EXPLANATORY NOTE

Docket Number A-80-7 Document Date: December 1979
Document Subcategory II-I-43

FROM: Gregory P. Lathan

TO: Synthetic Fibers NSPS Docket

SUBJECT: Emission Data Submitted by Tennessee Eastman Company, Kingsport, Tennessee, to the Tennessee Division of Air Pollution Control.

A-80-7

Process Emission Source Number B-178-2
Page 2 of 5
Date JUL 13 1979

NON-STACK PROCESS EMISSION POINT DATA FORM - APC - 23

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
C2-212 CORDELL HULL BUILDING
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE

COMPANY NO. [ ] - [ ]
PERMIT NO. [ ] P
PROCESS EMISSION SOURCE NO. [ ]
EMISSION POINT NO. [ ]
REVIEWER [ ]
DATE [ ]

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-178-2
3. POINT SOURCE IDENTIFICATION ON PROCESS FLOW DIAGRAM --
4. GIVE A BRIEF DESCRIPTION OF THE PROCESS EMISSION POINT PLUS A SKETCH IF APPROPRIATE Acetone emissions are losses into the room air surrounding the process equipment. Acetone leaves the building through windows, doors, and the ventilation system.
5. GIVE A BRIEF DESCRIPTION OF ANY AIR POLLUTION CONTROLS ON THIS EMISSION POINT None
6. FILL IN TABLE BELOW:

POLLUTANT	ABSENT	PRESENT	MAX. AND MIN. EMISSIONS FOR ANY 30 MINUTE PERIOD OF NORMAL OPERATION		AVERAGE EMISSIONS		METHOD OF MEASUREMENT*
			LBS MAXIMUM	LBS MINIMUM	LBS/HR	LBS/YR	
PARTICULATES	X						
SULFUR DIOXIDE	X						
CARBON MONOXIDE	X						
HYDROCARBONS		X	10	0.8	16.2	1.4×10^5	Engineering Estimate
OXIDES OF NITROGEN	X						
FLUORIDES	X						
SHOW OTHERS	X						

*PLEASE ATTACH A COPY OF THE TEST PROCEDURE, PROCESS MATERIAL BALANCE STUDY OR OTHER BASIS USED AS A METHOD OF MEASUREMENT.

FOR OFFICE USE ONLY

[ ] REGULATED BY FUGITIVE DUST LAW.
[ ] REGULATED BY PROCESS WEIGHT. TABLE I [ ] TABLE II [ ]
[ ] AMBIENT AIR MONITORING USED FOR SO_2 AT THIS PLANT.
[ ] IN COMPLIANCE
[ ] NOT IN COMPLIANCE
ACTUAL EMISSIONS _____ TONS

FILING IS AUTHORIZED BY _____ DATE JUL 13 1979

APC - 23
REV 5/73

1-22-74 Issue.

Process Emission Source
Number B-178-2
Page 3 of 5
Date Jul 13 1976

PROCESS EMISSION SOURCE COVER SHEET - APC 21

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
256 CAPITOL HILL BUILDING
NASHVILLE, TENNESSEE 37217

DO NOT WRITE IN THIS SPACE

COMPANY NO. | | | | | | |
LOG NO. _____
PERMIT NO. _____
REVIEWED BY _____

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-178-2 3. SIC CODE 2823
4. DID CONSTRUCTION OF THIS PROCESS BEGIN ON OR BEFORE AUGUST 9, 1969? [X] YES [ ] NO ON OR BEFORE APRIL 3, 1972? [X] YES [ ] NO
5. GIVE A BRIEF DESCRIPTION OF THE PROCESS ALONG WITH A FLOW DIAGRAM. OPERATION CENTERS, STORAGE POINTS, MATERIAL INPUTS, MATERIAL OUTPUTS AND EMISSION POINTS SHOULD BE NOTED IN POUNDS PER OPERATING HOUR.

Raw dope is filtered in plate and frame filter presses using nylon/paper filter media to produce filtered dope. Modacrylic polymer is dissolved in acetone to produce raw dope.

NOTE: ATTACH FLOW DIAGRAM FOR PROCESS EMISSION SOURCE CLAIMED ON SEPARATE SHEET.

6. TYPE OF PROCESS: CONTINUOUS [X] BATCH [ ] COMBINED [ ]
7. OPERATIONAL SCHEDULE OF PROCESS EMISSION SOURCE:
   A. HOURS PER DAY 24
   B. DAYS PER WEEK 7
   C. WEEKS PER YEAR 52
   D. % ANNUAL THRUPUT

DEC-FEB	MARCH-MAY	JUNE-AUGUST	SEPT-NOV
25	25	25	25

8. LIST MATERIAL INPUTS TO PROCESS EMISSION SOURCE:

NAME OF INPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
1 Raw dope	10,300	10,300
2 Nylon/paper filter media	27.2	27.2
3 Polymer	3,550	3,550
4 Acetone	8,540	8,540
TOTAL LBS/OPERATING HOUR INPUT TO PROCESS EMISSION SOURCE	22,400	22,400

(TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)

12/15/75 Issue

Process Emission Source Number B-178-2 Page 4 of 5 Date JUL 13 1971

9. LIST MATERIAL OUTPUTS FROM THIS PROCESS EMISSION SOURCE:

NAME OF OUTPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
5 Filtered Dope	22,300	22,300
6 Filter media and raw dope	54.4	54.4
TOTAL LBS/OPERATING HOUR OUTPUT FROM PROCESS EMISSION SOURCE (TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)	22,400	22,400

10. LIST AIR POLLUTION EMISSION POINTS FOR THIS PROCESS EMISSION SOURCE. ATTACH A SEPARATE "EMISSION POINT DATA" SHEET, APC-22, FOR EACH POINT.

FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR	FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR
A.		N.	
B.		O.	
C.		P.	
D.		Q.	
E.		R.	
F.		S.	
G.		T.	
H.		U.	
I.		V.	
J.		W.	
K.		X.	
L.		Y.	
M.		Z.	

TOTAL LBS. OF PARTICULATE EMITTED FROM PROCESS EMISSION SOURCE PER OPERATING HOUR 0 (TOTAL ROUNDED TO TWO SIGNIFICANT FIGURES)

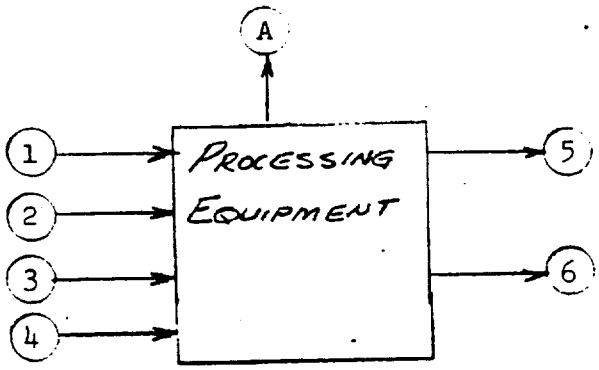
11. LIST PROCESS FUELS USED IN THIS PROCESS WHICH DO NOT APPEAR AS MATERIAL INPUTS TO THE PROCESS EMISSION SOURCE: (DIRECT OR INDIRECT HEAT SOURCES NOT ELSEWHERE REGISTERED ARE TO BE LISTED.)

FUEL	CONSUMPTION RATE: GAL/YR/FT³/YR	DIRECT HEAT SOURCE / INDIRECT HEAT SOURCE
NATURAL GAS		
FUEL OIL		
OTHER:		

Flow Diagram

For Item 5 of APC-21

Process Emission Sourc
Number B-178-2
Page 5 of 5
Date Jul 13 19[illegible]



4-11-74 Issue.

Attach to APC-21

7335

Process Emission Source Number B-102C-1
Page 1 of 1
Edition F

PERMIT APPLICATION - APC 20

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
CORDELL HULL BUILDING C2-212
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE
COMPANY NO. 82-01102 13
AQCR ___ AGENCY CODE ___
NEDS COUNTY CODE ___
PERMIT NO. CO81370 P
PROCESS EMISSION SOURCE NO. ___
EMISSION POINT NO. ___ - ___
CITY CODE ___ UTM ZONE ___
EW COORD. ___ . ___
NS COORD. ___ . ___
SIC CODE ___
REVIEWER ___
DATE ___

1. PERMIT TO BE ISSUED TO:

TENNESSEE EASTMAN COMPANY

2. MAILING ADDRESS

P. O. Box 511
Kingsport, Tennessee 37662

3. ADDRESS AT WHICH SOURCE IS TO BE OPERATED:

Same as above.

4. TYPE OF ORGANIZATION: CORPORATION [X]

5. EMISSION SOURCE NUMBER B-102C-1 6. STANDARD INDUSTRIAL CLASSIFICATION OF CO. 2 18 12 1 4

7. BRIEF DESCRIPTION OF EMISSION SOURCE FOR WHICH PERMIT IS DESIRED: ~~Exhaust from VEREL Fiber Processing~~

8. LATITUDE AND LONGITUDE OF AIR CONTAMINANT SOURCE 36° 31' 01" 82° 32' 17"

9. COST OF MODIFICATION $ _____ COST OF AIR POLLUTION CONTROL EQUIPMENT $ _____

10. IF THIS AIR CONTAMINANT SOURCE HAS A PREVIOUS WRITTEN PERMIT GIVE NAME OF CORPORATION, COMPANY OR INDIVIDUAL OWNER THAT OPERATED THIS SOURCE AND STATE PREVIOUS TENNESSEE DIVISION OF AIR POLLUTION CONTROL PERMIT NUMBER, IF KNOWN.

NAME **TENNESSEE EASTMAN COMPANY** PERMIT NUMBER 003580 P

11. PRESENT STATUS OF AIR CONTAMINANT SOURCE (CHECK AND COMPLETE APPLICABLE ITEMS)

[ ] PERMIT TO CONSTRUCT REQUESTED - Est. Starting Date _____ Est. Completion Date _____
[ ] CONSTRUCTION COMPLETED - Date _____ [X] PERMIT TO OPERATE REQUESTED
[ ] TRANSFER OF LOCATION - Est. Date _____ [X] AIR CONTAMINANT SOURCE HAS NOT BEEN ALTERED

12. J C Edwards
SIGNATURE OF RESPONSIBLE MEMBER OF FIRM

DEC 01 1977
DATE OF APPLICATION

TYPE OR PRINT NAME AND OFFICIAL TITLE OF PERSON SIGNING THIS APPLICATION:

NAME **J. C. Edwards**
TITLE **Manager, Clean Environment Program**
PHONE **246-2111, Extension 2444**

1-22-74 Issue.

APC - 20
REV 4/73

PROCESS EMISSION SOURCE COVER SHEET - APC 21

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
CORDELL HULL BUILDING C2-212
NASHVILLE, TENNESSEE 37217

DO NOT WRITE IN THIS SPACE

COMPANY NO. | | | | | | | |
PERMIT NO. | | | | | | | |
PROCESS EMISSION SOURCE NO. | | | |
EMISSION POINT NO. | | | |
REVIEWER | | | |
DATE | | | | | | |

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-102C-1 3. SIC CODE 2824
4. DID CONSTRUCTION OF THIS PROCESS BEGIN ON OR BEFORE AUGUST 9, 1969? [X] YES [ ] NO ON OR BEFORE APRIL 3, 1972? [X] YES [ ] NO
5. GIVE A BRIEF DESCRIPTION OF THE PROCESS ALONG WITH A FLOW DIAGRAM. OPERATION CENTERS, STORAGE POINTS, MATERIAL INPUTS, MATERIAL OUTPUTS AND EMISSION POINTS SHOULD BE NOTED IN POUNDS PER OPERATING HOUR.

Exhaust from VEREL Fiber Processing

NOTE: ATTACH FLOW DIAGRAM FOR PROCESS EMISSION SOURCE CLAIMED ON SEPARATE SHEET.

6. TYPE OF PROCESS: CONTINUOUS [X] BATCH [ ] COMBINED [ ]
7. OPERATIONAL SCHEDULE OF PROCESS EMISSION SOURCE:
   A. HOURS PER DAY 24
   B. DAYS PER WEEK 7
   C. WEEKS PER YEAR 52
   D. % ANNUAL THRUPUT

DEC-FEB	MARCH-MAY	JUNE-AUGUST	SEPT-NOV
25	25	25	25

8. LIST MATERIAL INPUTS TO PROCESS EMISSION SOURCE:

NAME OF INPUT	LBS/OPERATING HOUR: DESIGN CAPACITY	LBS/OPERATING HOUR: ACTUAL LOADING	FLOW DIAGRAM REFERENCE
A. VEREL Fiber	4,610	4,610	1
B. Acetone	323	323	2
C. Fiber Lubricant	6	6	3
D. Water	770	770	4
E.			
F.			
G.			
TOTAL LBS/OPERATING HOUR INPUT TO PROCESS EMISSION SOURCE	5,710	5,710	

(TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)

Process Emission Source
Number B-102C-1
Page 3 of 6
Edition E

LIST MATERIAL OUTPUTS FROM THIS PROCESS EMISSION SOURCE:

NAME OF OUTPUT	LBS/OPERATING HOUR		FLOW DIAGRAM REFERENCE
	DESIGN CAPACITY	ACTUAL LOADING	
A. Vercl fiber	4,610	4,610	5
B.			
C.			
D.			
E.			
F.			
G.			
TOTAL LBS/OPERATING HOUR OUTPUT FROM PROCESS EMISSION SOURCE	4,610	4,610	(TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)

LIST AIR POLLUTION EMISSION POINTS FOR THIS PROCESS EMISSION SOURCE. ATTACH A SEPARATE "EMISSION POINT DATA" SHEET, APC-22, FOR EACH POINT.

EMISSION POINT NO. OR CODE	LBS PARTICULATE/OPERATING HOUR	FLOW DIAGRAM REFERENCE
A. A	6.0	A
B.		
C.		
E.		
F.		

TOTAL LBS. OF PARTICULATE EMITTED FROM PROCESS EMISSION SOURCE PER OPERATING HOUR 6.0

NOTE: ATTACH ADDITIONAL SHEETS AS REQUIRED FOR ITEMS 8, 9, AND 10.

(TOTAL ROUNDED TO TWO SIGNIFICANT FIGURES)

J C Edwards
SIGNATURE OF RESPONSIBLE MEMBER OF FIRM

February 21, 1975
DATE OF APPLICATION

TYPE OR PRINT NAME AND OFFICIAL TITLE OF PERSON SIGNING THIS FORM

NAME J. C. Edwards

TITLE Manager, Clean Environment Program

DATE February 21, 1975 PHONE 246-2111, Ext. 2444

FOR OFFICIAL USE ONLY

- ☐ PROCESS EMISSION SOURCE CLAIMED IS ACCEPTABLE.
- ☐ PROCESS EMISSION SOURCE CLAIMED IS NOT ACCEPTABLE.
- ☐ RECOMMENDED MAKE UP OF PROCESS EMISSION SOURCE ATTACHED ON SEPARATE SHEET.
- ☐ PROCESS EMISSION SOURCE IS NOT IN COMPLIANCE WITH APPLICABLE REGULATIONS.
- ☐ PROCESS WEIGHT TABLE APPLIES TO THIS PROCESS EMISSION SOURCE.
- ☐ DIFFUSION EQUATION APPLIES TO THIS PROCESS EMISSION SOURCE. ☐ TABLE I ☐ TABLE II

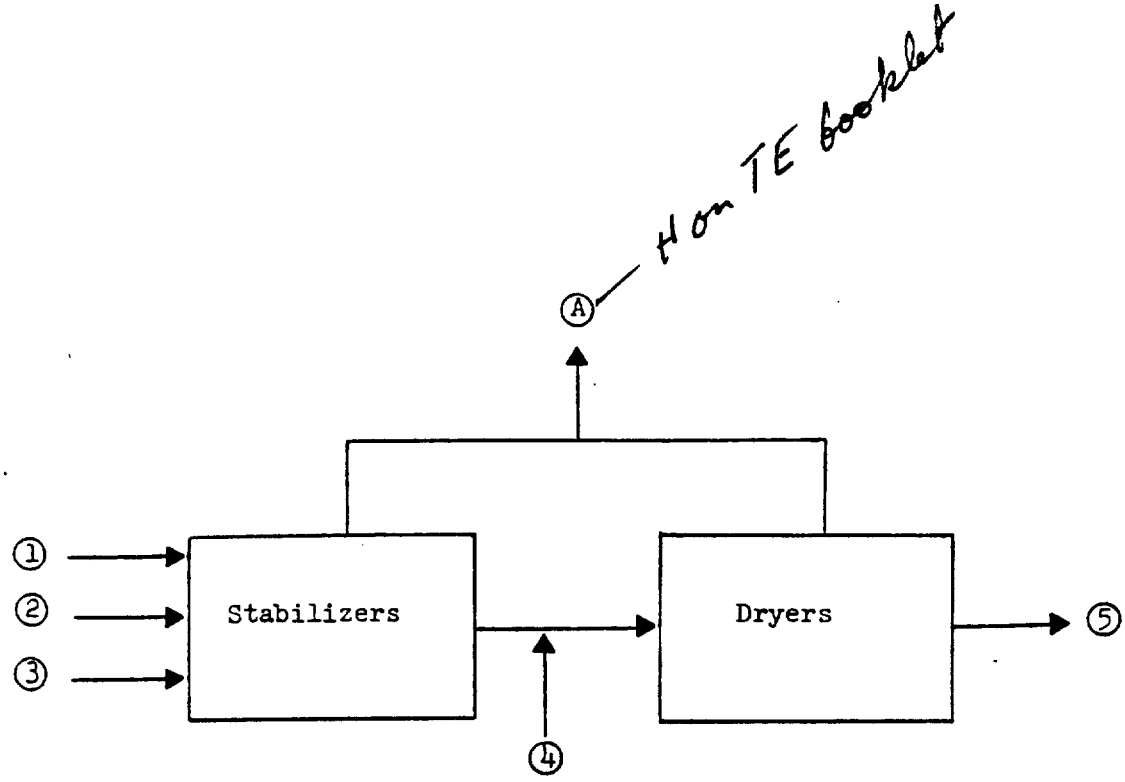
OWABLE EMISSIONS _____ LBS/HOUR ACTUAL EMISSIONS _____ TONS/YEAR

ING IS AUTHORIZED BY _____ DATE _____

Flow Diagram

For Item 5 of APC-21

Process Emission Source
Number B-102C-1
Page 4 of 6
Edition E



4-11-74 Issue.

Attach to APC-21

Process Emission Source
Number B-102C-1
Page 5 of 6
Edition E

STACK EMISSION POINT DATA - APC - 22

TENNESSEE DEPARTMENT OF PUBLIC HEALTH
ATT: TO: DIVISION OF AIR POLLUTION CONTROL
C-212 CORDELL HULL BUILDING
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE

COMPANY NO. | | | - | | | | | | |
PERMIT NO. | | | | | | | P
PROCESS EMISSION SOURCE NO. | | | |
EMISSION POINT NO. | | | |
REVIEWER | | | |
DATE | | | | | | |

- COMPANY NAME TENNESSEE EASTMAN COMPANY
- PROCESS EMISSION SOURCE NUMBER B-102C-1
- EMISSION POINT NUMBER OR CODE (AS SHOWN ON PROCESS EMISSION SOURCE COVER SHEET). A
- INDICATE STACK OR RELEASE POINT HEIGHT ABOVE GRADE 60 FEET.
- SHOW INSIDE DIAMETER OF STACK OR RELEASE MECHANISM AT TOP 5 FEET.
- SHOW NORMAL EXIT GAS TEMPERATURE 80 °F. 7. SHOW EXIT GAS VELOCITY 108 FT/SEC.
- INDICATE PERCENT OF TIME OVER 125°F 0 %.
- SHOW EXIT GAS VOLUME FLOW RATE 2080 FT^3 /SEC @ 70°F AND 1 ATMOS.
- SHOW MOISTURE CONTENT 7.2 (GR./CU. FT. DRY GAS AT 70°F) AND 7.0 (GR./CU. FT. GAS AT STACK CONDITION).
- SHOW DISTANCE FROM RELEASE POINT TO NEAREST PROPERTY LINE 1700 FEET.
- DIRECTION OF GAS STREAM AS IT LEAVES STACK X U-UP, _____ D-DOWN, _____ H-HORIZONTAL

AIR POLLUTION CONTROL EQUIPMENT

	AIR CONTAMINANT CONTROLLED	YEAR INSTALLED	TYPE [1]	EFFICIENCY
PARTICULATE				
SULFUR DIOXIDE				
OXIDES OF NITROGEN				
HYDROCARBONS				
CARBON MONOXIDE				
GASEOUS FLUORIDES				

22-74 Issue.

APC - 22
REV 5/7[illegible]

Process Emission Source Number B-1020-1 Page 6 of 6 Edition E

14. IS AN EMISSION MONITORING AND RECORDING INSTRUMENT ATTACHED TO THIS EMISSION POINT? YES ☐ NO ☒

IF YES, DESCRIBE: _____

15. ADDITIONAL COMMENTS: _____

EMISSION POINT DATA

16. SHOW AIR CONTAMINANT DATA FOR THIS EMISSION POINT:

POLLUTANT	ABSENT	PRESENT	CONCENTRATION		AVERAGE EMISSIONS		METHOD OF MEASUREMENT
			QUANTITY	UNITS	LBS/HR.	LBS/YEAR	
PARTICULATES		X	5.6×10^{-3}	GRAINS/SCF AT 70° F	6.0	53,000	Engineering Calculations
SULFUR DIOXIDE	X			PPM			
OXIDES OF NITROGEN	X			PPM			
CARBON MONOXIDE	X			PPM			
GASEOUS FLUORIDES	X			PPM			
OTHERS (NAME CHEMICAL)							
Acetone		X	580		320	2,800,000	

FOR OFFICE USE ONLY

☐ PROCESS WEIGHT TABLE APPLIES TO THIS EMISSION POINT.

☐ EMISSION POINT IS NOT IN COMPLIANCE WITH APPLICABLE PARTICULATE REGULATION. ALLOWABLE EMISSIONS _____ #/hr

☐ EMISSION POINT IS NOT IN COMPLIANCE WITH SULFUR DIOXIDE EMISSION STANDARD OF 2000 PPM.

☐ EMISSION POINT IS NOT IN COMPLIANCE WITH SULFUR DIOXIDE EMISSION STANDARD OF 500 PPM.

☐ EMISSION POINT IS NOT IN COMPLIANCE WITH GASEOUS EMISSION STANDARD. IDENTIFY GAS _____ AND ALLOWABLE EMISSIONS _____

☐ EMISSION POINT IS NOT IN COMPLIANCE WITH GASEOUS EMISSION STANDARD. IDENTIFY GAS _____ AND ALLOWABLE EMISSIONS _____

☐ CONTINUOUS MONITOR (S) FOR (1) _____; (2) _____; (3) _____ RECOMMENDED.

☐ METHOD OF MEASUREMENT IS ACCEPTABLE.

☐ METHOD OF MEASUREMENT IS NOT ACCEPTABLE.

EXPLAIN _____

WABLE EMISSIONS (TONS/YEAR)

PARTICULATES _____ SULFUR DIOXIDE _____ HYDROCARBONS _____

CARBON MONOXIDE _____ FLUORIDES _____

FILING IS AUTHORIZED BY _____ DATE _____

Process Emission Source Number B-126-1
Page 2 of 5
Date JUL 13 [illegible]

NON-STACK PROCESS EMISSION POINT DATA FORM - APC - 23

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
C2-212 CORDELL HULL BUILDING
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE

COMPANY NO. [ ] - [ ]
PERMIT NO. [ ] P
PROCESS EMISSION SOURCE NO. [ ]
EMISSION POINT NO. [ ]
REVIEWER [ ]
DATE [ ]

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-126-1
3. POINT SOURCE IDENTIFICATION ON PROCESS FLOW DIAGRAM
4. GIVE A BRIEF DESCRIPTION OF THE PROCESS EMISSION POINT PLUS A SKETCH IF APPROPRIATE Acetone emissions are vapor losses into the room air surrounding the process equipment and leaves the building through windows, doors, and the ventilation system.
5. GIVE A BRIEF DESCRIPTION OF ANY AIR POLLUTION CONTROLS ON THIS EMISSION POINT None

FILL IN TABLE BELOW:

POLLUTANT	ABSENT	PRESENT	MAX. AND MIN. EMISSIONS FOR ANY 30 MINUTE PERIOD OF NORMAL OPERATION		AVERAGE EMISSIONS		METHOD OF MEASUREMENT*
			LBS MAXIMUM	LBS MINIMUM	LBS/HR	LBS/YR	
PARTICULATES	X						
SULFUR DIOXIDE	X						
CARBON MONOXIDE	X						
HYDROCARBONS		X	5.2	4.6	10.3	9.0×10^4	Engineering E
OXIDES OF NITROGEN	X						
FLUORIDES	X						
SHOW OTHERS	X						

*PLEASE ATTACH A COPY OF THE TEST PROCEDURE, PROCESS MATERIAL BALANCE STUDY OR OTHER BASIS USED AS A METHOD OF MEASUREMENT.

FOR OFFICE USE ONLY

[ ] REGULATED BY FUGITIVE DUST LAW.
[ ] REGULATED BY PROCESS WEIGHT. TABLE I [ ] TABLE II [ ]
[ ] AMBIENT AIR MONITORING USED FOR SO_2 AT THIS PLANT.
[ ] IN COMPLIANCE
[ ] NOT IN COMPLIANCE
ACTUAL EMISSIONS _____ TONS/YR

FILING IS AUTHORIZED BY _____ DATE JUL 13 [illegible]

1-22-74 Issue.

APC - 23
REV 5/73

Process Emission Source Number B-126-1
Page 3 of 5
Date JUL 13 1972

PROCESS EMISSION SOURCE COVER SHEET - APC 21

MAIL TO:
TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
256 CAPITOL HILL BUILDING
NASHVILLE, TENNESSEE 37217

DO NOT WRITE IN THIS SPACE
COMPANY NO. | | | | | | |
LOG NO. _____
PERMIT NO. _____
REVIEWED BY _____

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-126-1 3. SIC CODE 2823
4. DID CONSTRUCTION OF THIS PROCESS BEGIN ON OR BEFORE AUGUST 9, 1969? [X] YES [ ] NO ON OR BEFORE APRIL 3, 1972? [X] YES [ ] NO
5. GIVE A BRIEF DESCRIPTION OF THE PROCESS ALONG WITH A FLOW DIAGRAM. OPERATION CENTERS, STORAGE POINTS, MATERIAL INPUTS, MATERIAL OUTPUTS AND EMISSION POINTS SHOULD BE NOTED IN POUNDS PER OPERATING HOUR.

Cellulose acetate is combined with acetone and pigment to produce raw dope.

NOTE: ATTACH FLOW DIAGRAM FOR PROCESS EMISSION SOURCE CLAIMED ON SEPARATE SHEET.

6. TYPE OF PROCESS: CONTINUOUS [X] BATCH [ ] COMBINED [ ]
7. OPERATIONAL SCHEDULE OF PROCESS EMISSION SOURCE:
   A. HOURS PER DAY 24
   B. DAYS PER WEEK 7
   C. WEEKS PER YEAR 52
   D. % ANNUAL THRUPUT

DEC-FEB	MARCH-MAY	JUNE-AUGUST	SEPT-NOV
25	25	25	25

8. LIST MATERIAL INPUTS TO PROCESS EMISSION SOURCE:

NAME OF INPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
1. Cellulose acetate	36,500	36,500
2. Pigment	200	200
3. Acetone	81,500	81,500
4. Thin Dope	20,200	20,200
TOTAL LBS/OPERATING HOUR INPUT TO PROCESS EMISSION SOURCE	138,400	138,400

(TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)

12/15/75 Issue

9. LIST MATERIAL OUTPUTS FROM THIS PROCESS EMISSION SOURCE:

NAME OF OUTPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
5. Raw dope	138,400	138,400
TOTAL LBS/OPERATING HOUR OUTPUT FROM PROCESS EMISSION SOURCE (TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)	138,400	138,400

10. LIST AIR POLLUTION EMISSION POINTS FOR THIS PROCESS EMISSION SOURCE. ATTACH A SEPARATE "EMISSION POINT DATA" SHEET, APC-22, FOR EACH POINT.

FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR	FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR
A.		N.	
B.		O.	
C.		P.	
D.		Q.	
E.		R.	
F.		S.	
G.		T.	
H.		U.	
I.		V.	
J.		W.	
K.		X.	
L.		Y.	
M.		Z.	

TOTAL LBS. OF PARTICULATE EMITTED FROM PROCESS EMISSION SOURCE PER OPERATING HOUR 0
(TOTAL ROUNDED TO TWO SIGNIFICANT FIGURES)

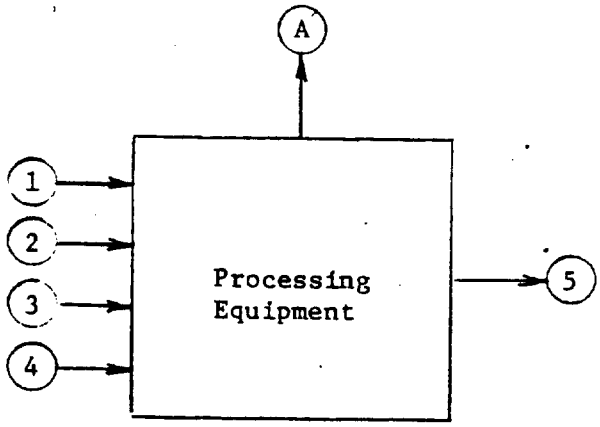
11. LIST PROCESS FUELS USED IN THIS PROCESS WHICH DO NOT APPEAR AS MATERIAL INPUTS TO THE PROCESS EMISSION SOURCE: (DIRECT OR INDIRECT HEAT SOURCES NOT ELSEWHERE REGISTERED ARE TO BE LISTED.)

FUEL	CONSUMPTION RATE: GAL/YR/FT³/YR	DIRECT HEAT SOURCE / INDIRECT HEAT SOURCE
NATURAL GAS		
FUEL OIL		
OTHER:		

Flow Diagram

For Item 5 of APC-21

Process Emission Sour
Number B-126-1
Page 5 of 5
Date JUL 13 1979



4-11-74 Issue.

Attach to APC-21

Process Emission Source
Number B-254-2
Page 2 of 5
Date JUL 13 1974

NON-STACK PROCESS EMISSION POINT DATA FORM - APC - 23

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
C2-212 CORDELL HULL BUILDING
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE

COMPANY NO. [ ] - [ ]
PERMIT NO. [ ] P
PROCESS EMISSION SOURCE NO. [ ]
EMISSION POINT NO. [ ]
REVIEWER [ ]
DATE [ ]

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-254-2
3. POINT SOURCE IDENTIFICATION ON PROCESS FLOW DIAGRAM --
4. GIVE A BRIEF DESCRIPTION OF THE PROCESS EMISSION POINT PLUS A SKETCH IF APPROPRIATE Acetone emissions are vapor losses into the room air surrounding the process equipment. Acetone leaves the building through windows, doors, and the ventilation system.
5. GIVE A BRIEF DESCRIPTION OF ANY AIR POLLUTION CONTROLS ON THIS EMISSION POINT None
6. FILL IN TABLE BELOW:

POLLUTANT	ABSENT	PRESENT	MAX. AND MIN. EMISSIONS FOR ANY 30 MINUTE PERIOD OF NORMAL OPERATION		AVERAGE EMISSIONS		METHOD OF MEASUREMENT*
			LBS MAXIMUM	LBS MINIMUM	LBS/HR	LBS/YR	
PARTICULATES	X						
SULFUR DIOXIDE	X						
CARBON MONOXIDE	X						
HYDROCARBONS		X	50	4.0	88.6	7.8×10^5	Engineering Estimate
OXIDES OF NITROGEN	X						
FLUORIDES	X						
SHOW OTHERS	X						

*PLEASE ATTACH A COPY OF THE TEST PROCEDURE, PROCESS MATERIAL BALANCE STUDY OR OTHER BASIS USED AS A METHOD OF MEASUREMENT.

FOR OFFICE USE ONLY

[ ] REGULATED BY FUGITIVE DUST LAW.
[ ] REGULATED BY PROCESS WEIGHT. TABLE I [ ] TABLE II [ ]
[ ] AMBIENT AIR MONITORING USED FOR SO_2 AT THIS PLANT.
[ ] IN COMPLIANCE
[ ] NOT IN COMPLIANCE
ACTUAL EMISSIONS _____ TONS/YR

FILING IS AUTHORIZED BY _____ DATE JUL 13 1974

1-22-74 Issue.

APC - 23
REV 5/73

PROCESS EMISSION SOURCE COVER SHEET - APC 21

MAIL TO:
TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
256 CAPITOL HILL BUILDING
NASHVILLE, TENNESSEE 37217

DO NOT WRITE IN THIS SPACE

COMPANY NO. | | | | | | | |
LOG NO.
PERMIT NO.
REVIEWED BY

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-254-2 3. SIC CODE 2823
4. DID CONSTRUCTION OF THIS PROCESS BEGIN ON OR BEFORE AUGUST 9, 1969? [X] YES [ ] NO ON OR BEFORE APRIL 3, 1972? [X] YES [ ] NO
5. GIVE A BRIEF DESCRIPTION OF THE PROCESS ALONG WITH A FLOW DIAGRAM. OPERATION CENTERS, STORAGE POINTS, MATERIAL INPUTS, MATERIAL OUTPUTS AND EMISSION POINTS SHOULD BE NOTED IN POUNDS PER OPERATING HOUR.

Raw dope is filtered in plate and frame filter presses using nylon/paper filter media to produce filtered dope.

NOTE: ATTACH FLOW DIAGRAM FOR PROCESS EMISSION SOURCE CLAIMED ON SEPARATE SHEET.

6. TYPE OF PROCESS: CONTINUOUS [X] BATCH [ ] COMBINED [ ]
7. OPERATIONAL SCHEDULE OF PROCESS EMISSION SOURCE:
   A. HOURS PER DAY 24
   B. DAYS PER WEEK 7
   C. WEEKS PER YEAR 52
   D. % ANNUAL THRUPUT

DEC-FEB	MARCH-MAY	JUNE-AUGUST	SEPT-NOV
25	25	25	25

8. LIST MATERIAL INPUTS TO PROCESS EMISSION SOURCE:

NAME OF INPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
1 Raw dope	40,600	40,600
2 Nylon/paper filter media	116	116
TOTAL LBS/OPERATING HOUR INPUT TO PROCESS EMISSION SOURCE	40,700	40,700

(TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)

Process Emission Source Number B-254-2 Page 4 of 5 Date JUL 13 1970

9. LIST MATERIAL OUTPUTS FROM THIS PROCESS EMISSION SOURCE:

NAME OF OUTPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
3 Filtered dope	40,400	40,400
4 Filter media and raw dope	231	231
TOTAL LBS/OPERATING HOUR OUTPUT FROM PROCESS EMISSION SOURCE (TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)	40,600	40,600

10. LIST AIR POLLUTION EMISSION POINTS FOR THIS PROCESS EMISSION SOURCE. ATTACH A SEPARATE "EMISSION POINT DATA" SHEET, APC-22, FOR EACH POINT.

FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR	FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR
A.		N.	
B.		O.	
C.		P.	
D.		Q.	
E.		R.	
F.		S.	
G.		T.	
H.		U.	
I.		V.	
J.		W.	
K.		X.	
L.		Y.	
M.		Z.	

TOTAL LBS. OF PARTICULATE EMITTED FROM PROCESS EMISSION SOURCE PER OPERATING HOUR 0 (TOTAL ROUNDED TO TWO SIGNIFICANT FIGURES)

11. LIST PROCESS FUELS USED IN THIS PROCESS WHICH DO NOT APPEAR AS MATERIAL INPUTS TO THE PROCESS EMISSION SOURCE: (DIRECT OR INDIRECT HEAT SOURCES NOT ELSEWHERE REGISTERED ARE TO BE LISTED.)

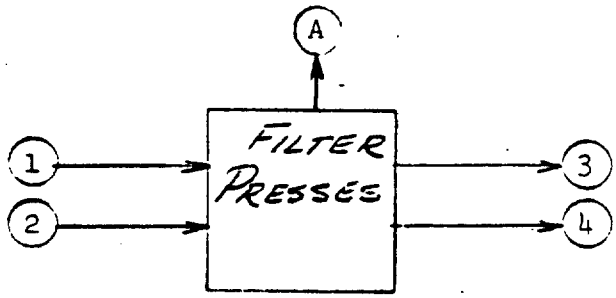
FUEL	CONSUMPTION RATE: GAL/YR/FT³/YR	DIRECT HEAT SOURCE / INDIRECT HEAT SOURCE
NATURAL GAS		
FUEL OIL		
OTHER:		

APC - 21

Flow Diagram

For Item 5 of APC-21

Process Emission Sour
Number B-254-2
Page 5 of 5
Date JUL 13 [illegible]



4-11-74 Issue.

Attach to APC-21

Process Emission Source Number B-97-1
Page 2 of 5
Date JUL 13 1979

NON-STACK PROCESS EMISSION POINT DATA FORM - APC - 23

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
C2-212 CORDELL HULL BUILDING
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE

COMPANY NO. [ ] - [ ]
PERMIT NO. [ ] P
PROCESS EMISSION SOURCE NO. [ ]
EMISSION POINT NO. [ ]
REVIEWER [ ]
DATE [ ]

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-97-1
3. POINT SOURCE IDENTIFICATION ON PROCESS FLOW DIAGRAM --
4. GIVE A BRIEF DESCRIPTION OF THE PROCESS EMISSION POINT PLUS A SKETCH IF APPROPRIATE Acetone emissions are vapor losses into the room air surrounding the process equipment and leaves the building through windows, doors, and the ventilation system.
5. GIVE A BRIEF DESCRIPTION OF ANY AIR POLLUTION CONTROLS ON THIS EMISSION POINT None
6. FILL IN TABLE BELOW:

POLLUTANT	ABSENT	PRESENT	MAX. AND MIN. EMISSIONS FOR ANY 30 MINUTE PERIOD OF NORMAL OPERATION		AVERAGE EMISSIONS		METHOD OF MEASUREMENT*
			LBS MAXIMUM	LBS MINIMUM	LBS/HR	LBS/YR	
PARTICULATES	X						
SULFUR DIOXIDE	X						
CARBON MONOXIDE	X						
HYDROCARBONS		X	60	4.0	92.9	8.1×10^5	Engineering Estimate
OXIDES OF NITROGEN	X						
FLUORIDES	X						
SHOW OTHERS	X						

*PLEASE ATTACH A COPY OF THE TEST PROCEDURE, PROCESS MATERIAL BALANCE STUDY OR OTHER BASIS USED AS A METHOD OF MEASUREMENT.

FOR OFFICE USE ONLY

[ ] REGULATED BY FUGITIVE DUST LAW.
[ ] REGULATED BY PROCESS WEIGHT. TABLE I [ ] TABLE II [ ]
[ ] AMBIENT AIR MONITORING USED FOR SO_2 AT THIS PLANT.
[ ] IN COMPLIANCE
[ ] NOT IN COMPLIANCE
ACTUAL EMISSIONS _____ TONS/YR.

FILING IS AUTHORIZED BY _____ DATE JUL 13 1979

1-22-74 Issue.

APC - 23
REV 5/73

Process Emission Source
Number B-97-1
Page 3 of 5
Date 12/15/75

PROCESS EMISSION SOURCE COVER SHEET - APC 21

MAIL TO:
TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
256 CAPITOL HILL BUILDING
NASHVILLE, TENNESSEE 37217

DO NOT WRITE IN THIS SPACE
COMPANY NO. | | | | | | | |
LOG NO.
PERMIT NO.
REVIEWED BY

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-97-1 3. SIC CODE 2823
4. DID CONSTRUCTION OF THIS PROCESS BEGIN ON OR BEFORE AUGUST 9, 1969? [X] YES [ ] NO ON OR BEFORE APRIL 3, 1972? [X] YES [ ] NO
5. GIVE A BRIEF DESCRIPTION OF THE PROCESS ALONG WITH A FLOW DIAGRAM. OPERATION CENTERS, STORAGE POINTS, MATERIAL INPUTS, MATERIAL OUTPUTS AND EMISSION POINTS SHOULD BE NOTED IN POUNDS PER OPERATING HOUR.

Raw dope is filtered in plate and frame presses using nylon/paper filter media to produce filtered dope.

NOTE: ATTACH FLOW DIAGRAM FOR PROCESS EMISSION SOURCE CLAIMED ON SEPARATE SHEET.

6. TYPE OF PROCESS: CONTINUOUS [X] BATCH [ ] COMBINED [ ]
7. OPERATIONAL SCHEDULE OF PROCESS EMISSION SOURCE:
   A. HOURS PER DAY 24
   B. DAYS PER WEEK 7
   C. WEEKS PER YEAR 52
   D. % ANNUAL THRUPUT

DEC-FEB	MARCH-MAY	JUNE-AUGUST	SEPT-NOV
25	25	25	25

8. LIST MATERIAL INPUTS TO PROCESS EMISSION SOURCE:

NAME OF INPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
1 Raw dope	31,000	31,000
2 Nylon/paper filter media	102.0	102.0
TOTAL LBS/OPERATING HOUR INPUT TO PROCESS EMISSION SOURCE	31,100	31,100

(TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)

APC - 21
REV 3/75

12/15/75 Issue

9. LIST MATERIAL OUTPUTS FROM THIS PROCESS EMISSION SOURCE:

NAME OF OUTPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
3 Filter media plus row dope	204	204
4 Filtered dope	30,800	30,800
TOTAL LBS/OPERATING HOUR OUTPUT FROM PROCESS EMISSION SOURCE (TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)	31,000	31,000

10. LIST AIR POLLUTION EMISSION POINTS FOR THIS PROCESS EMISSION SOURCE. ATTACH A SEPARATE "EMISSION POINT DATA" SHEET, APC-22, FOR EACH POINT.

FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR	FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR
A.		N.	
B.		O.	
C.		P.	
D.		Q.	
E.		R.	
F.		S.	
G.		T.	
H.		U.	
I.		V.	
J.		W.	
K.		X.	
L.		Y.	
M.		Z.	

TOTAL LBS. OF PARTICULATE EMITTED FROM PROCESS EMISSION SOURCE PER OPERATING HOUR 0
(TOTAL ROUNDED TO TWO SIGNIFICANT FIGURES)

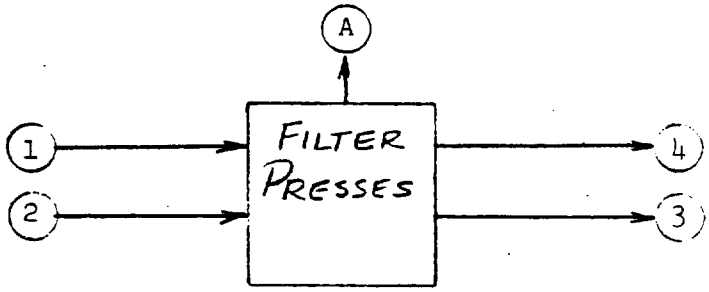
11. LIST PROCESS FUELS USED IN THIS PROCESS WHICH DO NOT APPEAR AS MATERIAL INPUTS TO THE PROCESS EMISSION SOURCE: (DIRECT OR INDIRECT HEAT SOURCES NOT ELSEWHERE REGISTERED ARE TO BE LISTED.)

FUEL	CONSUMPTION RATE: GAL/YR/FT³/YR	DIRECT HEAT SOURCE / INDIRECT HEAT SOURCE
NATURAL GAS		
FUEL OIL		
OTHER:		

Flow Diagram

For Item 5 of APC-21

Process Emission Sour
Number B-97-1
Page 5 of 5
Date JE 13 19



4-11-74 Issue.

Attach to APC-21

Process Emission Source
Number B-69-2
Page 2 of 5
Date JUL 13 1976

NON-STACK PROCESS EMISSION POINT DATA FORM - APC - 23

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
C2-212 CORDELL HULL BUILDING
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE

COMPANY NO. [ ] - [ ]
PERMIT NO. [ ] P
PROCESS EMISSION SOURCE NO. [ ]
EMISSION POINT NO. [ ]
REVIEWER [ ]
DATE [ ]

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-69-2
3. POINT SOURCE IDENTIFICATION ON PROCESS FLOW DIAGRAM
4. GIVE A BRIEF DESCRIPTION OF THE PROCESS EMISSION POINT PLUS A SKETCH IF APPROPRIATE Acetone emissions are vapor losses into the room air surrounding the process equipment. Acetone leaves the building through windows, doors, and the ventilation system.
5. GIVE A BRIEF DESCRIPTION OF ANY AIR POLLUTION CONTROLS ON THIS EMISSION POINT None
6. FILL IN TABLE BELOW:

POLLUTANT	ABSENT	PRESENT	MAX. AND MIN. EMISSIONS FOR ANY 30 MINUTE PERIOD OF NORMAL OPERATION		AVERAGE EMISSIONS		METHOD OF MEASUREMENT*
			LBS MAXIMUM	LBS MINIMUM	LBS/HR	LBS/YR	
PARTICULATES	X						
SULFUR DIOXIDE	X						
CARBON MONOXIDE	X						
HYDROCARBONS		X	2.2	0.2	3.9	3.4×10^4	Engineering Estimate
OXIDES OF NITROGEN	X						
FLUORIDES	X						
SHOW OTHERS	X						

*PLEASE ATTACH A COPY OF THE TEST PROCEDURE, PROCESS MATERIAL BALANCE STUDY OR OTHER BASIS USED AS A METHOD OF MEASUREMENT.

FOR OFFICE USE ONLY

[ ] REGULATED BY FUGITIVE DUST LAW.
[ ] REGULATED BY PROCESS WEIGHT. TABLE I [ ] TABLE II [ ]
[ ] AMBIENT AIR MONITORING USED FOR SO_2 AT THIS PLANT.
[ ] IN COMPLIANCE
[ ] NOT IN COMPLIANCE
ACTUAL EMISSIONS _____ TONS/YR

FILING IS AUTHORIZED BY _____ DATE JUL 13 1976

APC - 23
REV 5/73

1-22-74 Issue.

Process Emission Source
Number B-69-2
Page 3 of 5
Date Jul 13 '77

PROCESS EMISSION SOURCE COVER SHEET - APC 21

MAIL TO:
TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
256 CAPITOL HILL BUILDING
NASHVILLE, TENNESSEE 37217

DO NOT WRITE IN THIS SPACE
COMPANY NO. | | | | | | |
LOG NO. _____
PERMIT NO. _____
REVIEWED BY _____

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-69-2 3. SIC CODE 2823
4. DID CONSTRUCTION OF THIS PROCESS BEGIN ON OR BEFORE AUGUST 9, 1969? [X] YES [ ] NO ON OR BEFORE APRIL 3, 1972? [X] YES [ ] NO
5. GIVE A BRIEF DESCRIPTION OF THE PROCESS ALONG WITH A FLOW DIAGRAM. OPERATION CENTERS, STORAGE POINTS, MATERIAL INPUTS, MATERIAL OUTPUTS AND EMISSION POINTS SHOULD BE NOTED IN POUNDS PER OPERATING HOUR.

Raw dope is filtered in plate and frame filter presses using nylon/paper filter media to produce filtered dope.

NOTE: ATTACH FLOW DIAGRAM FOR PROCESS EMISSION SOURCE CLAIMED ON SEPARATE SHEET.

6. TYPE OF PROCESS: CONTINUOUS [X] BATCH [ ] COMBINED [ ]
7. OPERATIONAL SCHEDULE OF PROCESS EMISSION SOURCE:
   A. HOURS PER DAY 24
   B. DAYS PER WEEK 7
   C. WEEKS PER YEAR 52
   D. % ANNUAL THRUPUT

DEC-FEB	MARCH-MAY	JUNE-AUGUST	SEPT-NOV
25	25	25	25

8. LIST MATERIAL INPUTS TO PROCESS EMISSION SOURCE:

NAME OF INPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
1 Raw dope	18,400	18,400
2 Nylon/paper filter media	26.6	26.6
TOTAL LBS/OPERATING HOUR INPUT TO PROCESS EMISSION SOURCE	18,400	18,400

(TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)

APC - 21
REV 3/75

12/15/75 Issue

Process Emission Source Number B-69-2 Page 4 of 5 Date JUL 13 1977

9. LIST MATERIAL OUTPUTS FROM THIS PROCESS EMISSION SOURCE:

NAME OF OUTPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
4 Filtered dope	18,300	18,300
3 Filter media and raw dope	53.2	53.2
TOTAL LBS/OPERATING HOUR OUTPUT FROM PROCESS EMISSION SOURCE (TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)	18,400	18,400

10. LIST AIR POLLUTION EMISSION POINTS FOR THIS PROCESS EMISSION SOURCE. ATTACH A SEPARATE "EMISSION POINT DATA" SHEET, APC-22, FOR EACH POINT.

FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR	FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR
A.		N.	
B.		O.	
C.		P.	
D.		Q.	
E.		R.	
F.		S.	
G.		T.	
H.		U.	
I.		V.	
J.		W.	
K.		X.	
L.		Y.	
M.		Z.	

TOTAL LBS. OF PARTICULATE EMITTED FROM PROCESS EMISSION SOURCE PER OPERATING HOUR 0 (TOTAL ROUNDED TO TWO SIGNIFICANT FIGURES)

11. LIST PROCESS FUELS USED IN THIS PROCESS WHICH DO NOT APPEAR AS MATERIAL INPUTS TO THE PROCESS EMISSION SOURCE: (DIRECT OR INDIRECT HEAT SOURCES NOT ELSEWHERE REGISTERED ARE TO BE LISTED.)

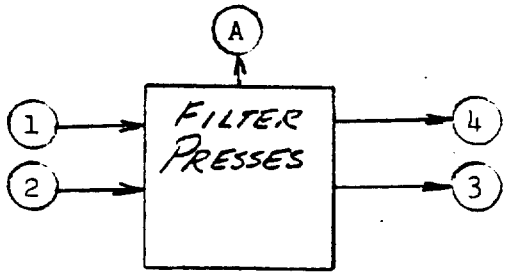
FUEL	CONSUMPTION RATE: GAL/YR/FT³/YR	DIRECT HEAT SOURCE / INDIRECT HEAT SOURCE
NATURAL GAS		
FUEL OIL		
OTHER:		

APC - 21 REV 7/75

Flow Diagram

For Item 5 of APC-21

Process Emission Sour
Number B-69-2
Page 5 of 5
Date JUL 13 1974



4-11-74 Issue.

Attach to APC-21

Process Emission Source Number B-249-1
Page 2 of 5
Date July 12 ...

NON-STACK PROCESS EMISSION POINT DATA FORM - APC - 23

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
C2-212 CORDELL HULL BUILDING
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE

COMPANY NO. [ ] - [ ]
PERMIT NO. [ ] P
PROCESS EMISSION SOURCE NO. [ ]
EMISSION POINT NO. [ ]
REVIEWER [ ]
DATE [ ]

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-249-1
3. POINT SOURCE IDENTIFICATION ON PROCESS FLOW DIAGRAM
4. GIVE A BRIEF DESCRIPTION OF THE PROCESS EMISSION POINT PLUS A SKETCH IF APPROPRIATE Acetone emissions are vapor losses into the room air surrounding the process equipment and leaves the building through windows, doors, and the ventilation system
5. GIVE A BRIEF DESCRIPTION OF ANY AIR POLLUTION CONTROLS ON THIS EMISSION POINT None
6. FILL IN TABLE BELOW:

POLLUTANT	ABSENT	PRESENT	MAX. AND MIN. EMISSIONS FOR ANY 30 MINUTE PERIOD OF NORMAL OPERATION		AVERAGE EMISSIONS		METHOD OF MEASUREMENT*
			LBS MAXIMUM	LBS MINIMUM	LBS/HR	LBS/YR	
PARTICULATES	X						
SULFUR DIOXIDE	X						
CARBON MONOXIDE	X						
HYDROCARBONS		X	3.0	0.3	107	9.4×10^5	Engineering Estimate
OXIDES OF NITROGEN	X						
FLUORIDES	X						
SHOW OTHERS	X						

*PLEASE ATTACH A COPY OF THE TEST PROCEDURE, PROCESS MATERIAL BALANCE STUDY OR OTHER BASIS USED AS A METHOD OF MEASUREMENT.

FOR OFFICE USE ONLY

[ ] REGULATED BY FUGITIVE DUST LAW.
[ ] REGULATED BY PROCESS WEIGHT. TABLE I [ ] TABLE II [ ]
[ ] AMBIENT AIR MONITORING USED FOR SO_2 AT THIS PLANT.
[ ] IN COMPLIANCE
[ ] NOT IN COMPLIANCE
ACTUAL EMISSIONS _____ TONS/YR

FILING IS AUTHORIZED BY _____ DATE _____

1-22-74 Issue.

APC - 23
REV 5/73

PROCESS EMISSION SOURCE COVER SHEET - APC 21

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
256 CAPITOL HILL BUILDING
NASHVILLE, TENNESSEE 37217

DO NOT WRITE IN THIS SPACE

COMPANY NO. | | | | | | | |

LOG NO. _____

PERMIT NO. _____

REVIEWED BY _____

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-249-1 3. SIC CODE 2823
4. DID CONSTRUCTION OF THIS PROCESS BEGIN ON OR BEFORE AUGUST 9, 1969? [x] YES [ ] NO ON OR BEFORE APRIL 5, 1972? [x] YES [ ] NO
5. GIVE A BRIEF DESCRIPTION OF THE PROCESS ALONG WITH A FLOW DIAGRAM. OPERATION CENTERS, STORAGE POINTS, MATERIAL INPUTS, MATERIAL OUTPUTS AND EMISSION POINTS SHOULD BE NOTED IN POUNDS PER OPERATING HOUR.

Nylon filter media containing raw dope is washed in acetone for reuse and the thin dope is clarified for use. Paper filter media containing raw dope is collected for disposal.

NOTE: ATTACH FLOW DIAGRAM FOR PROCESS EMISSION SOURCE CLAIMED ON SEPARATE SHEET.

6. TYPE OF PROCESS: CONTINUOUS [x] BATCH [ ] COMBINED [ ]
7. OPERATIONAL SCHEDULE OF PROCESS EMISSION SOURCE:
   A. HOURS PER DAY 24
   B. DAYS PER WEEK 7
   C. WEEKS PER YEAR 52
   D. % ANNUAL THRUPUT

DEC-FEB	MARCH-MAY	JUNE-AUGUST	SEPT-NOV
25	25	25	25

8. LIST MATERIAL INPUTS TO PROCESS EMISSION SOURCE:

NAME OF INPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
1 Nylon + dope	243	243
2 Acetone + dope	5272	5272
3 Steam	18.4	18.4
4 Paper + dope	229	229
TOTAL LBS/OPERATING HOUR INPUT TO PROCESS EMISSION SOURCE	5760	5760

(TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)

12/15/75 Issue

Process Emission Source Number B-249-1 Page 4 of 5 Date JUL 13 ...

LIST MATERIAL OUTPUTS FROM THIS PROCESS EMISSION SOURCE:

NAME OF OUTPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
5 Nylon	122	122
6 Dope	5380	5380
7 Acetone + water	23.6	23.6
8 Paper + dope	132	132
TOTAL LBS/OPERATING HOUR OUTPUT FROM PROCESS EMISSION SOURCE (TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)	5660	5660

10. LIST AIR POLLUTION EMISSION POINTS FOR THIS PROCESS EMISSION SOURCE. ATTACH A SEPARATE "EMISSION POINT DATA" SHEET, APC-22, FOR EACH POINT.

FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR	FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR
A.		N.	
B.		O.	
C.		P.	
D.		Q.	
E.		R.	
F.		S.	
G.		T.	
H.		U.	
I.		V.	
J.		W.	
K.		X.	
L.		Y.	
M.		Z.	

TOTAL LBS. OF PARTICULATE EMITTED FROM PROCESS EMISSION SOURCE PER OPERATING HOUR 0
(TOTAL ROUNDED TO TWO SIGNIFICANT FIGURES)

11. LIST PROCESS FUELS USED IN THIS PROCESS WHICH DO NOT APPEAR AS MATERIAL INPUTS TO THE PROCESS EMISSION SOURCE: (DIRECT OR INDIRECT HEAT SOURCES NOT ELSEWHERE REGISTERED ARE TO BE LISTED.)

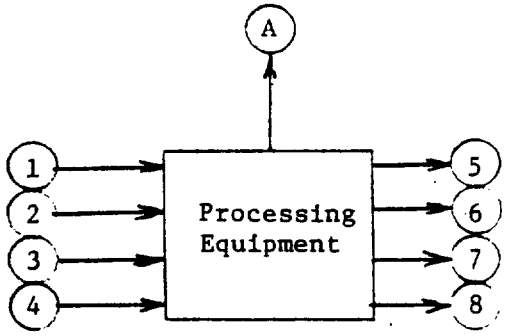
FUEL	CONSUMPTION RATE: GAL/YR/FT³/YR	DIRECT HEAT SOURCE / INDIRECT HEAT SOURCE
NATURAL GAS		
FUEL OIL		
OTHER:		

APC - 21 REV 3/75

Flow Diagram

For Item 5 of APC-21

Process Emission Sour
Number B-249-1
Page 5 of 5
Date JUL 13 1979



4-11-74 Issue.

Attach to APC-21

Process Emission Source
Number B-74-1
Page 2 of 5
Date JUL 13 1979

NON-STACK PROCESS EMISSION POINT DATA FORM - APC - 23

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
C2-212 CORDELL HULL BUILDING
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE

COMPANY NO. [ ] - [ ]
PERMIT NO. [ ] P
PROCESS EMISSION SOURCE NO. [ ]
EMISSION POINT NO. [ ]
REVIEWER [ ]
DATE [ ]

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-74-1
3. POINT SOURCE IDENTIFICATION ON PROCESS FLOW DIAGRAM
4. GIVE A BRIEF DESCRIPTION OF THE PROCESS EMISSION POINT PLUS A SKETCH IF APPROPRIATE Acetone emissions are vapor losses into the room air surrounding the process equipment and leaves the building through windows, doors, and the ventilation system
5. GIVE A BRIEF DESCRIPTION OF ANY AIR POLLUTION CONTROLS ON THIS EMISSION POINT None
6. FILL IN TABLE BELOW:

POLLUTANT	ABSENT	PRESENT	MAX. AND MIN. EMISSIONS FOR ANY 30 MINUTE PERIOD OF NORMAL OPERATION		AVERAGE EMISSIONS		METHOD OF MEASUREMENT*
			LBS MAXIMUM	LBS MINIMUM	LBS/HR	LBS/YR	
PARTICULATES	X						
SULFUR DIOXIDE	X						
CARBON MONOXIDE	X						
HYDROCARBONS		X	3.0	0.3	5.0	4.4×10^4	Engineer Est.
OXIDES OF NITROGEN	X						
FLUORIDES	X						
SHOW OTHERS	X						

*PLEASE ATTACH A COPY OF THE TEST PROCEDURE, PROCESS MATERIAL BALANCE STUDY OR OTHER BASIS USED AS A METHOD OF MEASUREMENT.

FOR OFFICE USE ONLY

[ ] REGULATED BY FUGITIVE DUST LAW.
[ ] REGULATED BY PROCESS WEIGHT. TABLE I [ ] TABLE II [ ]
[ ] AMBIENT AIR MONITORING USED FOR SO_2 AT THIS PLANT.
[ ] IN COMPLIANCE
[ ] NOT IN COMPLIANCE
ACTUAL EMISSIONS _____ TONS/YR

FILING IS AUTHORIZED BY _____ DATE JUL 13 1979

1-22-74 Issue.

APC - 23
REV 5/73

PROCESS EMISSION SOURCE COVER SHEET - APC 21

MAIL TO:
- TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
256 CAPITOL HILL BUILDING
NASHVILLE, TENNESSEE 37217

DO NOT WRITE IN THIS SPACE

COMPANY NO. | | | | | | | |
LOG NO. _____
PERMIT NO. _____
REVIEWED BY _____

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-74-1 3. SIC CODE 2823
4. DID CONSTRUCTION OF THIS PROCESS BEGIN ON OR BEFORE AUGUST 9, 1969? [X] YES [ ] NO ON OR BEFORE APRIL 5, 1972? [X] YES [ ] NO
5. GIVE A BRIEF DESCRIPTION OF THE PROCESS ALONG WITH A FLOW DIAGRAM. OPERATION CENTERS, STORAGE POINTS, MATERIAL INPUTS, MATERIAL OUTPUTS AND EMISSION POINTS SHOULD BE NOTED IN POUNDS PER OPERATING HOUR.

Nylon filter media containing raw dope is washed in acetone for reuse and the thin dope is clarified for reuse.

NOTE: ATTACH FLOW DIAGRAM FOR PROCESS EMISSION SOURCE CLAIMED ON SEPARATE SHEET.

6. TYPE OF PROCESS: CONTINUOUS [X] BATCH [ ] COMBINED [ ]
7. OPERATIONAL SCHEDULE OF PROCESS EMISSION SOURCE:
   A. HOURS PER DAY 24
   B. DAYS PER WEEK 7
   C. WEEKS PER YEAR 52
   D. % ANNUAL THRUPUT

DEC-FEB	MARCH-MAY	JUNE-AUGUST	SEPT-NOV
25	25	25	25

8. LIST MATERIAL INPUTS TO PROCESS EMISSION SOURCE:

NAME OF INPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
1. Nylon and dope	243	243
2. Acetone and dope	5272	5272
3. Steam	18.4	18.4
TOTAL LBS/OPERATING HOUR INPUT TO PROCESS EMISSION SOURCE	5530.	5530.

(TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)

Process Emission Source Number B-74-1 Page 4 of 5 Date JUL 13 1979

9. LIST MATERIAL OUTPUTS FROM THIS PROCESS EMISSION SOURCE:

NAME OF OUTPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
4. Nylon	122	122
5. Dope	5380.	5380.
6. Acetone and water (Recovery)	23.6	23.6
TOTAL LBS/OPERATING HOUR OUTPUT FROM PROCESS EMISSION SOURCE (TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)	5530.	5530.

10. LIST AIR POLLUTION EMISSION POINTS FOR THIS PROCESS EMISSION SOURCE. ATTACH A SEPARATE "EMISSION POINT DATA" SHEET, APC-22, FOR EACH POINT.

FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR	FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR
A.		N.	
B.		O.	
C.		P.	
D.		Q.	
E.		R.	
F.		S.	
G.		T.	
H.		U.	
I.		V.	
J.		W.	
K.		X.	
L.		Y.	
M.		Z.	

TOTAL LBS. OF PARTICULATE EMITTED FROM PROCESS EMISSION SOURCE PER OPERATING HOUR 0
(TOTAL ROUNDED TO TWO SIGNIFICANT FIGURES)

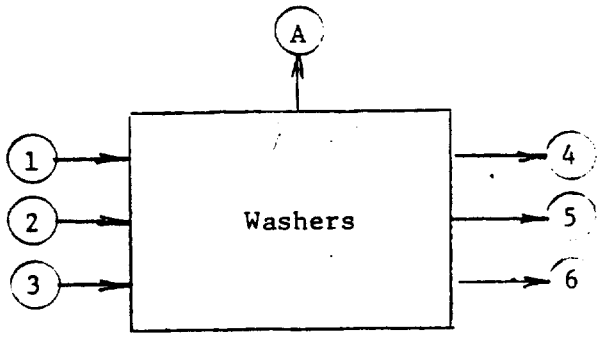
11. LIST PROCESS FUELS USED IN THIS PROCESS WHICH DO NOT APPEAR AS MATERIAL INPUTS TO THE PROCESS EMISSION SOURCE: (DIRECT OR INDIRECT HEAT SOURCES NOT ELSEWHERE REGISTERED ARE TO BE LISTED.)

FUEL	CONSUMPTION RATE: GAL/YR/FT³/YR	DIRECT HEAT SOURCE / INDIRECT HEAT SOURCE
NATURAL GAS		
FUEL OIL		
OTHER:		

Flow Diagram

For Item 5 of APC-21

Process Emission Source
Number B-71-1
Page 5 of 5
Date JUL 13 1



4-11-74 Issue.

Attach to APC-21

Process Emission Source
Number B-85-4
Page 2 of 5
Date JUL 13 197

NON-STACK PROCESS EMISSION POINT DATA FORM - APC - 23

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
C2-212 CORDELL HULL BUILDING
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE

COMPANY NO. [ ] - [ ]
PERMIT NO. [ ] P
PROCESS EMISSION SOURCE NO. [ ]
EMISSION POINT NO. [ ]
REVIEWER [ ]
DATE [ ]

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-85-4
3. POINT SOURCE IDENTIFICATION ON PROCESS FLOW DIAGRAM --
4. GIVE A BRIEF DESCRIPTION OF THE PROCESS EMISSION POINT PLUS A SKETCH IF APPROPRIATE Acetone emissions are vapor losses into the room air surrounding the process equipment and leaves the building through windows, doors, and the ventilation system.
5. GIVE A BRIEF DESCRIPTION OF ANY AIR POLLUTION CONTROLS ON THIS EMISSION POINT
6. FILL IN TABLE BELOW:

POLLUTANT	ABSENT	PRESENT	MAX. AND MIN. EMISSIONS FOR ANY 30 MINUTE PERIOD OF NORMAL OPERATION		AVERAGE EMISSIONS		METHOD OF MEASUREMENT*
			LBS MAXIMUM	LBS MINIMUM	LBS/HR	LBS/YR	
PARTICULATES	X						
SULFUR DIOXIDE	X						
CARBON MONOXIDE	X						
HYDROCARBONS		X	2.5	0.2	3.8	3.3×10^4	Engineering Estimate
OXIDES OF NITROGEN	X						
FLUORIDES	X						
SHOW OTHERS	X						

*PLEASE ATTACH A COPY OF THE TEST PROCEDURE, PROCESS MATERIAL BALANCE STUDY OR OTHER BASIS USED AS A METHOD OF MEASUREMENT.

FOR OFFICE USE ONLY

[ ] REGULATED BY FUGITIVE DUST LAW.
[ ] REGULATED BY PROCESS WEIGHT. TABLE I [ ] TABLE II [ ]
[ ] AMBIENT AIR MONITORING USED FOR SO_2 AT THIS PLANT.
[ ] IN COMPLIANCE
[ ] NOT IN COMPLIANCE
ACTUAL EMISSIONS _____ TONS/YR

FILING IS AUTHORIZED BY _____ DATE JUL 13 1979

1-22-74 Issue.

APC - 23
REV 5/73

Process Emission Source
Number B-85-4
Page 3 of 5
Date JUL 13 19?

PROCESS EMISSION SOURCE COVER SHEET - APC 21

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
256 CAPITOL HILL BUILDING
NASHVILLE, TENNESSEE 37217

DO NOT WRITE IN THIS SPACE

COMPANY NO. | | | | | | |

LOG NO. _____

PERMIT NO. _____

REVIEWED BY _____

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-85-4 3. SIC CODE 2823
4. DID CONSTRUCTION OF THIS PROCESS BEGIN ON OR BEFORE AUGUST 9, 1969? [X] YES [ ] NO ON OR BEFORE APRIL 3, 1972? [X] YES [ ] NO
5. GIVE A BRIEF DESCRIPTION OF THE PROCESS ALONG WITH A FLOW DIAGRAM. OPERATION CENTERS, STORAGE POINTS, MATERIAL INPUTS, MATERIAL OUTPUTS AND EMISSION POINTS SHOULD BE NOTED IN POUNDS PER OPERATING HOUR.

Nylon filter media containing raw dope is washed in acetone for reuse and the thin dope is clarified for reuse.

NOTE: ATTACH FLOW DIAGRAM FOR PROCESS EMISSION SOURCE CLAIMED ON SEPARATE SHEET.

6. TYPE OF PROCESS: CONTINUOUS [X] BATCH [ ] COMBINED [ ]
7. OPERATIONAL SCHEDULE OF PROCESS EMISSION SOURCE:
   A. HOURS PER DAY 24
   B. DAYS PER WEEK 7
   C. WEEKS PER YEAR 52
   D. % ANNUAL THRUPUT

DEC-FEB	MARCH-MAY	JUNE-AUGUST	SEPT-NOV
25	25	25	25

8. LIST MATERIAL INPUTS TO PROCESS EMISSION SOURCE:

NAME OF INPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
1 Nylon + dope	183	183
2 Acetone + dope	3,954	3,954
3 Steam	13.8	13.8
TOTAL LBS/OPERATING HOUR INPUT TO PROCESS EMISSION SOURCE	4,150	4,150

(TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)

APC - 21
REV 3/75

12/15/75 Issue

Process Emission Source Number B-85-4 Page 4 of 5 Date JUL 13 1979

9. LIST MATERIAL OUTPUTS FROM THIS PROCESS EMISSION SOURCE:

NAME OF OUTPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
4 Nylon	91.3	91.3
5 Dope	4,040	4,040
6 Acetone + water (recovery)	17.7	17.7
TOTAL LBS/OPERATING HOUR OUTPUT FROM PROCESS EMISSION SOURCE (TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)	4,150	4,150

10. LIST AIR POLLUTION EMISSION POINTS FOR THIS PROCESS EMISSION SOURCE. ATTACH A SEPARATE "EMISSION POINT DATA" SHEET, APC-22, FOR EACH POINT.

FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR	FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR
A.		N.	
B.		O.	
C.		P.	
D.		Q.	
E.		R.	
F.		S.	
G.		T.	
H.		U.	
I.		V.	
J.		W.	
K.		X.	
L.		Y.	
M.		Z.	

TOTAL LBS. OF PARTICULATE EMITTED FROM PROCESS EMISSION SOURCE PER OPERATING HOUR 0
(TOTAL ROUNDED TO TWO SIGNIFICANT FIGURES)

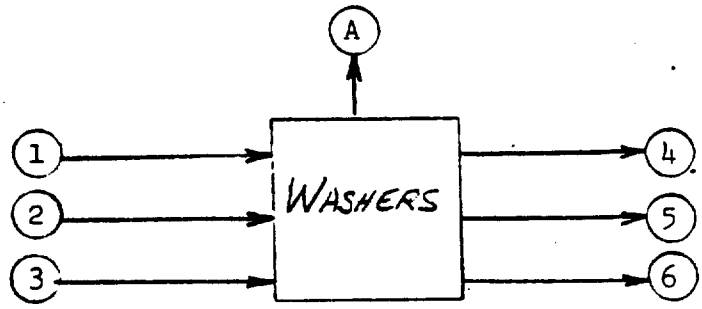
11. LIST PROCESS FUELS USED IN THIS PROCESS WHICH DO NOT APPEAR AS MATERIAL INPUTS TO THE PROCESS EMISSION SOURCE: (DIRECT OR INDIRECT HEAT SOURCES NOT ELSEWHERE REGISTERED ARE TO BE LISTED.)

FUEL	CONSUMPTION RATE: GAL/YR/FT³/YR	DIRECT HEAT SOURCE / INDIRECT HEAT SOURCE
NATURAL GAS		
FUEL OIL		
OTHER:		

Flow Diagram

For Item 5 of APC-21

Process Emission Source
Number B-85-4
Page 5 of 5
Date JUL 13 1974



4-11-74 Issue.

Attach to APC-21

Process Emission Source Number B-62-1
Page 2 of 5
Date JUL 13 1977

NON-STACK PROCESS EMISSION POINT DATA FORM - APC - 23

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
C2-212 CORDELL HULL BUILDING
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE

COMPANY NO. [ ] - [ ]
PERMIT NO. [ ] P
PROCESS EMISSION SOURCE NO. [ ]
EMISSION POINT NO. [ ]
REVIEWER [ ]
DATE [ ]

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-62-1
3. POINT SOURCE IDENTIFICATION ON PROCESS FLOW DIAGRAM
4. GIVE A BRIEF DESCRIPTION OF THE PROCESS EMISSION POINT PLUS A SKETCH IF APPROPRIATE Acetone emissions are vapor losses into the room air surrounding the process equipment and leaves the building through windows, doors, and the ventilation system.
5. GIVE A BRIEF DESCRIPTION OF ANY AIR POLLUTION CONTROLS ON THIS EMISSION POINT None
6. FILL IN TABLE BELOW:

POLLUTANT	ABSENT	PRESENT	MAX. AND MIN. EMISSIONS FOR ANY 30 MINUTE PERIOD OF NORMAL OPERATION		AVERAGE EMISSIONS		METHOD OF MEASUREMENT*
			LBS MAXIMUM	LBS MINIMUM	LBS/HR	LBS/YR	
PARTICULATES	X						
SULFUR DIOXIDE	X						
CARBON MONOXIDE	X						
HYDROCARBONS		X	3.0	0.3	5.0	4.4×10^4	Engineering
OXIDES OF NITROGEN	X						
FLUORIDES	X						
SHOW OTHERS	X						

*PLEASE ATTACH A COPY OF THE TEST PROCEDURE, PROCESS MATERIAL BALANCE STUDY OR OTHER BASIS USED AS A METHOD OF MEASUREMENT

FOR OFFICE USE ONLY

[ ] REGULATED BY FUGITIVE DUST LAW.
[ ] REGULATED BY PROCESS WEIGHT. TABLE I [ ] TABLE II [ ]
[ ] AMBIENT AIR MONITORING USED FOR SO_2 AT THIS PLANT.
[ ] IN COMPLIANCE
[ ] NOT IN COMPLIANCE
ACTUAL EMISSIONS _____ TONS/YR

FILING IS AUTHORIZED BY _____ DATE JUL 13 1977

1-22-74 Issue.

APC - 23
REV 5/73

Process Emission Source
Number B-62-1
Page 3 of 5
Date JUL 12 197

PROCESS EMISSION SOURCE COVER SHEET - APC 21

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
256 CAPITOL HILL BUILDING
NASHVILLE, TENNESSEE 37217

DO NOT WRITE IN THIS SPACE

COMPANY NO. | | | | | | | |

LOG NO. _____

PERMIT NO. _____

REVIEWED BY _____

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-62-1 3. SIC CODE 2823
4. DID CONSTRUCTION OF THIS PROCESS BEGIN ON OR BEFORE AUGUST 9, 1969? [X] YES [ ] NO ON OR BEFORE APRIL 3, 1972? [X] YES [ ] NO
5. GIVE A BRIEF DESCRIPTION OF THE PROCESS ALONG WITH A FLOW DIAGRAM. OPERATION CENTERS, STORAGE POINTS, MATERIAL INPUTS, MATERIAL OUTPUTS AND EMISSION POINTS SHOULD BE NOTED IN POUNDS PER OPERATING HOUR.

Nylon filter media containing raw dope is washed in acetone for reuse and the thin dope is clarified for reuse.

NOTE: ATTACH FLOW DIAGRAM FOR PROCESS EMISSION SOURCE CLAIMED ON SEPARATE SHEET.

6. TYPE OF PROCESS: CONTINUOUS [X] BATCH [ ] COMBINED [ ]
7. OPERATIONAL SCHEDULE OF PROCESS EMISSION SOURCE:
   A. HOURS PER DAY 24
   B. DAYS PER WEEK 7
   C. WEEKS PER YEAR 52
   D. % ANNUAL THRUPUT

DEC-FEB	MARCH-MAY	JUNE-AUGUST	SEPT-NOV
25	25	25	25

8. LIST MATERIAL INPUTS TO PROCESS EMISSION SOURCE:

NAME OF INPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
1. Nylon and dope	243	243
2. Acetone and dope	5,272	5,272
3. Steam	18.4	18.4
TOTAL LBS/OPERATING HOUR INPUT TO PROCESS EMISSION SOURCE	5530.	5530.

(TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)

12/15/75 Issue

9. LIST MATERIAL OUTPUTS FROM THIS PROCESS EMISSION SOURCE:

NAME OF OUTPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
4. Nylon	122	122
5. Dope	5390	5380
6. Acetone and Water (Recovery)	23.6	23.6
TOTAL LBS/OPERATING HOUR OUTPUT FROM PROCESS EMISSION SOURCE (TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)	5530.	5530.

10. LIST AIR POLLUTION EMISSION POINTS FOR THIS PROCESS EMISSION SOURCE. ATTACH A SEPARATE "EMISSION POINT DATA" SHEET, APC-22, FOR EACH POINT.

FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR	FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR
A.		N.	
B.		O.	
C.		P.	
D.		Q.	
E.		R.	
F.		S.	
G.		T.	
H.		U.	
I.		V.	
J.		W.	
K.		X.	
L.		Y.	
M.		Z.	

TOTAL LBS. OF PARTICULATE EMITTED FROM PROCESS EMISSION SOURCE PER OPERATING HOUR 0
(TOTAL ROUNDED TO TWO SIGNIFICANT FIGURES)

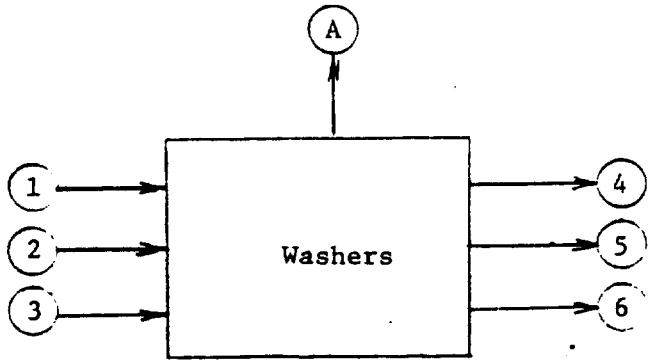
11. LIST PROCESS FUELS USED IN THIS PROCESS WHICH DO NOT APPEAR AS MATERIAL INPUTS TO THE PROCESS EMISSION SOURCE: (DIRECT OR INDIRECT HEAT SOURCES NOT ELSEWHERE REGISTERED ARE TO BE LISTED.)

FUEL	CONSUMPTION RATE: GAL/YR/FT³/YR	DIRECT HEAT SOURCE / INDIRECT HEAT SOURCE
NATURAL GAS		
FUEL OIL		
OTHER:		

Flow Diagram

For Item 5 of APC-21

Process Emission Source
Number B-62-1
Page 5 of 5
Date JUL 13 [illegible]



4-11-74 Issue.

Attach to APC-21

Process Emission Source
Number B-93-2
Page 2 of 5
Edition A
JUL 13 [illegible]

PROCESS EMISSION SOURCE COVER SHEET - APC 21

MAIL TO:
TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
256 CAPITOL HILL BUILDING
NASHVILLE, TENNESSEE 37217

DO NOT WRITE IN THIS SPACE
COMPANY NO. | | | | | | | |
LOG NO. _____
PERMIT NO. _____
REVIEWED BY _____

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-93-2 3. SIC CODE 2823
4. DID CONSTRUCTION OF THIS PROCESS BEGIN ON OR BEFORE AUGUST 9, 1969? [X] YES [ ] NO ON OR BEFORE APRIL 3, 1972? YES [ ] NO [ ]
5. GIVE A BRIEF DESCRIPTION OF THE PROCESS ALONG WITH A FLOW DIAGRAM. OPERATION CENTERS, STORAGE POINTS, MATERIAL INPUTS, MATERIAL OUTPUTS AND EMISSION POINTS SHOULD BE NOTED IN POUNDS PER OPERATING HOUR.

Spinning of Cellulose Acetate Yarn

NOTE: ATTACH FLOW DIAGRAM FOR PROCESS EMISSION SOURCE CLAIMED ON SEPARATE SHEET.

6. TYPE OF PROCESS: CONTINUOUS [X] BATCH [ ] COMBINED [ ]
7. OPERATIONAL SCHEDULE OF PROCESS EMISSION SOURCE:
   A. HOURS PER DAY 24
   B. DAYS PER WEEK 7
   C. WEEKS PER YEAR 52
   D. % ANNUAL THRUPUT

DEC-FEB	MARCH-MAY	JUNE-AUGUST	SEPT-NOV
25	25	25	25

8. LIST MATERIAL INPUTS TO PROCESS EMISSION SOURCE:

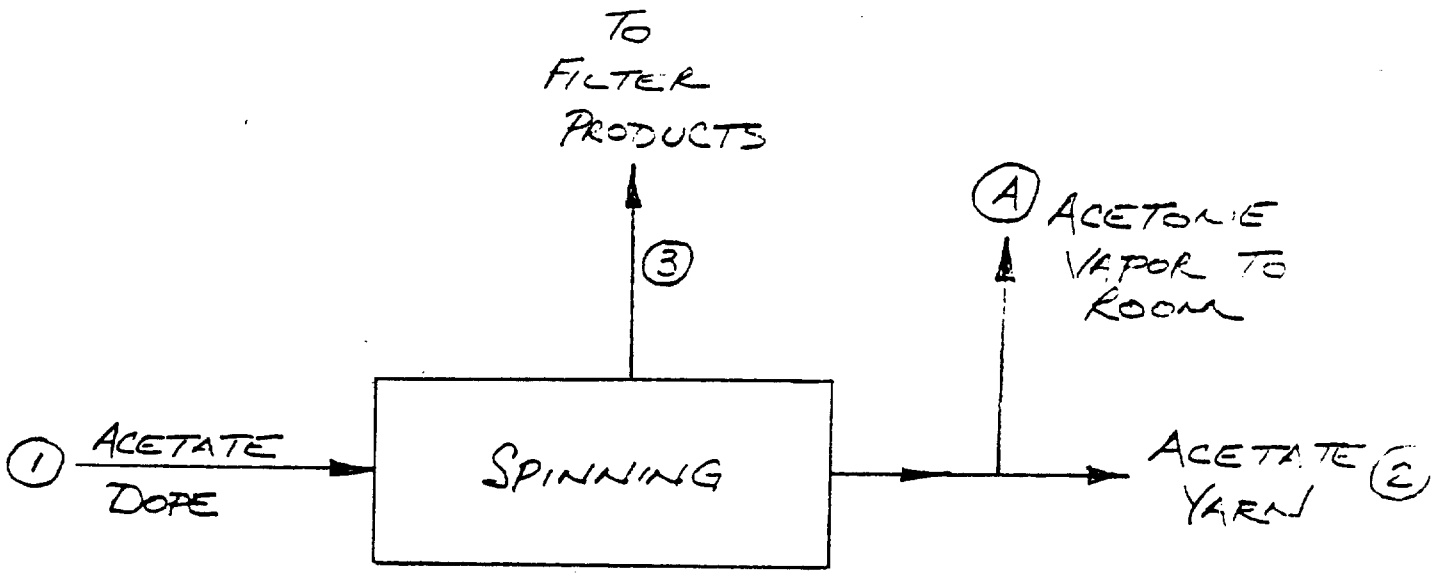
NAME OF INPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
Cellulose Acetate Dope, (1)	9800	9800
TOTAL LBS/OPERATING HOUR INPUT TO PROCESS EMISSION SOURCE	9800	9800

(TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)

Flow Diagram

Process Emission Source
Number B-93-2
Page 4 of 5
Edition B

JUL 13



4-11-74 Issue

Process Emission Source Number B-93-2
Page 5 of 5
Edition A

NON-STACK PROCESS EMISSION POINT DATA FORM - APC - 23

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
C2-212 CORDELL HULL BUILDING
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE

COMPANY NO. [ ] - [ ]
PERMIT NO. [ ] P
PROCESS EMISSION SOURCE NO. [ ]
EMISSION POINT NO. [ ]
REVIEWER [ ]
DATE [ ]

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-93-2
3. POINT SOURCE IDENTIFICATION ON PROCESS FLOW DIAGRAM A
4. GIVE A BRIEF DESCRIPTION OF THE PROCESS EMISSION POINT PLUS A SKETCH IF APPROPRIATE Acetone vapor is lost into th room where process equipment is located. The vapors escape through doors, windows, and A.C. System.
5. GIVE A BRIEF DESCRIPTION OF ANY AIR POLLUTION CONTROLS ON THIS EMISSION POINT

FILL IN TABLE BELOW:

POLLUTANT	ABSENT	PRESENT	MAX. AND MIN. EMISSIONS FOR ANY 30 MINUTE PERIOD OF NORMAL OPERATION		AVERAGE EMISSIONS		METHOD OF MEASUREMENT*
			LBS MAXIMUM	LBS MINIMUM	LBS/HR	LBS/YR	
PARTICULATES	x						
SULFUR DIOXIDE	x						
CARBON MONOXIDE	x						
HYDROCARBONS (acetone)		x	318.5	318.5	637.7	5.58×10^6	Calculation
OXIDES OF NITROGEN	x						
FLUORIDES	x						
SHOW OTHERS	x						

*PLEASE ATTACH A COPY OF THE TEST PROCEDURE, PROCESS MATERIAL BALANCE STUDY OR OTHER BASIS USED AS A METHOD OF MEASUREMENT.

FOR OFFICE USE ONLY

[ ] REGULATED BY FUGITIVE DUST LAW.
[ ] REGULATED BY PROCESS WEIGHT. TABLE I [ ] TABLE II [ ]
[ ] AMBIENT AIR MONITORING USED FOR SO_2 AT THIS PLANT.

[ ] IN COMPLIANCE
[ ] NOT IN COMPLIANCE
ACTUAL EMISSIONS _____ TONS/YR

FILING IS AUTHORIZED BY _____ DATE JUL 13 ---

1-22-74 Issue.

APC - 23
REV 5/73

Process Emission Source
Number B-70-3
Page 2 of 6
Edition A

JUL 13 1979

PROCESS EMISSION SOURCE COVER SHEET - APC 21

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
256 CAPITOL HILL BUILDING
NASHVILLE, TENNESSEE 37217

DO NOT WRITE IN THIS SPACE

COMPANY NO. | | | | | | | |

LOG NO. _____

PERMIT NO. _____

REVIEWED BY _____

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-70-3 3. SIC CODE 2823
4. DID CONSTRUCTION OF THIS PROCESS BEGIN ON OR BEFORE AUGUST 9, 1969? [x] YES [ ] NO ON OR BEFORE APRIL 3, 1972? YES [ ] NO [ ]
5. GIVE A BRIEF DESCRIPTION OF THE PROCESS ALONG WITH A FLOW DIAGRAM. OPERATION CENTERS, STORAGE POINTS, MATERIAL INPUTS, MATERIAL OUTPUTS AND EMISSION POINTS SHOULD BE NOTED IN POUNDS PER OPERATING HOUR.

Spinning of Cellulose Acetate Yarn

NOTE: ATTACH FLOW DIAGRAM FOR PROCESS EMISSION SOURCE CLAIMED ON SEPARATE SHEET.

6. TYPE OF PROCESS: CONTINUOUS [x] BATCH [ ] COMBINED [ ]
7. OPERATIONAL SCHEDULE OF PROCESS EMISSION SOURCE:
   A. HOURS PER DAY 24
   B. DAYS PER WEEK 7
   C. WEEKS PER YEAR 52
   D. % ANNUAL THRUPUT

DEC-FEB	MARCH-MAY	JUNE-AUGUST	SEPT-NOV
25	25	25	25

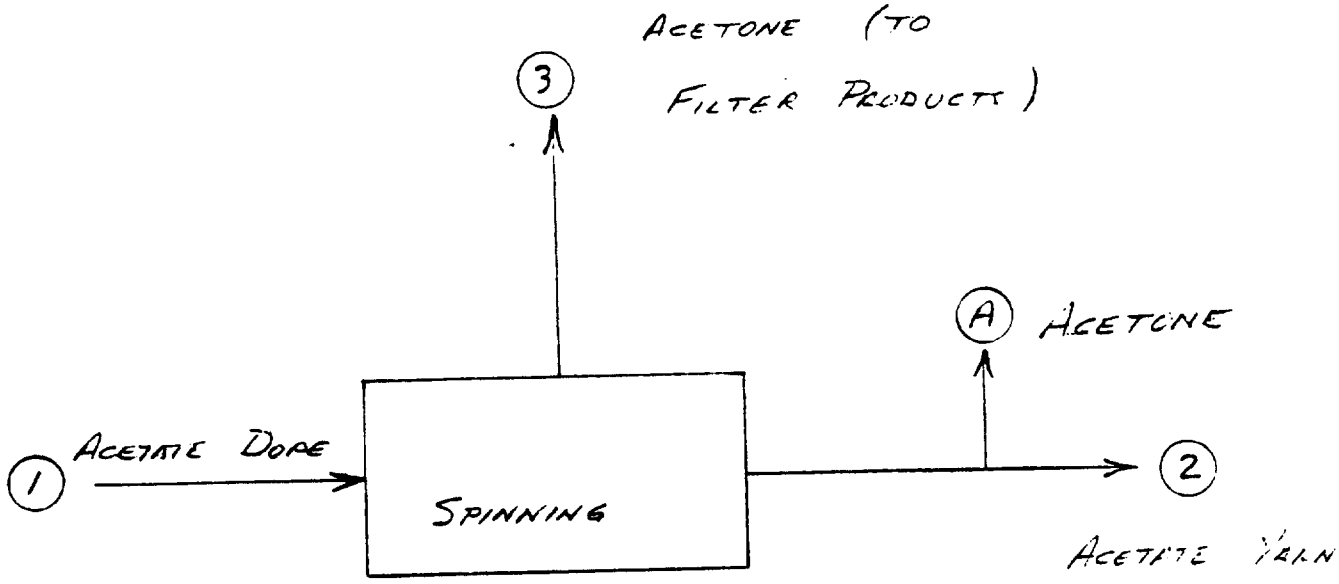
8. LIST MATERIAL INPUTS TO PROCESS EMISSION SOURCE:

NAME OF INPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
Cellulose Acetate Dope, (1)	9800	9800
TOTAL LBS/OPERATING HOUR INPUT TO PROCESS EMISSION SOURCE	9800	9800

(TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)

APC - 21
REV 3/75

12/15/75 Issue


ACETONE (TO FILTER PRODUCTS)
3
A
ACETONE
1
ACETATE DOPE
SPINNING
2
ACETATE YARN

Process Emission Source
Number B-70-3
Page 6 of 6
Edition A

NON-STACK PROCESS EMISSION POINT DATA FORM - APC - 23

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
C2-212 CORDELL HULL BUILDING
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE

COMPANY NO. [ ] - [ ]
PERMIT NO. [ ] P
PROCESS EMISSION SOURCE NO. [ ]
EMISSION POINT NO. [ ]
REVIEWER [ ]
DATE [ ]

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-70-3
3. POINT SOURCE IDENTIFICATION ON PROCESS FLOW DIAGRAM A
4. GIVE A BRIEF DESCRIPTION OF THE PROCESS EMISSION POINT PLUS A SKETCH IF APPROPRIATE Acetone vapor is lost into the room where process equipment is located. The vapors escape through doors, windows, and air conditioning system.
5. GIVE A BRIEF DESCRIPTION OF ANY AIR POLLUTION CONTROLS ON THIS EMISSION POINT

FILL IN TABLE BELOW:

POLLUTANT	ABSENT	PRESENT	MAX. AND MIN. EMISSIONS FOR ANY 30 MINUTE PERIOD OF NORMAL OPERATION		AVERAGE EMISSIONS		METHOD OF MEASUREMENT*
			LBS MAXIMUM	LBS MINIMUM	LBS/HR	LBS/YR	
PARTICULATES	x						
SULFUR DIOXIDE	x						
CARBON MONOXIDE	x						
HYDROCARBONS (acetone)		x	330	330	670	5.9×10^6	Calculation
OXIDES OF NITROGEN	x						
FLUORIDES	x						
SHOW OTHERS	x						

*PLEASE ATTACH A COPY OF THE TEST PROCEDURE, PROCESS MATERIAL BALANCE STUDY OR OTHER BASIS USED AS A METHOD OF MEASUREMENT.

FOR OFFICE USE ONLY

☐ REGULATED BY FUGITIVE DUST LAW.
☐ REGULATED BY PROCESS WEIGHT. TABLE I ☐ TABLE II ☐
☐ AMBIENT AIR MONITORING USED FOR SO_2 AT THIS PLANT.

☐ IN COMPLIANCE
☐ NOT IN COMPLIANCE
ACTUAL EMISSIONS _____ TONS/YR

FILING IS AUTHORIZED BY _____ DATE _____

1-22-74 Issue.

APC - 23
REV 5/73

Process Emission Source Number B-125- 2
Page 2 of 5
Date JUL 13 1979

NON-STACK PROCESS EMISSION POINT DATA FORM - APC - 23

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
C2-212 CORDELL HULL BUILDING
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE

COMPANY NO. [ ] - [ ]
PERMIT NO. [ ] P
PROCESS EMISSION SOURCE NO. [ ]
EMISSION POINT NO. [ ]
REVIEWER [ ]
DATE [ ]

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-125-2
3. POINT SOURCE IDENTIFICATION ON PROCESS FLOW DIAGRAM
4. GIVE A BRIEF DESCRIPTION OF THE PROCESS EMISSION POINT PLUS A SKETCH IF APPROPRIATE Acetone emissions are vapor losses into the room air surrounding the process equipment and leaves the building through windows, doors, and the ventilation systems.
5. GIVE A BRIEF DESCRIPTION OF ANY AIR POLLUTION CONTROLS ON THIS EMISSION POINT None
6. FILL IN TABLE BELOW:

POLLUTANT	ABSENT	PRESENT	MAX. AND MIN. EMISSIONS FOR ANY 30 MINUTE PERIOD OF NORMAL OPERATION		AVERAGE EMISSIONS		METHOD OF MEASUREMENT*
			LBS MAXIMUM	LBS MINIMUM	LBS/HR	LBS/YR	
PARTICULATES	X						
SULFUR DIOXIDE	X						
CARBON MONOXIDE	X						
HYDROCARBONS		X	540.	430.	1,136	1.0×10^7	Engineering
OXIDES OF NITROGEN	X						
FLUORIDES	X						
SHOW OTHERS	X						

*PLEASE ATTACH A COPY OF THE TEST PROCEDURE, PROCESS MATERIAL BALANCE STUDY OR OTHER BASIS USED AS A METHOD OF MEASUREMENT

FOR OFFICE USE ONLY

[ ] REGULATED BY FUGITIVE DUST LAW.
[ ] REGULATED BY PROCESS WEIGHT. TABLE I [ ] TABLE II [ ]
[ ] AMBIENT AIR MONITORING USED FOR SO_2 AT THIS PLANT.
[ ] IN COMPLIANCE
[ ] NOT IN COMPLIANCE
ACTUAL EMISSIONS _____ TON

FILING IS AUTHORIZED BY _____ DATE JUL 13 1979

APC - 23
REV 5/73

1-22-74 Issue.

Process Emission Source Number B-125-2
Page 3 of 5
Date JUL 13 1976

PROCESS EMISSION SOURCE COVER SHEET - APC 21

MAIL TO:
TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
256 CAPITOL HILL BUILDING
NASHVILLE, TENNESSEE 37217

DO NOT WRITE IN THIS SPACE
COMPANY NO. [ ] [ ]
LOG NO. _____
PERMIT NO. _____
REVIEWED BY _____

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-125-2 3. SIC CODE 2823
4. DID CONSTRUCTION OF THIS PROCESS BEGIN ON OR BEFORE AUGUST 9, 1969? [X] YES [ ] NO ON OR BEFORE APRIL 3, 1972? [X] YES [ ] NO
5. GIVE A BRIEF DESCRIPTION OF THE PROCESS ALONG WITH A FLOW DIAGRAM. OPERATION CENTERS, STORAGE POINTS, MATERIAL INPUTS, MATERIAL OUTPUTS AND EMISSION POINTS SHOULD BE NOTED IN POUNDS PER OPERATING HOUR.

Filtered dope is spun to produce continuous filament cellulose acetate fibers

NOTE: ATTACH FLOW DIAGRAM FOR PROCESS EMISSION SOURCE CLAIMED ON SEPARATE SHEET.

6. TYPE OF PROCESS: CONTINUOUS [X] BATCH [ ] COMBINED [ ]
7. OPERATIONAL SCHEDULE OF PROCESS EMISSION SOURCE:
   A. HOURS PER DAY 24
   B. DAYS PER WEEK 7
   C. WEEKS PER YEAR 52
   D. % ANNUAL THRUPUT

DEC-FEB	MARCH-MAY	JUNE-AUGUST	SEPT-NOV
25	25	25	25

8. LIST MATERIAL INPUTS TO PROCESS EMISSION SOURCE:

NAME OF INPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
1. Filtered dope	36,900	36,900
TOTAL LBS/OPERATING HOUR INPUT TO PROCESS EMISSION SOURCE	36,900	36,900

(TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)

APC - 21
REV 3/75

12/15/75 Issue

9. LIST MATERIAL OUTPUTS FROM THIS PROCESS EMISSION SOURCE:

NAME OF OUTPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
2. Monofilament cellulose acetate	10,800	10,800
3. Acetone to distillation recovery	25,000	25,000
TOTAL LBS/OPERATING HOUR OUTPUT FROM PROCESS EMISSION SOURCE (TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)	35,800	35,800

10. LIST AIR POLLUTION EMISSION POINTS FOR THIS PROCESS EMISSION SOURCE. ATTACH A SEPARATE "EMISSION POINT DATA" SHEET, APC-22, FOR EACH POINT.

FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR	FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR
A.		N.	
B.		O.	
C.		P.	
D.		Q.	
E.		R.	
F.		S.	
G.		T.	
H.		U.	
I.		V.	
J.		W.	
K.		X.	
L.		Y.	
M.		Z.	

TOTAL LBS. OF PARTICULATE EMITTED FROM PROCESS EMISSION SOURCE PER OPERATING HOUR 0 (TOTAL ROUNDED TO TWO SIGNIFICANT FIGURES)

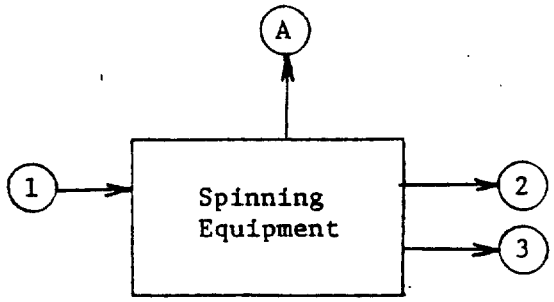
11. LIST PROCESS FUELS USED IN THIS PROCESS WHICH DO NOT APPEAR AS MATERIAL INPUTS TO THE PROCESS EMISSION SOURCE: (DIRECT OR INDIRECT HEAT SOURCES NOT ELSEWHERE REGISTERED ARE TO BE LISTED.)

FUEL	CONSUMPTION RATE: GAL/YR/FT³/YR	DIRECT HEAT SOURCE / INDIRECT HEAT SOURCE
NATURAL GAS		
FUEL OIL		
OTHER:		

Flow Diagram

For Item 5 of APC-21

Process Emission Sour
Number B-125-2
Page 5 of 5
Date JUL 13 1979



4-11-74 Issue.

Attach to APC-21

Process Emission Source
Number B-125A-4
Page 2 of 5
Date JUL 13 1977

NON-STACK PROCESS EMISSION POINT DATA FORM - APC - 23

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
C2-212 CORDELL HULL BUILDING
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE

COMPANY NO. [ ] - [ ]
PERMIT NO. [ ] P
PROCESS EMISSION SOURCE NO. [ ]
EMISSION POINT NO. [ ]
REVIEWER [ ]
DATE [ ]

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-125A-4
3. POINT SOURCE IDENTIFICATION ON PROCESS FLOW DIAGRAM
4. GIVE A BRIEF DESCRIPTION OF THE PROCESS EMISSION POINT PLUS A SKETCH IF APPROPRIATE Acetone emissions are vapor losses into the room air surrounding the process equipment and leaves the building through windows, doors, and the ventilation system.
5. GIVE A BRIEF DESCRIPTION OF ANY AIR POLLUTION CONTROLS ON THIS EMISSION POINT None

FILL IN TABLE BELOW:

POLLUTANT	ABSENT	PRESENT	MAX. AND MIN. EMISSIONS FOR ANY 30 MINUTE PERIOD OF NORMAL OPERATION		AVERAGE EMISSIONS		METHOD OF MEASUREMENT*
			LBS MAXIMUM	LBS MINIMUM	LBS/HR	LBS/YR	
PARTICULATES	X						
SULFUR DIOXIDE	X						
CARBON MONOXIDE	X						
HYDROCARBONS		X	440	350	922	8.1×10^6	Engineering Estimate
OXIDES OF NITROGEN	X						
FLUORIDES	X						
SHOW OTHERS	X						

*PLEASE ATTACH A COPY OF THE TEST PROCEDURE, PROCESS MATERIAL BALANCE STUDY OR OTHER BASIS USED AS A METHOD OF MEASUREMENT

FOR OFFICE USE ONLY

[ ] REGULATED BY FUGITIVE DUST LAW.
[ ] REGULATED BY PROCESS WEIGHT. TABLE I [ ] TABLE II [ ]
[ ] AMBIENT AIR MONITORING USED FOR SO_2 AT THIS PLANT.
[ ] IN COMPLIANCE
[ ] NOT IN COMPLIANCE
ACTUAL EMISSIONS _____ TONS/YR

FILING IS AUTHORIZED BY _____ DATE JUL 13 1977

1-22-74 Issue.

APC - 23
REV 5/75

Process Emission Source
Number B-125A-4
Page 3 of 5
Date JUL 13 [illegible]

PROCESS EMISSION SOURCE COVER SHEET - APC 21

MAIL TO:
TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
256 CAPITOL HILL BUILDING
NASHVILLE, TENNESSEE 37217

DO NOT WRITE IN THIS SPACE
COMPANY NO. [ ][ ] [ ][ ][ ][ ][ ]
LOG NO. _____
PERMIT NO. _____
REVIEWED BY _____

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-125A-4 3. SIC CODE 2823
4. DID CONSTRUCTION OF THIS PROCESS BEGIN ON OR BEFORE AUGUST 9, 1969? [X] YES [ ] NO ON OR BEFORE APRIL 3, 1972? [X] YES [ ] NO
5. GIVE A BRIEF DESCRIPTION OF THE PROCESS ALONG WITH A FLOW DIAGRAM. OPERATION CENTERS, STORAGE POINTS, MATERIAL INPUTS, MATERIAL OUTPUTS AND EMISSION POINTS SHOULD BE NOTED IN POUNDS PER OPERATING HOUR.

Filtered dope is spun to produce continuous filament cellulose acetate fibers

NOTE: ATTACH FLOW DIAGRAM FOR PROCESS EMISSION SOURCE CLAIMED ON SEPARATE SHEET.

6. TYPE OF PROCESS: CONTINUOUS [X] BATCH [ ] COMBINED [ ]
7. OPERATIONAL SCHEDULE OF PROCESS EMISSION SOURCE:
   A. HOURS PER DAY 24
   B. DAYS PER WEEK 7
   C. WEEKS PER YEAR 52
   D. % ANNUAL THRUPUT

DEC-FEB	MARCH-MAY	JUNE-AUGUST	SEPT-NOV
25	25	25	25

8. LIST MATERIAL INPUTS TO PROCESS EMISSION SOURCE:

NAME OF INPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
1. Filtered Dope	40,400	40,400
TOTAL LBS/OPERATING HOUR INPUT TO PROCESS EMISSION SOURCE	40,400	40,400

(TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)

12/15/75 Issue

Process Emission Source Number B-125A-4 Page 4 of 5 Date JUL 13 1973

9. LIST MATERIAL OUTPUTS FROM THIS PROCESS EMISSION SOURCE:

NAME OF OUTPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
2. Monofilament cellulose acetate	10,800	10,800
3. Acetone to distillation recovery	28,700	28,700
TOTAL LBS/OPERATING HOUR OUTPUT FROM PROCESS EMISSION SOURCE (TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)	39,500	39,500

10. LIST AIR POLLUTION EMISSION POINTS FOR THIS PROCESS EMISSION SOURCE. ATTACH A SEPARATE "EMISSION POINT DATA" SHEET, APC-22, FOR EACH POINT.

FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR	FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR
A.		N.	
B.		O.	
C.		P.	
D.		Q.	
E.		R.	
F.		S.	
G.		T.	
H.		U.	
I.		V.	
J.		W.	
K.		X.	
L.		Y.	
M.		Z.	

TOTAL LBS. OF PARTICULATE EMITTED FROM PROCESS EMISSION SOURCE PER OPERATING HOUR 0
(TOTAL ROUNDED TO TWO SIGNIFICANT FIGURES)

11. LIST PROCESS FUELS USED IN THIS PROCESS WHICH DO NOT APPEAR AS MATERIAL INPUTS TO THE PROCESS EMISSION SOURCE: (DIRECT OR INDIRECT HEAT SOURCES NOT ELSEWHERE REGISTERED ARE TO BE LISTED.)

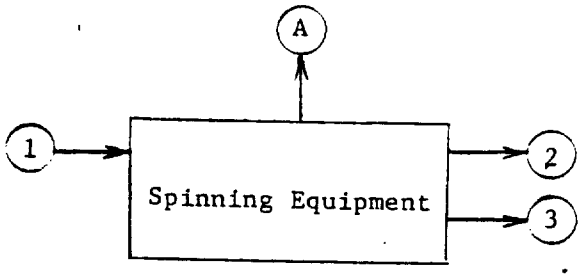
FUEL	CONSUMPTION RATE: GAL/YR/FT³/YR	DIRECT HEAT SOURCE / INDIRECT HEAT SOURCE
NATURAL GAS		
FUEL OIL		
OTHER:		

APC - 21
REV 3/75

Flow Diagram

For Item 5 of APC-21

Process Emission Sour
Number B-125A-4
Page 5 of 5
Date [illegible]



4-11-74 Issue.

Attach to APC-21

Process Emission Source
Number B-127-2
Page 2 of 6
Date 6-29-77

PROCESS EMISSION SOURCE COVER SHEET - APC 21

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
256 CAPITOL HILL BUILDING
NASHVILLE, TENNESSEE 37217

DO NOT WRITE IN THIS SPACE
COMPANY NO. | | | | | | |
LOG NO.
PERMIT NO.
REVIEWED BY

COMPANY NAME TENNESSEE EASTMAN COMPANY

PROCESS EMISSION SOURCE NUMBER B-127-2 S. SIC CODE 2823

DID CONSTRUCTION OF THIS PROCESS BEGIN ON OR BEFORE AUGUST 9, 1969? [X] YES [ ] NO ON OR BEFORE APRIL 3, 1972? [X] YES [ ] NO

GIVE A BRIEF DESCRIPTION OF THE PROCESS ALONG WITH A FLOW DIAGRAM. OPERATION CENTERS, STORAGE POINTS, MATERIAL INPUTS, MATERIAL OUTPUTS AND EMISSION POINTS SHOULD BE NOTED IN POUNDS PER OPERATING HOUR.

Acetone laden air is collected and routed through carbon beds to remove the acetone.

NOTE: ATTACH FLOW DIAGRAM FOR PROCESS EMISSION SOURCE CLAIMED ON SEPARATE SHEET.

TYPE OF PROCESS: CONTINUOUS [X] BATCH [ ] COMBINED [ ]

OPERATIONAL SCHEDULE OF PROCESS EMISSION SOURCE:

A. HOURS PER DAY 24
B. DAYS PER WEEK 7
C. WEEKS PER YEAR 52

D. % ANNUAL THRUPUT

DEC-FEB	MARCH-MAY	JUNE-AUGUST	SEPT-NOV
25	25	25	25

LIST MATERIAL INPUTS TO PROCESS EMISSION SOURCE:

NAME OF INPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
1. Acetone	611	611
2. Steam	5,700	5,700
TOTAL LBS/OPERATING HOUR INPUT TO PROCESS EMISSION SOURCE	6,310	6,310

(TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)

APC - 21
REV 3/75

12/15/75 Issue

9. LIST MATERIAL OUTPUTS FROM THIS PROCESS EMISSION SOURCE:

NAME OF OUTPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
3. Acetone	5,700	5,700
Water	545	545
TOTAL LBS/OPERATING HOUR OUTPUT FROM PROCESS EMISSION SOURCE (TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)	6,240	6,240

10. LIST AIR POLLUTION EMISSION POINTS FOR THIS PROCESS EMISSION SOURCE. ATTACH A SEPARATE "EMISSION POINT DATA" SHEET, APC-22, FOR EACH POINT.

FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR	FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR
A.	0	N.	
B.		O.	
C.		P.	
D.		Q.	
E.		R.	
F.		S.	
G.		T.	
H.		U.	
I.		V.	
J.		W.	
K.		X.	
L.		Y.	
M.		Z.	

TOTAL LBS. OF PARTICULATE EMITTED FROM PROCESS EMISSION SOURCE PER OPERATING HOUR _____ (TOTAL ROUNDED TO TWO SIGNIFICANT FIGURES)

11. LIST PROCESS FUELS USED IN THIS PROCESS WHICH DO NOT APPEAR AS MATERIAL INPUTS TO THE PROCESS EMISSION SOURCE: (DIRECT OR INDIRECT HEAT SOURCES NOT ELSEWHERE REGISTERED ARE TO BE LISTED.)

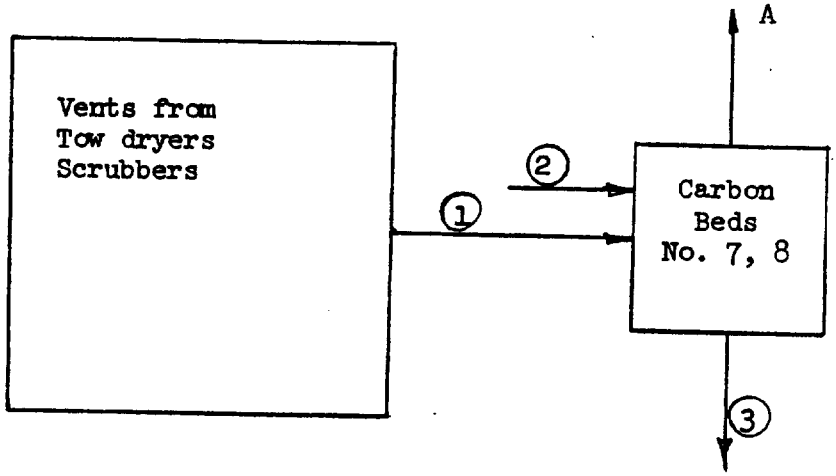
FUEL	CONSUMPTION RATE: GAL/YR/FT³/YR	DIRECT HEAT SOURCE / INDIRECT HEAT SOURCE
NATURAL GAS		
FUEL OIL		
OTHER:		

12/15/7 sue

Flow Diagram

For Item 5 of APC-21

Process Emission Source
Number B-127-2
Page 4 of 6
Edition A



4-11-74 Issue.

Attach to APC-21

Process Emission Source
Number B-127-2
Page 5 of 6
Edition A

STACK EMISSION POINT DATA - APC - 22

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
256 CAPITOL HILL BUILDING
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE

COMPANY NO. _____

PERMIT NO. _____ P

PROCESS EMISSION SOURCE NO. _____

LOG NO. _____

REVIEWED BY _____

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-127-2
3. **EMISSION POINT LETTER OR CODE (AS SHOWN ON PROCESS EMISSION SOURCE COVER SHEET).** A
4. INDICATE STACK OR RELEASE POINT HEIGHT ABOVE GRADE 85 FT.
5. SHOW INSIDE DIAMETER OF STACK OR RELEASE MECHANISM AT TOP 2.5 FT.
6. SHOW NORMAL EXIT GAS TEMPERATURE 70 °F. 7. SHOW EXIT GAS VELOCITY 41 FT/SEC
8. INDICATE PERCENT OF TIME OVER 125°F 0 %.
9. SHOW EXIT GAS VOLUME FLOW RATE 200 FT³/SEC @ 70°F AND 1 ATMOS. AND AT STACK CONDITIONS _____ FT³/SEC
10. SHOW MOISTURE CONTENT 0.30 (GR./CU. FT. DRY GAS AT 70°F) AND _____ (GR./CU. FT. GAS AT STACK CONDITIONS)
11. SHOW DISTANCE FROM RELEASE POINT TO NEAREST PROPERTY LINE 1,380 FEET.
12. DIRECTION OF GAS STREAM AS IT LEAVES STACK U U-UP, _____ D-DOWN, _____ H-HORIZONTAL
13. AIR POLLUTION CONTROL EQUIPMENT

	AIR CONTAMINANT CONTROLLED	YEAR INSTALLED	TYPE	EFFICIENCY
PARTICULATE				
SULFUR DIOXIDE				
OXIDES OF NITROGEN				
HYDROCARBONS (Acetone)	YES	1947	048	90%
CARBON MONOXIDE				
GASEOUS FLUORIDES				

/15/75 Issue

APC - 22
REV 7/75

Process Emission Source Number B-127-2 Page 6 of 6 Date 6-29-77

14. IS AN EMISSION MONITORING AND RECORDING INSTRUMENT ATTACHED TO THIS EMISSION POINT? YES [X] NO [ ]

IF YES, DESCRIBE: Continuous recording acetone analyzer

15. ADDITIONAL COMMENTS:

EMISSION POINT DATA

16. SHOW AIR CONTAMINANT DATA FOR THIS EMISSION POINT:

POLLUTANT	ABSENT	PRESENT	CONCENTRATION		AVERAGE EMISSIONS		METHOD OF* MEASUREMENT
			QUANTITY	UNITS	LBS/HR.	TONS/YEAR	
PARTICULATES	X			GRAINS/SCF AT 70°F			
SULFUR DIOXIDE	X			PPM			
OXIDES OF NITROGEN	X			PPM			
HYDROCARBONS		X	97,000	PPM	66	288	CALCULATION
CARBON MONOXIDE	X			PPM			
GASEOUS FLUORIDES	X						
OTHERS	X						

*PLEASE USE THE ABBREVIATIONS SHOWN BELOW FOR INDICATING METHOD OF MEASUREMENT

METHOD OF MEASUREMENT

1. EMISSION TEST CONDUCTED AND RESULTS EVALUATED BY STATE (OR EPA).
2. EMISSION TEST OBSERVED BY STATE (OR EPA) COPY OF TEST REPORT ENCLOSED.
3. EMISSION TEST OBSERVED AND RESULTS ALREADY EVALUATED BY STATE (OR EPA) COPY OF TEST REPORT EVALUATION ENCLOSED.
4. EMISSION TEST UNOBSERVED. COPY OF TEST REPORT ENCLOSED _____ PREVIOUSLY SUBMITTED _____.
5. EMISSION TEST UNOBSERVED AND COPY OF TEST REPORT NOT ENCLOSED.
6. PROCESS MATERIAL BALANCE STUDY. COPY ENCLOSED _____ NOT ENCLOSED _____.
7. EMISSION FACTORS COPY OF FACTORS ENCLOSED OR CITED _____ NOT ENCLOSED _____.
8. OTHER BASIS - SPECIFY _____

file 82-...

82 ...

COPY ... E.

RECEIVED ...

Process Emission So.
Number B-102A-1
Page 1 of 10
Edition C

PERMIT APPLICATION - APC 20

76 JUN 10 P 3: 08 Log #3986

MAIL TO:
TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
CORDELL HULL BUILDING C2-212
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE
COMPANY NO. 82-0004
AQCR
AGENCY CODE
NEDS COUNTY CODE
PERMIT NO. 0056571 B
PROCESS EMISSION SOURCE NO.
EMISSION POINT NO. -
CITY CODE
UTM ZONE
EW COORD. .
NS COORD. .
SIC CODE
REVIEWER
DATE

1. PERMIT TO BE ISSUED TO:

TENNESSEE EASTMAN COMPANY

2. MAILING ADDRESS

P. O. Box 511
Kingsport, Tennessee 37662

3. ADDRESS AT WHICH SOURCE IS TO BE OPERATED:

Same as above.

TYPE OF ORGANIZATION: CORPORATION [X]

EMISSION SOURCE NUMBER B-102A-1

6. STANDARD INDUSTRIAL CLASSIFICATION OF CO. 2 8 2 3

BRIEF DESCRIPTION OF EMISSION SOURCE FOR WHICH PERMIT IS DESIRED: acetone vapor to atmosphere

LATITUDE AND LONGITUDE OF AIR CONTAMINANT SOURCE 36 ° 31 ' 6 " 82 ° 32 ' 18

COST OF MODIFICATION $ 34,000,000 COST OF AIR POLLUTION CONTROL EQUIPMENT $ 780,000

IF THIS AIR CONTAMINANT SOURCE HAS A PREVIOUS WRITTEN PERMIT GIVE NAME OF CORPORATION, COMPANY OR INDIVIDUAL OWNER THAT OPERATED THIS SOURCE AND STATE PREVIOUS TENNESSEE DIVISION OF AIR POLLUTION CONTROL PERMIT NUMBER, IF KNOWN.

NAME **TENNESSEE EASTMAN COMPANY** PERMIT NUMBER 999303 P

PRESENT STATUS OF AIR CONTAMINANT SOURCE (CHECK AND COMPLETE APPLICABLE ITEMS)

[ ] PERMIT TO CONSTRUCT REQUESTED - Est. Starting Date ______ Est. Completion Date ______

[X] CONSTRUCTION COMPLETED - Date 4-9-76 [X] PERMIT TO OPERATE REQUESTED

[ ] TRANSFER OF LOCATION - Est. Date ______ [ ] AIR CONTAMINANT SOURCE HAS NOT BEEN ALTERED

JCEdwards

SIGNATURE OF RESPONSIBLE MEMBER OF FIRM

DATE OF APPLICATION

TYPE OR PRINT NAME AND OFFICIAL TITLE OF PERSON SIGNING THIS APPLICATION

NAME J. C. Edwards

TITLE Manager, Clean Environment Program

PHONE 246-2111, Extension 2444

22-74 Issue.

APC - 20
REV 4/73

COPY SENT TO S, & E.

Process Emission Source
Number B-102A-1
Page 2 of 10
Edition C

Supplement to APC-20 Form

14. THE NUMBER OF EMPLOYEES AT PLANT IS MORE THAN 100.

15. ELEVATION OF PLANT IS ABOUT 1220 FEET ABOVE MEAN SEA LEVEL.

16. INFORMATION SUBMITTED IS REPRESENTATIVE OR APPLICABLE TO CALENDAR YEAR 1976.

17. LAND AREA AT PLANT LOCATION IS 1105 ACRES. A PLANT MAP HAS BEEN PREVIOUSLY SUBMITTED TO EPA AND THE MAP SHOWS THE LOCATION OF THE PLANT.

Process Emission Source
Number B-102A-1
Page 3 of 10
Edition C

PROCESS EMISSION SOURCE COVER SHEET - APC 21

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
256 CAPITOL HILL BUILDING
NASHVILLE, TENNESSEE 37217

DO NOT WRITE IN THIS SPACE
COMPANY NO. 82 01701014-C
LOG NO.
PERMIT NO. 005657P
REVIEWED BY

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-102A-1 3. SIC CODE 2823
4. DID CONSTRUCTION OF THIS PROCESS BEGIN ON OR BEFORE AUGUST 9, 1969? [X] YES [ ] NO ON OR BEFORE APRIL 3, 1972? [ ] YES [ ] NO
5. GIVE A BRIEF DESCRIPTION OF THE PROCESS ALONG WITH A FLOW DIAGRAM. OPERATION CENTERS, STORAGE POINTS, MATERIAL INPUTS, MATERIAL OUTPUTS AND EMISSION POINTS SHOULD BE NOTED IN POUNDS PER OPERATING HOUR.

Spinning of cellulose acetate yarn

NOTE: ATTACH FLOW DIAGRAM FOR PROCESS EMISSION SOURCE CLAIMED ON SEPARATE SHEET.

6. TYPE OF PROCESS: CONTINUOUS [X] BATCH [ ] COMBINED [ ]
7. OPERATIONAL SCHEDULE OF PROCESS EMISSION SOURCE:
   A. HOURS PER DAY 24
   B. DAYS PER WEEK 7
   C. WEEKS PER YEAR 52
   D. % ANNUAL THRUPUT

DEC-FEB	MARCH-MAY	JUNE-AUGUST	SEPT-NOV
25	25	25	25

8. LIST MATERIAL INPUTS TO PROCESS EMISSION SOURCE:

NAME OF INPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
Cellulose acetate dope, 1	45,000	45,000
TOTAL LBS/OPERATING HOUR INPUT TO PROCESS EMISSION SOURCE	45,000	45,000

(TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)

9. LIST MATERIAL OUTPUTS FROM THIS PROCESS EMISSION SOURCE:

NAME OF OUTPUT AND FLOW DIAGRAM REFERENCE	LBS/OPERATING HOUR	
	DESIGN CAPACITY	ACTUAL LOADING
Acetate yarn, 2	12,000	12,000
Liquid acetone (recovered), 3 & 6	33,000	33,000
TOTAL LBS/OPERATING HOUR OUTPUT FROM PROCESS EMISSION SOURCE (TOTAL ROUNDED TO THREE SIGNIFICANT FIGURES)	45,000	45,000

10. LIST AIR POLLUTION EMISSION POINTS FOR THIS PROCESS EMISSION SOURCE. ATTACH A SEPARATE "EMISSION POINT DATA" SHEET, APC-22, FOR EACH POINT.

FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR	FLOW DIAGRAM REFERENCE & EMISSION POINT LETTER	LBS PARTICULATE/ OPERATING HOUR
A.	0	N.	
B.	0	O.	
C.		P.	
D.		Q.	
E.		R.	
F.		S.	
G.		T.	
H.		U.	
I.		V.	
J.		W.	
K.		X.	
L.		Y.	
M.		Z.	

TOTAL LBS. OF PARTICULATE EMITTED FROM PROCESS EMISSION SOURCE PER OPERATING HOUR None
(TOTAL ROUNDED TO TWO SIGNIFICANT FIGURES)

11. LIST PROCESS FUELS USED IN THIS PROCESS WHICH DO NOT APPEAR AS MATERIAL INPUTS TO THE PROCESS EMISSION SOURCE: (DIRECT OR INDIRECT HEAT SOURCES NOT ELSEWHERE REGISTERED ARE TO BE LISTED.)

FUEL	CONSUMPTION RATE: GAL/YR/FT³/YR	DIRECT HEAT SOURCE / INDIRECT HEAT SOURCE
NATURAL GAS		
FUEL OIL		
OTHER:		

Supplement to APC-21 Form

13. NORMAL OPERATING SCHEDULE: 8,760 HOURS PER YEAR.

14. DATES OF ANY SCHEDULED ANNUALLY OCCURRING SHUTDOWN OF OPERATIONS None

15. DATE (YEAR) INSTALLATION (OR PROCESS) WENT ON LINE 1976

16. ESTIMATED PERCENT INCREASE OR DECREASE IN PROCESS RATES ON A TOTAL PROCESS BASIS FOR THE 5 YEARS AFTER THE CALENDAR YEAR FOR WHICH THIS REPORT IS COMPLETED None

Flow Diagram

For Item 5 of APC-21

Process Emission Source
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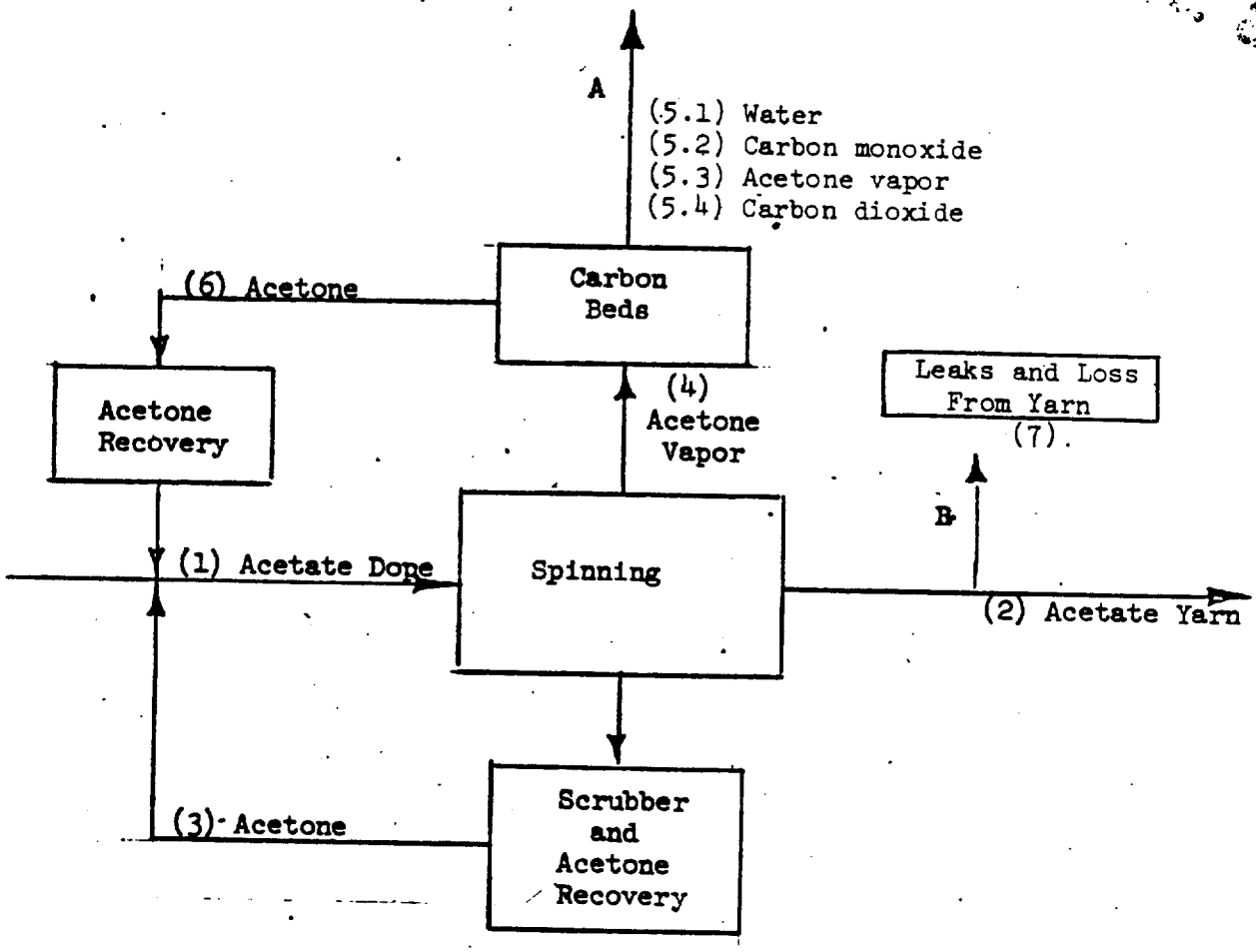

*Denotes non-stacked emission.

4-11-74 Issue.

Attach to APC-21

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E & E

STACK EMISSION POINT DATA - APC - 22

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
256 CAPITOL HILL BUILDING
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE

COMPANY NO. 82-01004-07
PERMIT NO. 05657 P
PROCESS EMISSION SOURCE NO.
LOG NO.
REVIEWED BY

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-102A-1
3. EMISSION POINT LETTER OR CODE (AS SHOWN ON PROCESS EMISSION SOURCE COVER SHEET). A
4. INDICATE STACK OR RELEASE POINT HEIGHT ABOVE GRADE 80 FEET.
5. SHOW INSIDE DIAMETER OF STACK OR RELEASE MECHANISM AT TOP 3 FEET.
6. SHOW NORMAL EXIT GAS TEMPERATURE 110 °F. 7. SHOW EXIT GAS VELOCITY 56.6 FT/SEC.
8. INDICATE PERCENT OF TIME OVER 125°F 15 %.
9. SHOW EXIT GAS VOLUME FLOW RATE 400 FT³/SEC @ 70°F AND 1 ATMOS. AND AT STACK CONDITIONS 423 FT³/SEC
10. SHOW MOISTURE CONTENT 28.9 (GR./CU. FT. DRY GAS AT 70°F) AND 24.7 (GR./CU. FT. GAS AT STACK CONDIT
11. SHOW DISTANCE FROM RELEASE POINT TO NEAREST PROPERTY LINE 1,740 FEET.
12. DIRECTION OF GAS STREAM AS IT LEAVES STACK ____ U-UP, D D-DOWN, ____ H-HORIZONTAL
13. AIR POLLUTION CONTROL EQUIPMENT

	AIR CONTAMINANT CONTROLLED	YEAR INSTALLED	TYPE	EFFICIENCY
PARTICULATE				
SULFUR DIOXIDE				
OXIDES OF NITROGEN				
HYDROCARBONS (acetone)	Yes	1976	048	98.3
CARBON MONOXIDE				
GASEOUS FLUORIDES				

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4. IS AN EMISSION MONITORING AND RECORDING INSTRUMENT ATTACHED TO THIS EMISSION POINT? YES [ ] NO [X]

IF YES, DESCRIBE:

5. ADDITIONAL COMMENTS:

E. & E.

EMISSION POINT DATA

6. SHOW AIR CONTAMINANT DATA FOR THIS EMISSION POINT:

POLLUTANT	ABSENT	PRESENT	CONCENTRATION		AVERAGE EMISSIONS		METHOD OF* MEASUREMENT
			QUANTITY	UNITS	LBS/HR.	TONS/YEAR	
PARTICULATES	X			GRAINS/SCF AT 70°F			
SULFUR DIOXIDE	X			PPM			
OXIDES OF NITROGEN	X			PPM			
HYDROCARBONS	X			PPM			
CARBON MONOXIDE		X	1.50*	PPM	.15	.65	8
GASEOUS FLUORIDES	X						
OTHERS	X						
Carbon dioxide		X	370*		36	160	8
Acetone		X	140*		14	60	8

*PLEASE USE THE ABBREVIATIONS SHOWN BELOW FOR INDICATING METHOD OF MEASUREMENT

*By weight

METHOD OF MEASUREMENT

1. EMISSION TEST CONDUCTED AND RESULTS EVALUATED BY STATE (OR EPA).
2. EMISSION TEST OBSERVED BY STATE (OR EPA) COPY OF TEST REPORT ENCLOSED.
3. EMISSION TEST OBSERVED AND RESULTS ALREADY EVALUATED BY STATE (OR EPA) COPY OF TEST REPORT EVALUATION ENCLOSED.
4. EMISSION TEST UNOBSERVED. COPY OF TEST REPORT ENCLOSED _____ PREVIOUSLY SUBMITTED _____.
5. EMISSION TEST UNOBSERVED AND COPY OF TEST REPORT NOT ENCLOSED.
6. PROCESS MATERIAL BALANCE STUDY. COPY ENCLOSED _____ NOT ENCLOSED _____.
7. EMISSION FACTORS COPY OF FACTORS ENCLOSED OR CITED _____ NOT ENCLOSED _____.
8. OTHER BASIS - SPECIFY Engineering calculation

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Supplement to APC-22

17. AIR POLLUTION CONTROL EQUIPMENT		18. AIR CONTAMINANT DATA FOR EMISSION POINT
POLLUTANT REMOVED	PERCENT DESIGN EFFICIENCY	MAXIMUM EMISSION RATE, LBS. PER HOUR
PARTICULATE	0	
SULFUR DIOXIDE	0	
OXIDES OF NITROGEN	0	
HYDROCARBONS	98.3	14
CARBON MONOXIDE	0	
GASEOUS FLUORIDES	0	

19. AIR POLLUTION CONTROL EQUIPMENT CONDITIONS:

INLET GAS TEMPERATURE, ^{o}F 110

INLET GAS FLOW RATE, CFM 423

EXIT GAS PRESSURE, PSI .11

20. EXIT GAS FLOW RATE FROM STACK AT ACTUAL FLOW CONDITION, MAXIMUM CFM 423

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NON-STACK PROCESS EMISSION POINT DATA FORM - APC - 23

MAIL TO: TENNESSEE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF AIR POLLUTION CONTROL
C2-212 CORDELL HULL BUILDING
NASHVILLE, TENNESSEE 37219

DO NOT WRITE IN THIS SPACE

COMPANY NO. 82-01/0014-0
PERMIT NO. 0956557 P
PROCESS EMISSION SOURCE NO.
EMISSION POINT NO.
REVIEWER
DATE

1. COMPANY NAME TENNESSEE EASTMAN COMPANY
2. PROCESS EMISSION SOURCE NUMBER B-102A-1
3. POINT SOURCE IDENTIFICATION ON PROCESS FLOW DIAGRAM B
4. GIVE A BRIEF DESCRIPTION OF THE PROCESS EMISSION POINT PLUS A SKETCH IF APPROPRIATE acetone emissions are losses into the room air surrounding the process equipment. Acetone leaves the building through windows, doors, and the ventilation system.
5. GIVE A BRIEF DESCRIPTION OF ANY AIR POLLUTION CONTROLS ON THIS EMISSION POINT
6. FILL IN TABLE BELOW:

POLLUTANT	ABSENT	PRESENT	MAX. AND MIN. EMISSIONS FOR ANY 30 MINUTE PERIOD OF NORMAL OPERATION		AVERAGE EMISSIONS		METHOD OF MEASUREMENT*
			LBS MAXIMUM	LBS MINIMUM	LBS/HR	LBS/YR	
PARTICULATES	X						
SULFUR DIOXIDE	X						
CARBON MONOXIDE	X						
HYDROCARBONS (acetone)		X	270	270	270	2.4×10^6	Engineering calculation
OXIDES OF NITROGEN	X						
FLUORIDES	X						
SHOW OTHERS	X						

*PLEASE ATTACH A COPY OF THE TEST PROCEDURE, PROCESS MATERIAL BALANCE STUDY OR OTHER BASIS USED AS A METHOD OF MEASUREMENT.

FOR OFFICE USE ONLY

- ☐ REGULATED BY FUGITIVE DUST LAW.
- ☐ REGULATED BY PROCESS WEIGHT. TABLE I ☐ TABLE II ☐
- ☐ AMBIENT AIR MONITORING USED FOR SO_2 AT THIS PLANT.
- ☐ IN COMPLIANCE
- ☐ NOT IN COMPLIANCE

ACTUAL EMISSIONS _____ TONS/YR

ILING IS AUTHORIZED BY _____ DATE _____

1-22-74 Issue.

APC - 23
REV 5/73

~~1) RAW DOPE IS~~

update?

A FILTER MEDIA IS WASH IN ACETONE

B ACETONE AIR ~~[redacted]~~ VENTS FROM TOW DRYERS SCRUBBERS

C SPINNING OF C.A. Yarn

D RAW DOPE IS FILTERED

E SPINNING OF CA Yarn

F Cellulose is combined w/ acetone and pigment to prod raw dope

G FILTER MEDIA IS WASHED FOR REUSE

H RAW DOPE IS FILTERED

I Filtered dope is spun to get cellulose ~~fiber~~ acetate fibers

J Spunny filter dope.

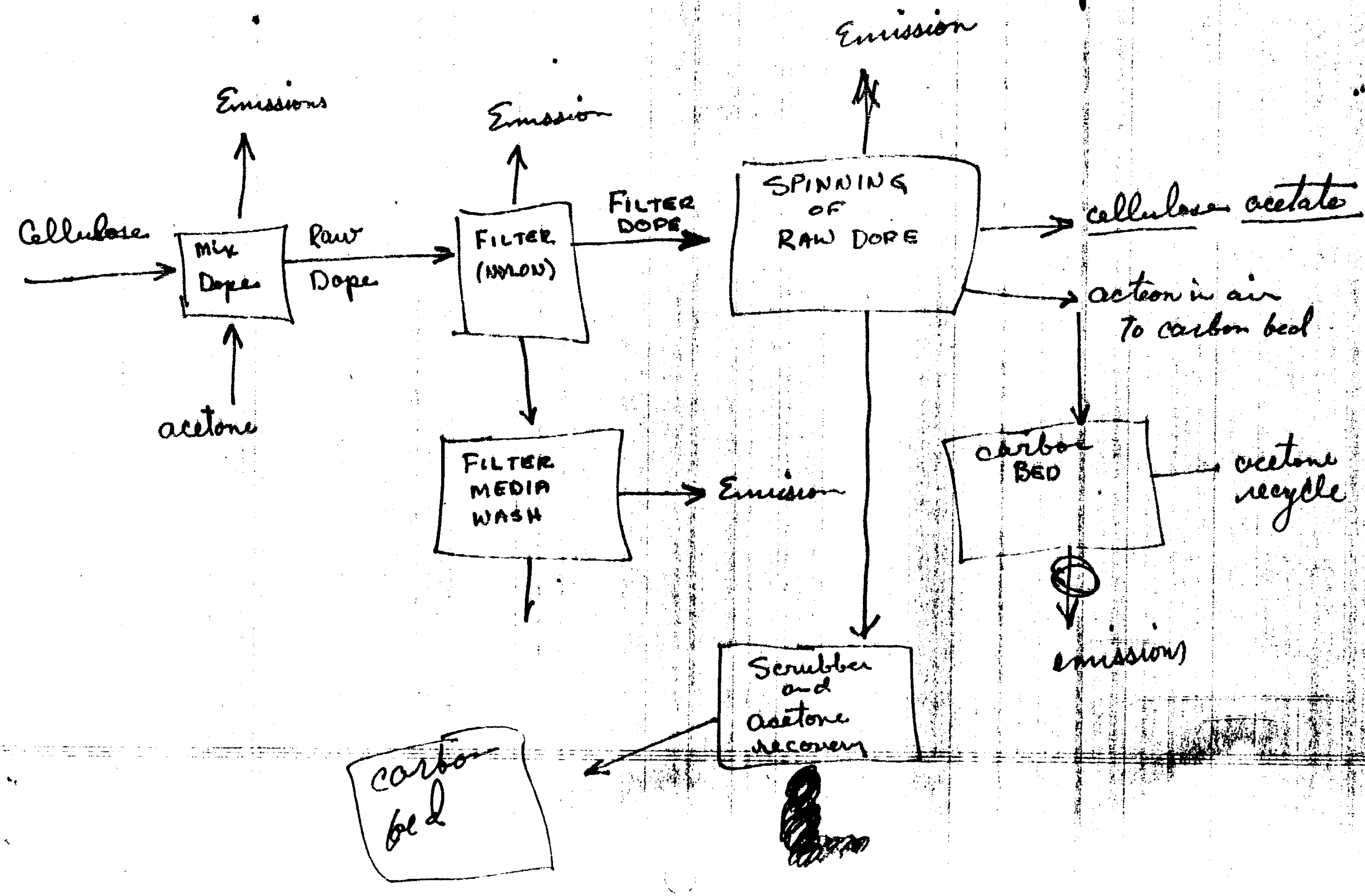
K Wash filter

L Wash filter

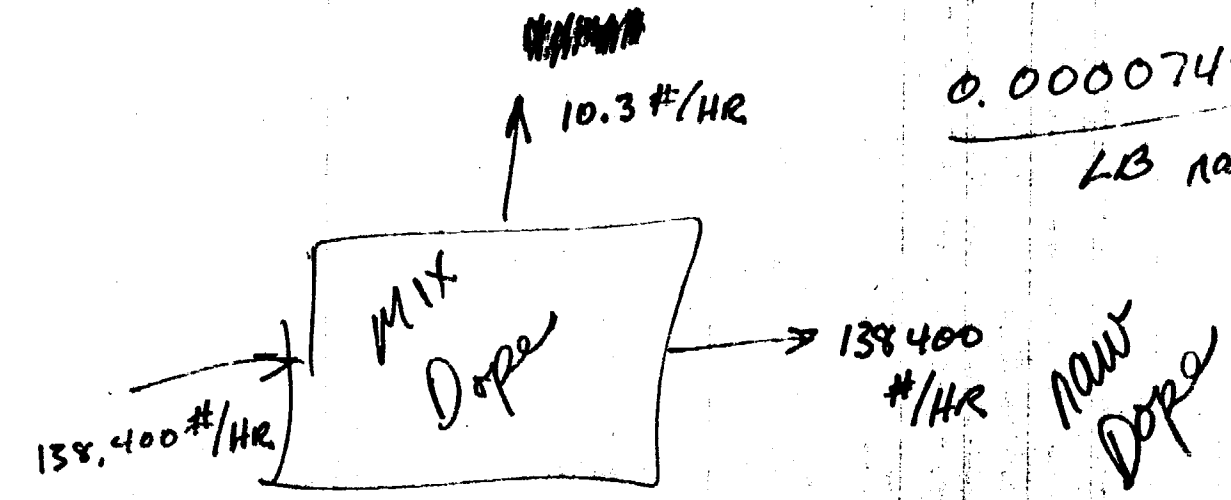
M Raw dope is filtered.

CELLULOSE ACETATE

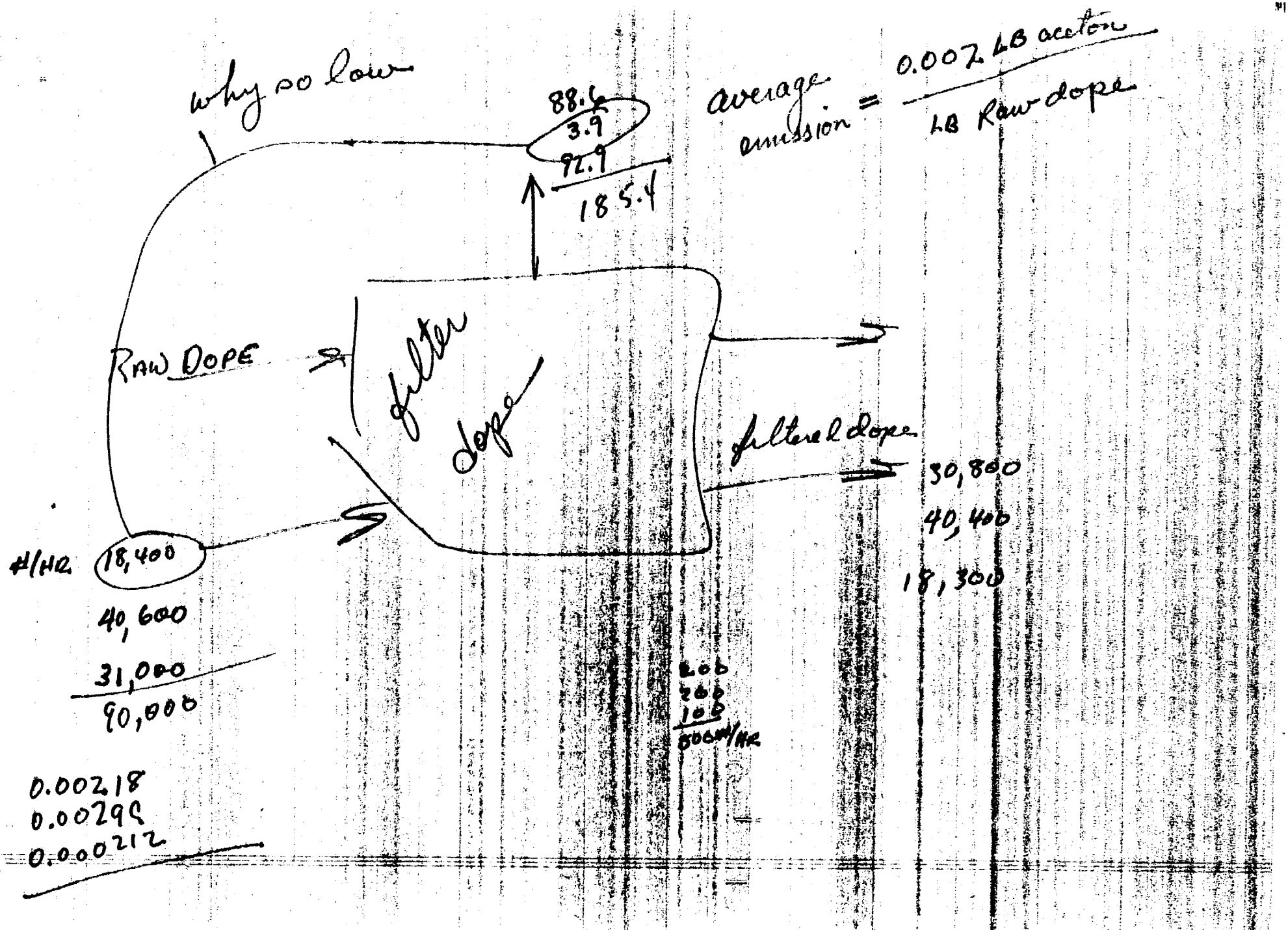
For 22 pt course
23 Aug



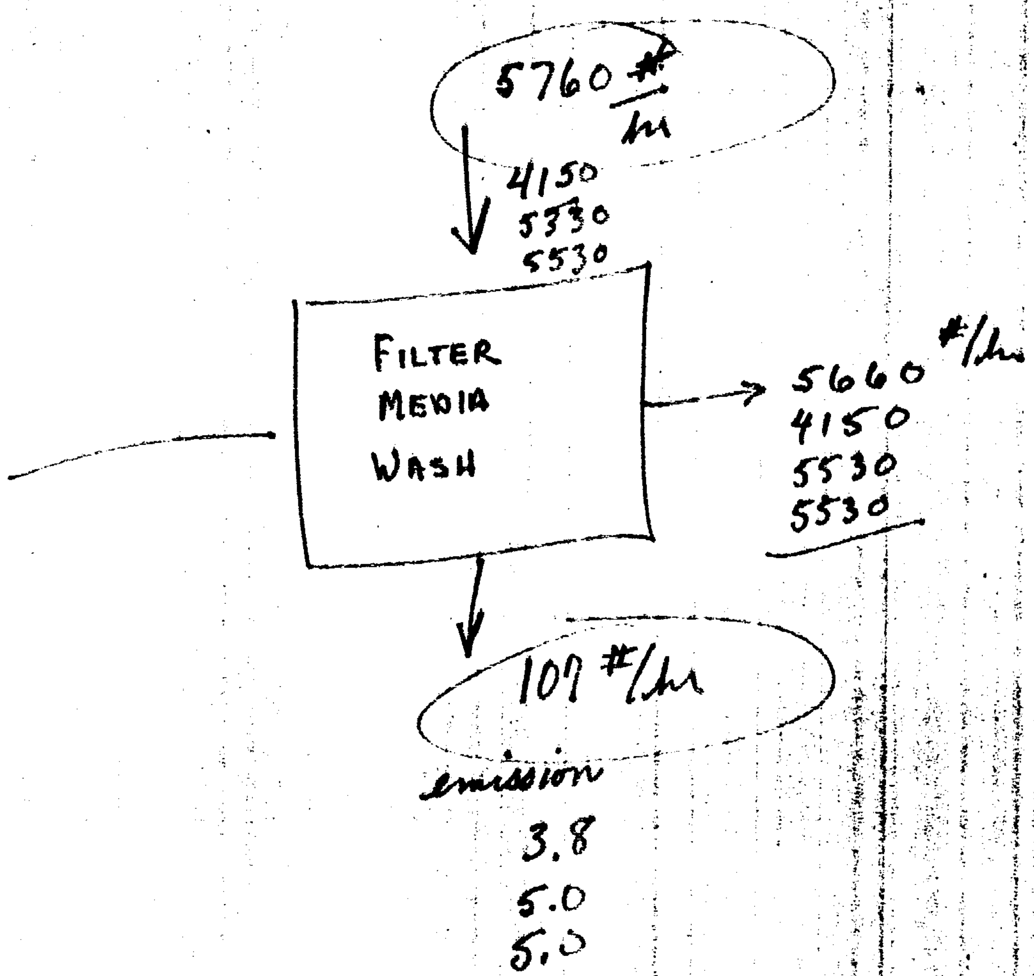
8.40000



0.0000744 LB acetone / LB raw dope


why so low
88.6
3.9
92.9
185.4
average emission = 0.007 LB acetone / LB Raw dope
RAW DOPE
filter
dope
filtered dope
30,800
40,400
18,300
#/HR
18,400
40,600
31,000
90,000
200
200
100
500 #/HR
0.00218
0.00299
0.000212

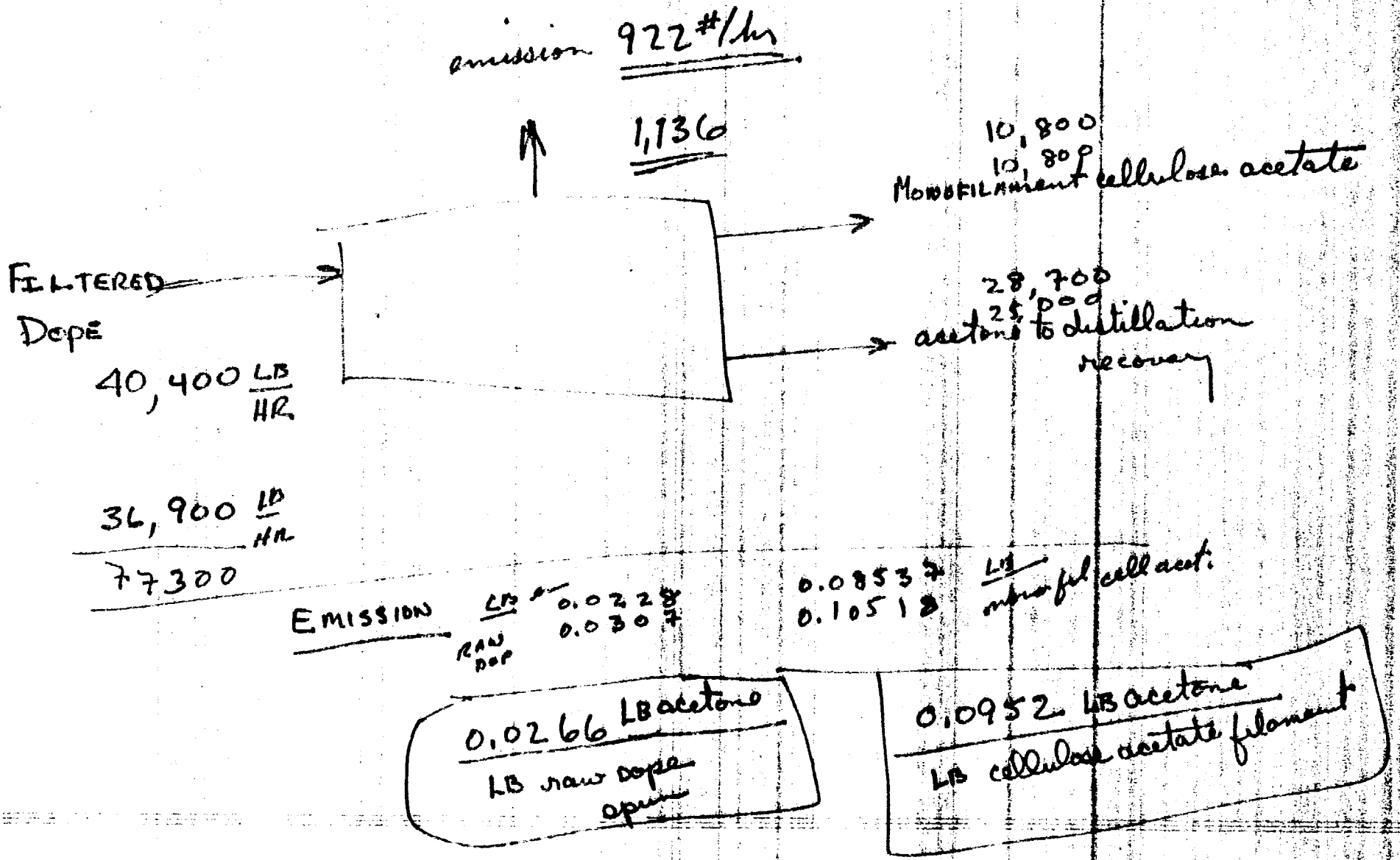
Richmond



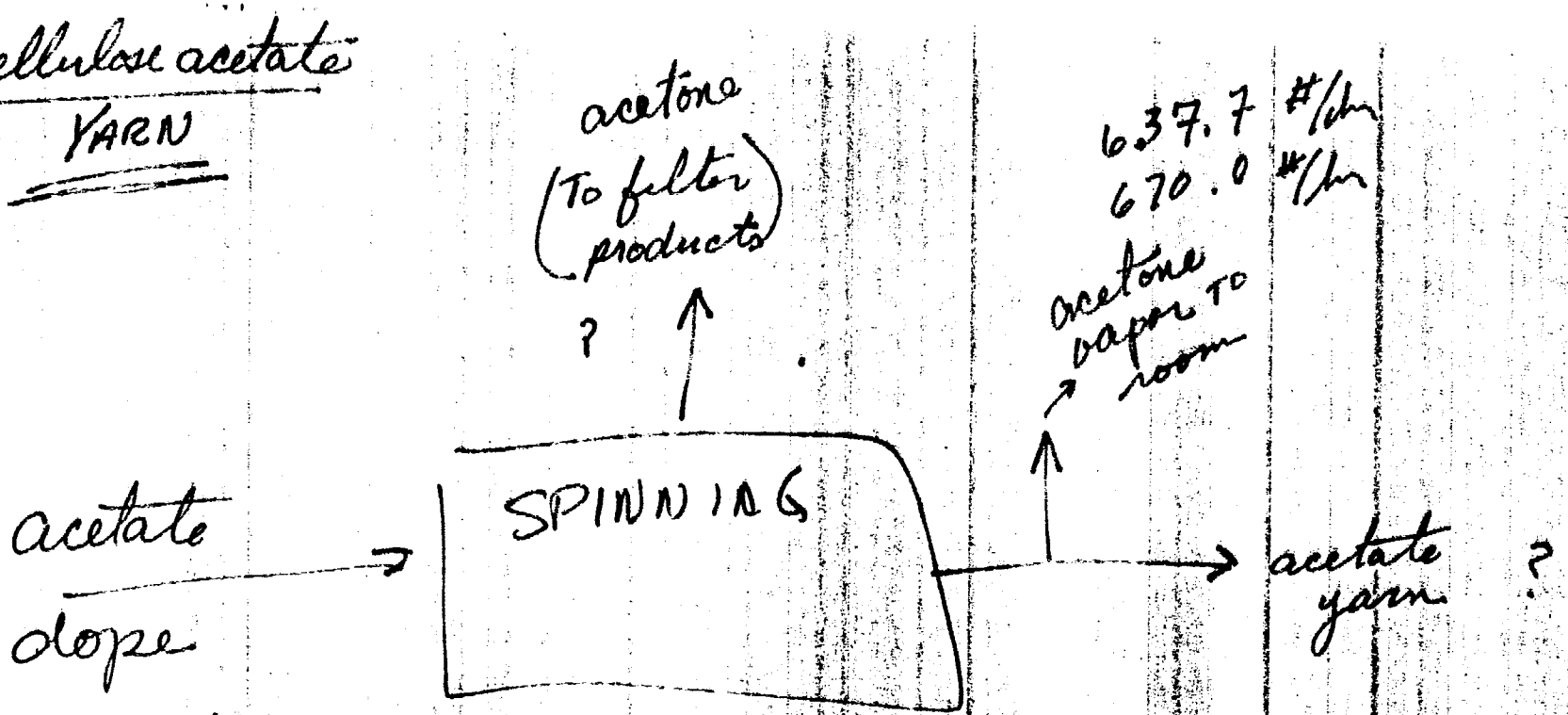
107 lb/hr / 5380 RAW CCPG

why so high

MONOFILAMENT SPINNING CELLULOSE ACETATE

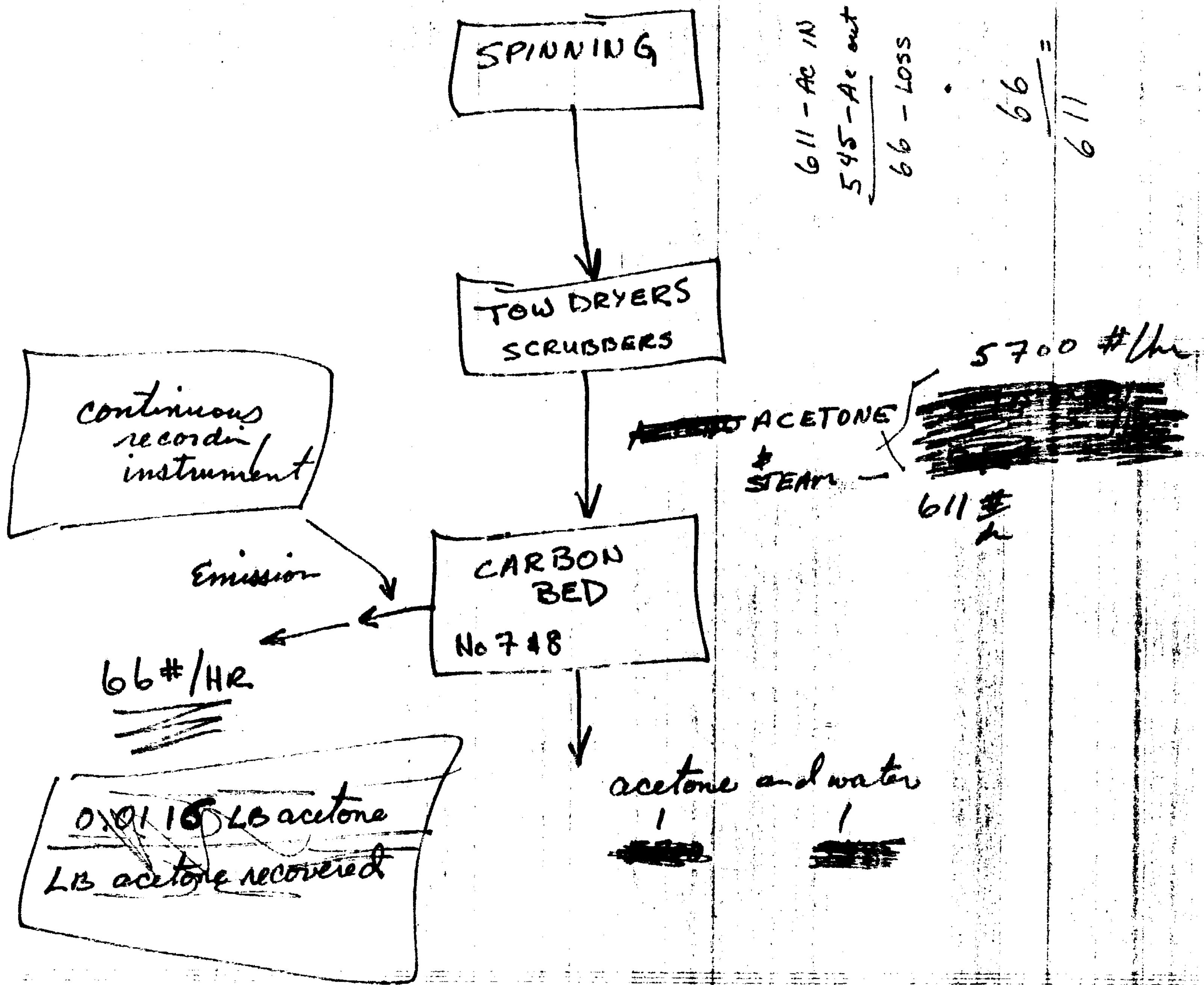


cellulose acetate YARN



1) 0.0650 LB acetone / # raw dope

2) 0.06836 LB acetone / # raw dope

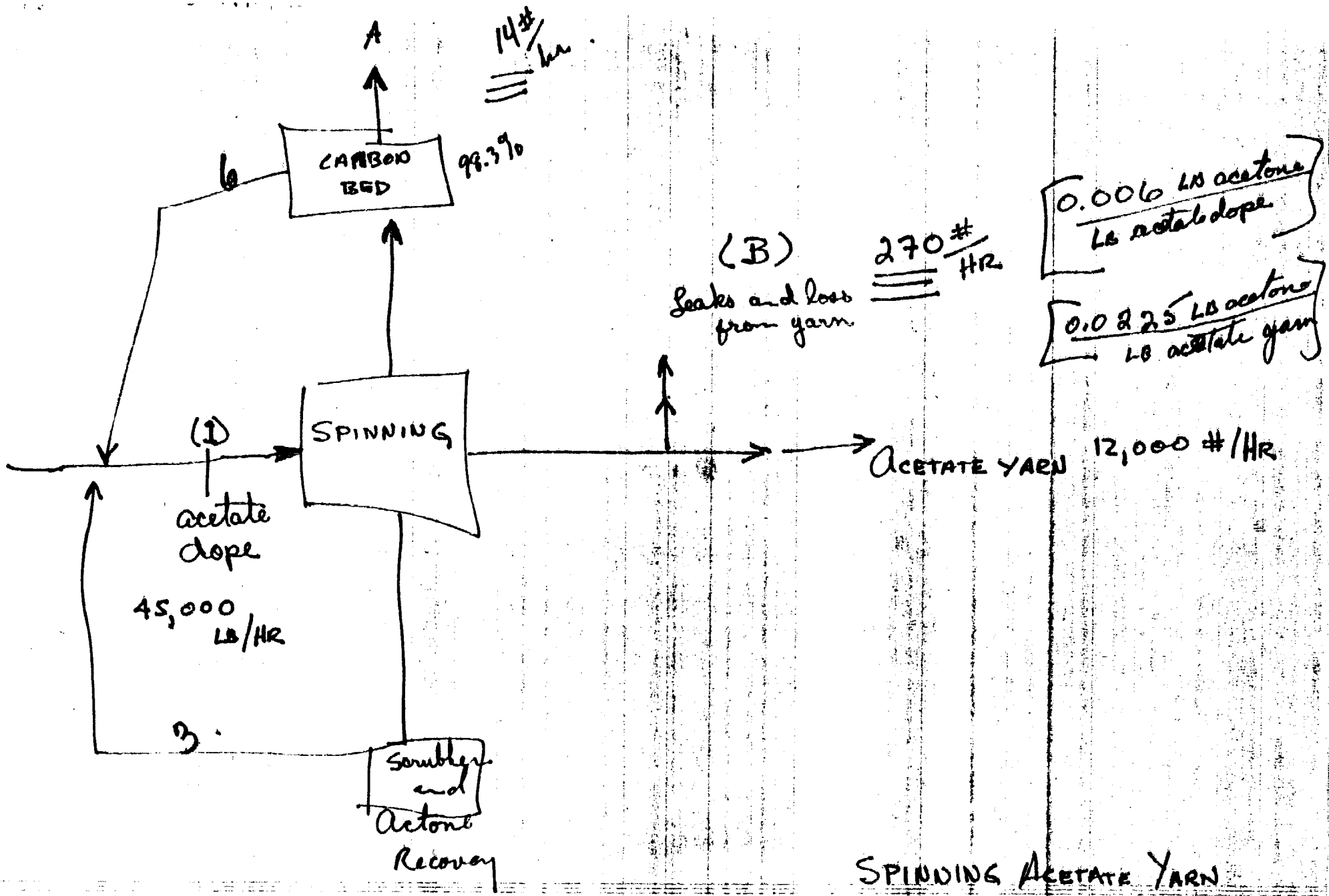


611 - Ac IN
545 - Ac out
66 - LOSS

$\frac{66}{611} =$

~~98.8% recovery~~
90% reported

Rede



SPINNING ACETATE YARN

#6+3 = 33,000#/HR