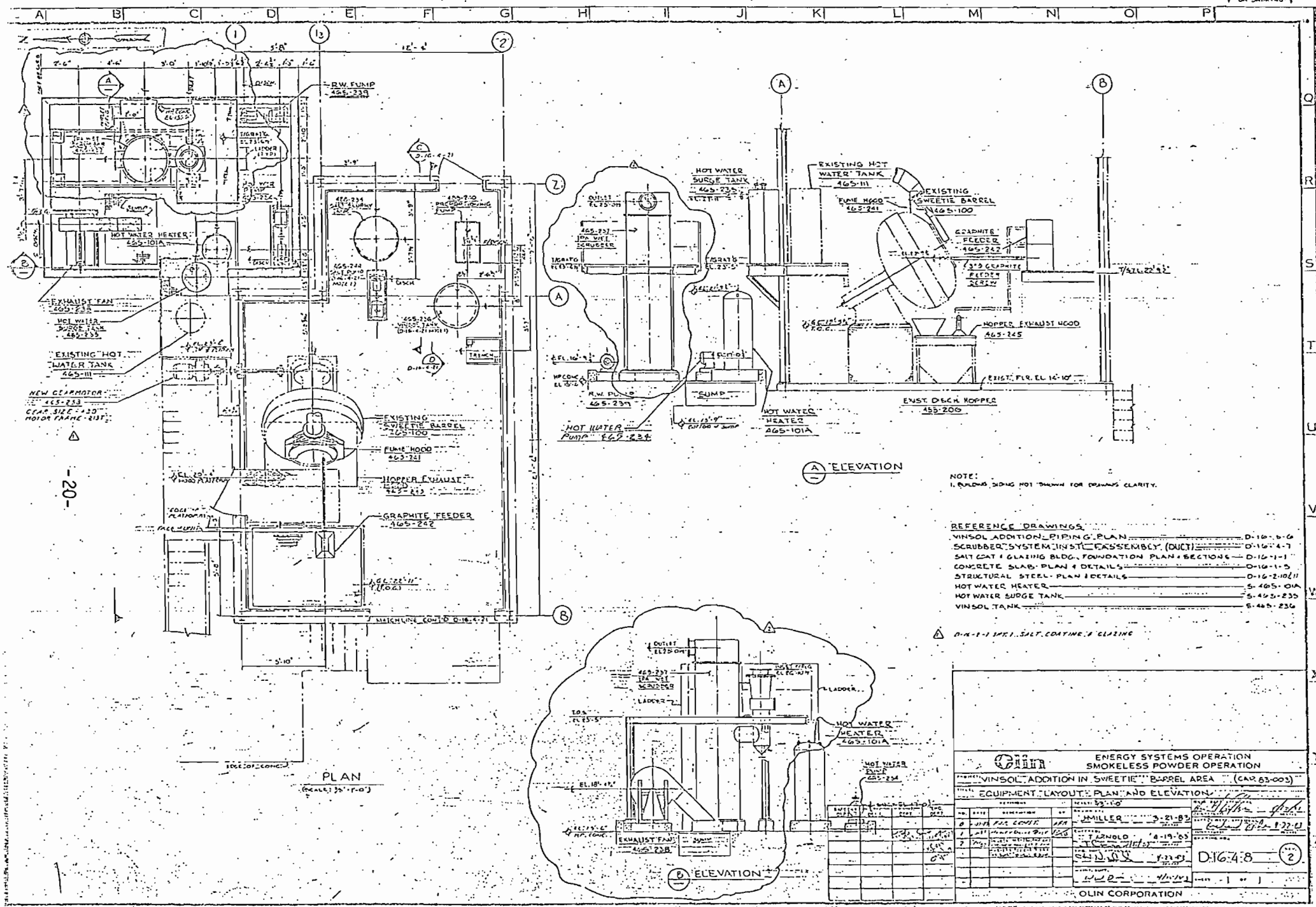


SOUND POWER LEVELS (IN DB REF 10^{-12} WATTS)								
OCTAVE	1	2	3	4	5	6	7	8
LEVEL								

DATE 6-15-87

CN-





REFERENCE DRAWINGS

VINSOL ADDITION - PIPING PLAN	D-16-1-6-6
SCRUBBER SYSTEM INST. ASSEMBLY (DUCT)	D-16-4-7
SALT COAT & GLAZING BLDG. FOUNDATION PLAN & SECTIONS	D-16-1-1
CONCRETE SLAB PLAN & DETAILS	D-16-1-5
STRUCTURAL STEEL PLAN & DETAILS	D-16-2-10&11
HOT WATER HEATER	S-465-101A
HOT WATER SURGE TANK	S-465-235
VINSOL TANK	S-465-236

△ D-16-1-1 SHT 1 SALT COATING & GLAZING

Olin — ENERGY SYSTEMS OPERATION
SMOKELESS POWDER OPERATION

PROJECT: VINSOL ADDITION IN SWEETIE BARREL AREA (CAP 83-003)

TITLE: EQUIPMENT LAYOUT PLAN AND ELEVATION

NO.	DATE	REVISIONS	BY
0	3-21-83	FOR CONST.	JMA
1	4-19-83	MISC. CHANGES PER FIELD	JMA
2	5-27-83	MISC. CHANGES PER FIELD	JMA

DESIGNED 83-10 — J MILLER 3-21-83
DRAWN — T ARNOLD 4-19-83
CHECKED — S.N.N.V. 5-27-83
APPROVED — [illegible] 6-1-83

D-16-4-8 (2)

OLIN CORPORATION

NOTE:

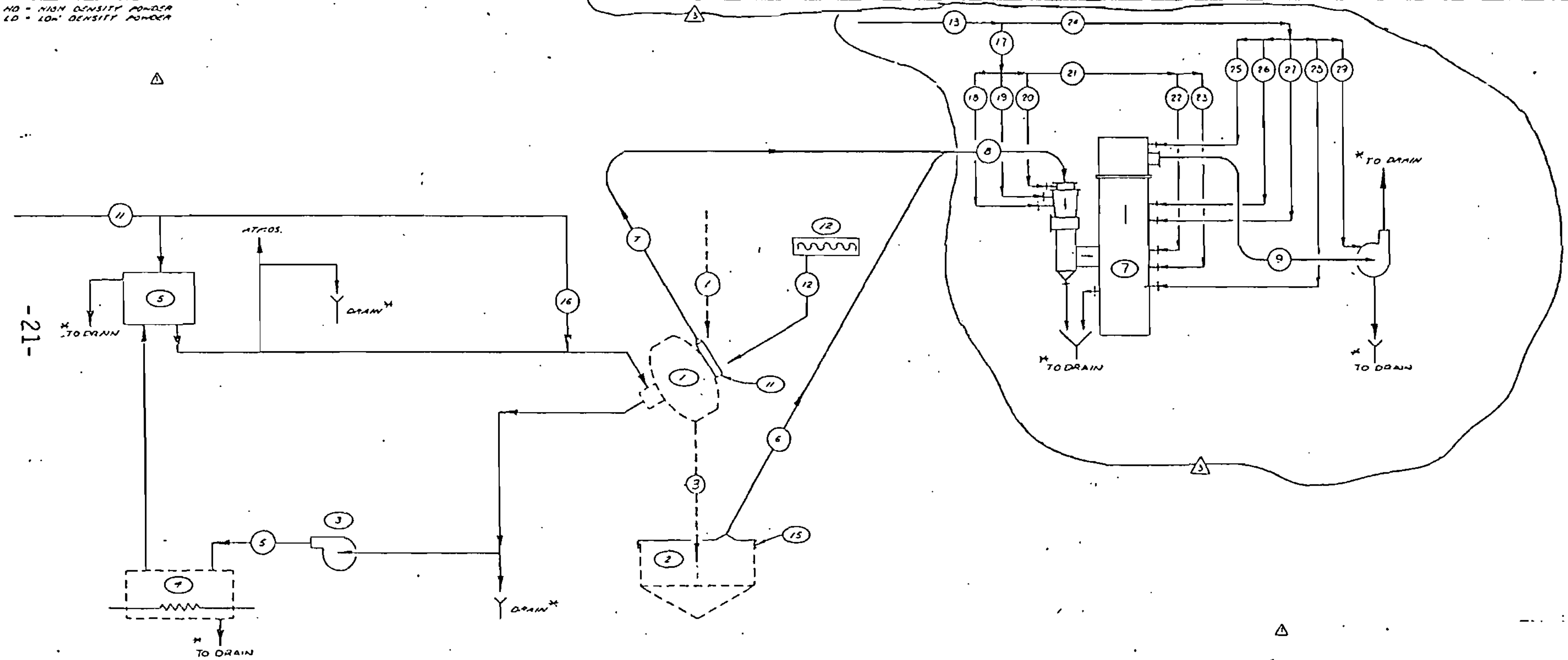
-20-

Best Available Copy

LINE NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MATERIAL	POWDER		COATED POWDER		HOT WATER	FINES/ AIR	IPA FUMES/ FINES	IPA FUMES/ FINES	AIR		PROCESS WATER	GRAPHITE	PROCESS WATER	RW OVERFLOW	
LBS./MIN.	185		—		—	22.5	225	247.5	247.5	—	AS REQ'D	—	333.		
GPM/CFM	—		—		40GPM	300CFM	3000CFM	3300CFM	3300CFM		—	—	40		
TEMP. °F/°C	AMB		AMB		158/70	AMB	AMB	AMB	AMB		AMB	AMB	AMB		
P.S.I.G.	—		GRAV		24	—	—	—	—		50	—	50		
SPEC. GRAVITY	1.25/1.6		1.2[illegible]/1.6		.98	—	—	—	—		1.0	—	1.0		
VISC. CPS	—		—		1.0	—	—	—	—		1.0	—	1.0		
% SOLIDS (WT)	100		100		—	—	—	—	—	—	—	100	—	—	
LBS./BATCH	[illegible] HD/ [illegible] LD		—		—	—	—	—	—	—	—	4 LB.	—	—	
		△		△											△

LINE NO.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
MATERIAL	COOLING WATER	PROCESS WATER	PROCESS WATER	PROCESS WATER	PROCESS WATER	PROCESS WATER	PROCESS WATER	PROCESS WATER	PROCESS WATER	PROCESS WATER	PROCESS WATER	PROCESS WATER	PROCESS WATER	PROCESS WATER												
LBS./MIN.		179	42	42	42	55	35	20	154	42	42	42	20	83												
GPM/CFM	20GPM	21.5GPM	5GPM	5GPM	5GPM	6.5GPM	4GPM	2.5GPM	18.5GPM	5GPM	5GPM	5GPM	2.5GPM	10GPM												
TEMP. °F/°C	AMB	AMB	AMB	AMB	AMB	AMB.	AMB	AMB	AMB	AMB	AMB	AMB	AMB	AMB												
P.S.I.G.	5	50	50	50	50	50	50	50	50	50	50	50	50	50												
SPEC. GRAVITY	1.0	1.0	1.0	1.0	1.0.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0												
VISC. CPS	1	1	1	1	1	1	1	1	1	1	1	1	1	1												
% SOLIDS (WT)	—	—	—	—	—	—	—	—	—	—	—	—	—	—												
LBS./BATCH	—	—	—	—	—	—	—	—	—	—	—	—	—	—												

HD = HIGH DENSITY POWDER
LD = LOW DENSITY POWDER



-21-

EQUIP. NO.	465-100	465-206	465-234	465-101A	465-235		465-237	465-238			465-241	465-242			465-245
DESCRIPTION	SWEETIE BARREL	DISCHARGE HOPPER	HOT WATER PUMP	HOT WATER HEATER	HOT WATER SURGE TANK		WET SCRUBBER	EXHAUST FAN			FUME HOOD	GRAPHITE FEEDER			HOPPER EXHAUST HOOD
REMARKS	CAMDEN ALLOY FABRICATORS 3000 # CAPACITY SM # 21447	EXISTING	60 GPM 24 PSIG	A.O. SMITH SUPP. BY TAMCO CO MOD AVE 170-54 54 KWATTS SM # 448 EXISTING	117 GAL.		[illegible]	[illegible] 10 HP @ 1800 RPM				B.I.F. HELIX FEEDER MOD. # 25-04			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)

A | B | C | D | E | F | G | H | I | J | K | L

Olin — ENERGY SYSTEMS OPERATION
SMOKELESS POWDER OPERATION

PROJECT: VINSOL ADDITION IN SWEETIE BARREL 16 (CAR 83-003)

TITLE: FLOW DIAGRAM

SCALE: NONE

DRAWN BY: A KARCAS 10-14-82

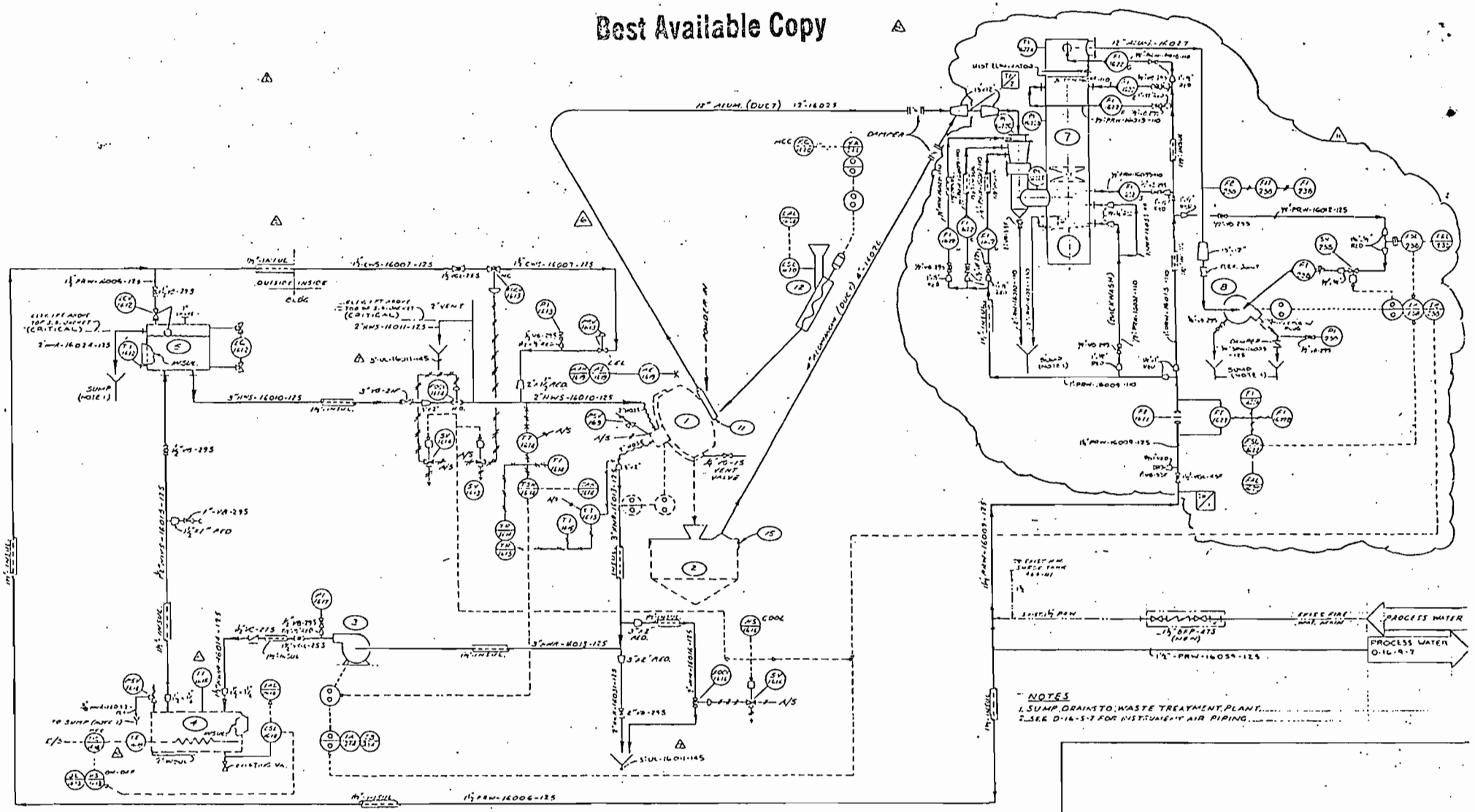
NO.	DATE	DESCRIPTION
0		FOR CONST.
1		GEN. REV.
△		[illegible]
3		[illegible]

DRAWING NO.: D-15-9-4 (3)

SHEET 1 OF 1

OLIN CORPORATION

NOTE: [illegible]



NOTES
1. SUMP DRAINS TO WASTE TREATMENT PLANT.
2. SEE D-16-5-7 FOR INSTRUMENT AIR PIPING.

EQUIP. NO.	465-100	488-206	465-234	465-104A	465-235	465-236	465-237	465-238			465-241	465-242	465-243		465-245	465-246	465-247	
DESCRIPTION	SIFTER BARREL	DISCHARGE HOPPER	HOT WATER PUMP	HOT WATER HEATER	HOT WATER SURGE TANK	VINSOL TANK	AIR WET SCRUBBER	EXHAUST FAN			FUME HOOD	GRANITE FEEDER	VINSOL FEED RECEIVER		POWDER EXHAUST HOOD	VINSOL FEEDER	VINSOL TANK AGITATOR	
REMARKS		EXISTING									ALUM. CONST.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		

Olin
ENERGY SYSTEMS OPERATION
SMOKELESS POWDER OPERATION

TITLE: P&I DIAGRAM PROCESS & UTILITY

DRAWING NO. D-16-9-5 (11)

SHEET 1 OF 1

OLIN CORPORATION

NOTE: