AMMONIUM NITRATE
AP-42 Section 6.8
Reference Number
19

Note: This is a reference cited in *AP 42, Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources.* AP42 is located on the EPA web site at www.epa.gov/ttn/chief/ap42/

The file name refers to the reference number, the AP42 chapter and section. The file name "ref02_c01s02.pdf" would mean the reference is from AP42 chapter 1 section 2. The reference may be from a previous version of the section and no longer cited. The primary source should always be checked.

PHILLIPS CHEMICAL COMPANY
A Division of Phillips Petroleum Company
Cactus Plant
Dumas, Texas

1975

PROCESS-WEIGHT SECTION

INSTRUCTIONS-YOU DID NOT PROVIDE THE FOLLOWING INFORMATION FOR 1969. HOWEVER,YOU ARE REQUIRED TO DO SO FOR 1970. ATTACH ADDITIONAL COPIES AS NECESSARY

LINE - 301
PROCESS NAME OR DESCRIPTION- CO_2 REMOVAL

PROCESS NUMBER- 5 OPERATING SCHEDULE- 24 HR/DA 7 DA/WK 52 WK/YR

PROCESS MATERIALS

TERIALS	INPUT/YEAR QUANTITIES	UNITS	MATERIALS	OUTPUT/YEAR QUANTITIES	UNITS
ocess Gas	477176	T/Yr	Process Gas to Process	233490	T/Yr
			Carbon Dioxide	242087	"
			Hydrogen	1226	"
			Nitrogen	254	"
			Water	117	"
			Hydrogen Sulfide	2	"

ASSOCIATED CONTROL DEVICE Condenser CONTROL NO 1 % EFFICIENCY SOURCE NO 5
Demister CONTROL NO 2

TEXAS AIR CONTROL BOARD
1970 EMISSIONS INVENTORY QUESTIONNAIRE

PROCESS-WEIGHT SECTION

INSTRUCTIONS-YOU DID NOT PROVIDE THE FOLLOWING INFORMATION FOR 1969. HOWEVER, YOU ARE REQUIRED TO DO SO FOR 1970. ATTACH ADDITIONAL COPIES AS NECESSARY

TEXAS AIR CONTROL BOARD
1970 EMISSIONS INVENTORY QUESTIONNAIRE

LINE - 301
PROCESS NAME OR DESCRIPTION- NITRIC ACID PLANT

PROCESS NUMBER- 12

OPERATING SCHEDULE- 24 HR/DA 7 DA/WK 52 WK/YR

PROCESS MATERIALS

ATERIALS	INPUT/YEAR QUANTITIES	UNITS	MATERIALS	OUTPUT/YEAR QUANTITIES	UNITS
Process Gas	338154.1	T/Yr	Water	4795	T/Yr
Natural Gas	1644	"	Nitrogen	324300	"
			Carbon Dioxide	3600	"
			Oxygen	6187	"
			Nitrogen Oxide	714	"
			Hydrocarbons	202	"
			Sulfur Dioxide	0.1	"

ASSOCIATED CONTROL DEVICE Afterburner CONTROL NO 4 % EFFICIENCY 90.8 SOURCE NO 12

TEXAS AIR CONTROL BOARD
1970 EMISSIONS INVENTORY QUESTIONNAIRE

PAGE - 5
COMPANY ID - PHI0560

PROCESS-WEIGHT SECTION

INSTRUCTIONS-YOU DID NOT PROVIDE THE FOLLOWING INFORMATION FOR 1969. HOWEVER, YOU ARE REQUIRED TO DO SO FOR 1970. ATTACH ADDITIONAL COPIES AS NECESSARY

TEXAS AIR CONTROL BOARD
1970 EMISSIONS INVENTORY QUESTIONNAIRE

PAGE - 6
COMPANY ID - PHI0560

LINE - 301
PROCESS NAME OR DESCRIPTION- DRYERS 1 AND 2

PROCESS NUMBER- 15

OPERATING SCHEDULE- 24 HR/DA 7 DA/WK 52 WK/YR

PROCESS MATERIALS

ATERIALS	INPUT/YEAR QUANTITIES	UNITS	MATERIALS	OUTPUT/YEAR QUANTITIES	UNITS
Nitrate	8130	T/Yr	Nitrate to Solution	8103	T/Yr
Water	20725	"	Water	20725	"
			Nitrate to Air	27	"

ASSOCIATED CONTROL DEVICE Rotoclones CONTROL NO 5 % EFFICIENCY 99.7 SOURCE NO 15

TEXAS AIR CONTROL BOARD
1970 EMISSIONS INVENTORY QUESTIONNAIRE

PAGE - 5
COMPANY ID - PHI0560

PROCESS-WEIGHT SECTION

INSTRUCTIONS-YOU DID NOT PROVIDE THE FOLLOWING INFORMATION FOR 1969. HOWEVER, YOU ARE REQUIRED TO DO SO FOR 1970. ATTACH ADDITIONAL COPIES AS NECESSARY

TEXAS AIR CONTROL BOARD
1970 EMISSIONS INVENTORY QUESTIONNAIRE

PAGE - 6
COMPANY ID - PHI0560

LINE - 301
PROCESS NAME OR DESCRIPTION- DRYERS 3, 4 AND 5

PROCESS NUMBER- 17

OPERATING SCHEDULE- 24 HR/DA 7 DA/WK 52 WK/YR

PROCESS MATERIALS

MATERIALS	INPUT/YEAR QUANTITIES	UNITS	MATERIALS	OUTPUT/YEAR QUANTITIES	UNITS
Nitrate	8416	T/Yr	Nitrate to Solution	8397	T/Yr
Water	17748	"	Water	17748	"
			Nitrate to Air	18	"

ASSOCIATED CONTROL DEVICE Pease Anthony Scrubbers CONTROL NO 6 % EFFICIENCY 99.8 SOURCE NO 17

PROCESS-WEIGHT SECTION

INSTRUCTIONS-YOU DID NOT PROVIDE THE FOLLOWING INFORMATION FOR 1969. HOWEVER, YOU ARE REQUIRED TO DO SO FOR 1970. ATTACH ADDITIONAL COPIES AS NECESSARY

LINE - 301
PROCESS NAME OR DESCRIPTION- NITRATE VACUUM CLEANER

PROCESS NUMBER- 19 OPERATING SCHEDULE- 24 HR/DA 7 DA/WK 52 WK/YR

PROCESS MATERIALS

INPUT/YEAR MATERIALS	QUANTITIES	UNITS	OUTPUT/YEAR MATERIALS	QUANTITIES	UNITS
Nitrate	456	T/Yr	Nitrate to Process	454	T/Yr
			Nitrate to Air	2	"

ASSOCIATED CONTROL DEVICE Bag Filter CONTROL NO 7 % EFFICIENCY 99.6 SOURCE NO 19

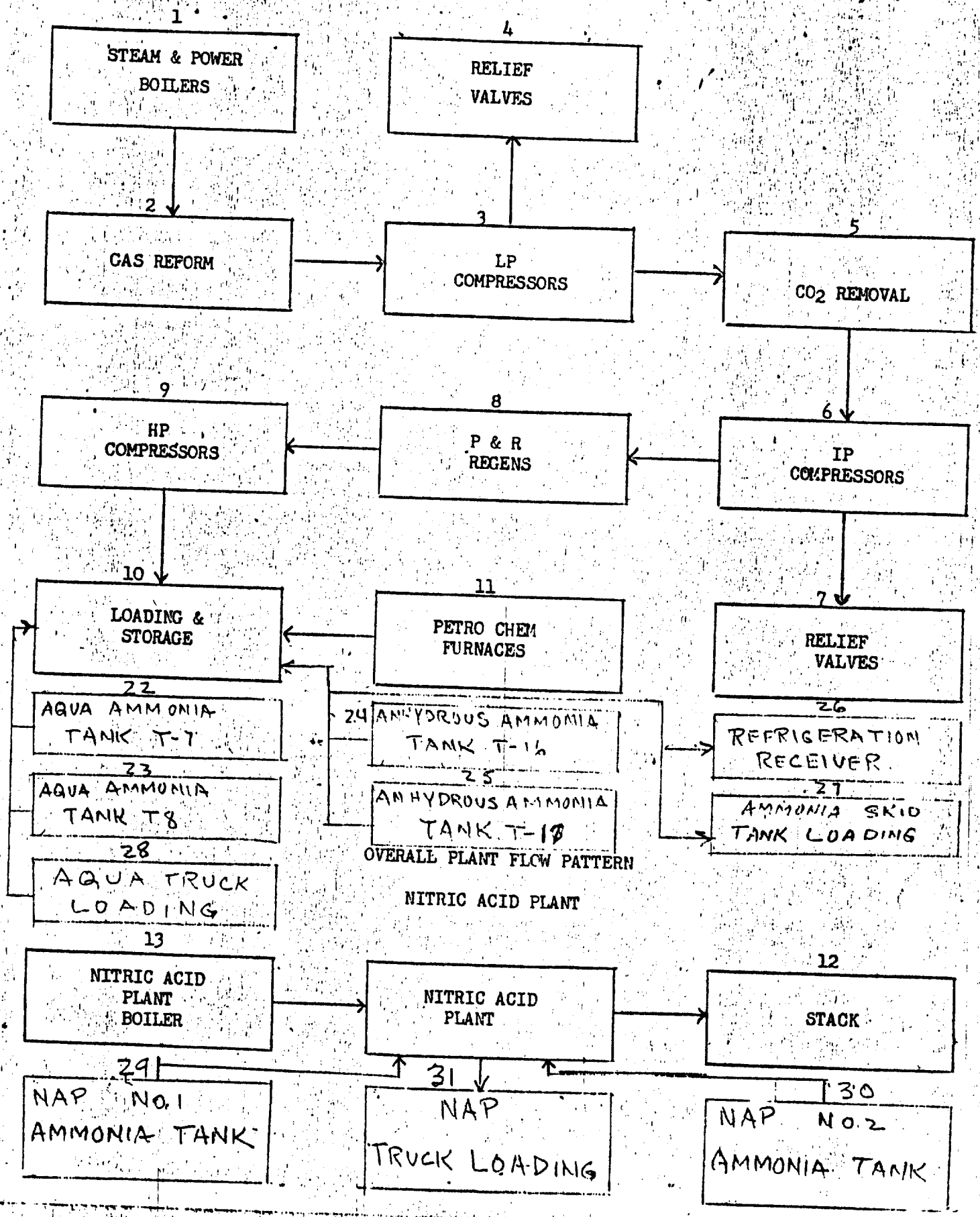
TEXAS AIR CONTROL BOARD 1973 Questionnaire

LEGEND FOR PROCESS BLOCK DIAGRAMS AND OVERALL PLANT FLOW PATTERNS

S & P Boilers	Steam and Power Boilers
CO_2 Removal	Carbon Dioxide Removal Unit
LP Compressors	Low Pressure Compressors
IP Compressors	Intermediate Pressure Compressors
P & R Regens	Purification and Regeneration Regenerators
HP Compressors	High Pressure Compressors
Petro Chems	This is a commercial name for a heating furnace.
LP	Low Pressure Compressors
IP	Intermediate Pressure Compressors
HP	High Pressure Compressors
CO_2	Carbon Dioxide Removal Unit
L & S	Loading and Storage
Prill Tower	Ammonium Nitrate Prilling Tower
Dryers	Ammonium Nitrate Dryers
Rotoclone	Commercial name for a dust water scrubber
P.A. Scrubber	Pease Anthony Water Scrubber for dust
Nitrate Whse. Loading	Ammonium Nitrate Warehouse and Loading
NAP Boiler	Nitric Acid Plant Boiler
NAP Stack	Nitric Acid Plant Stack
PSV	Pressure Safety Valve

OVERALL PLANT FLOW PATTERN

AMMONIA PLANT

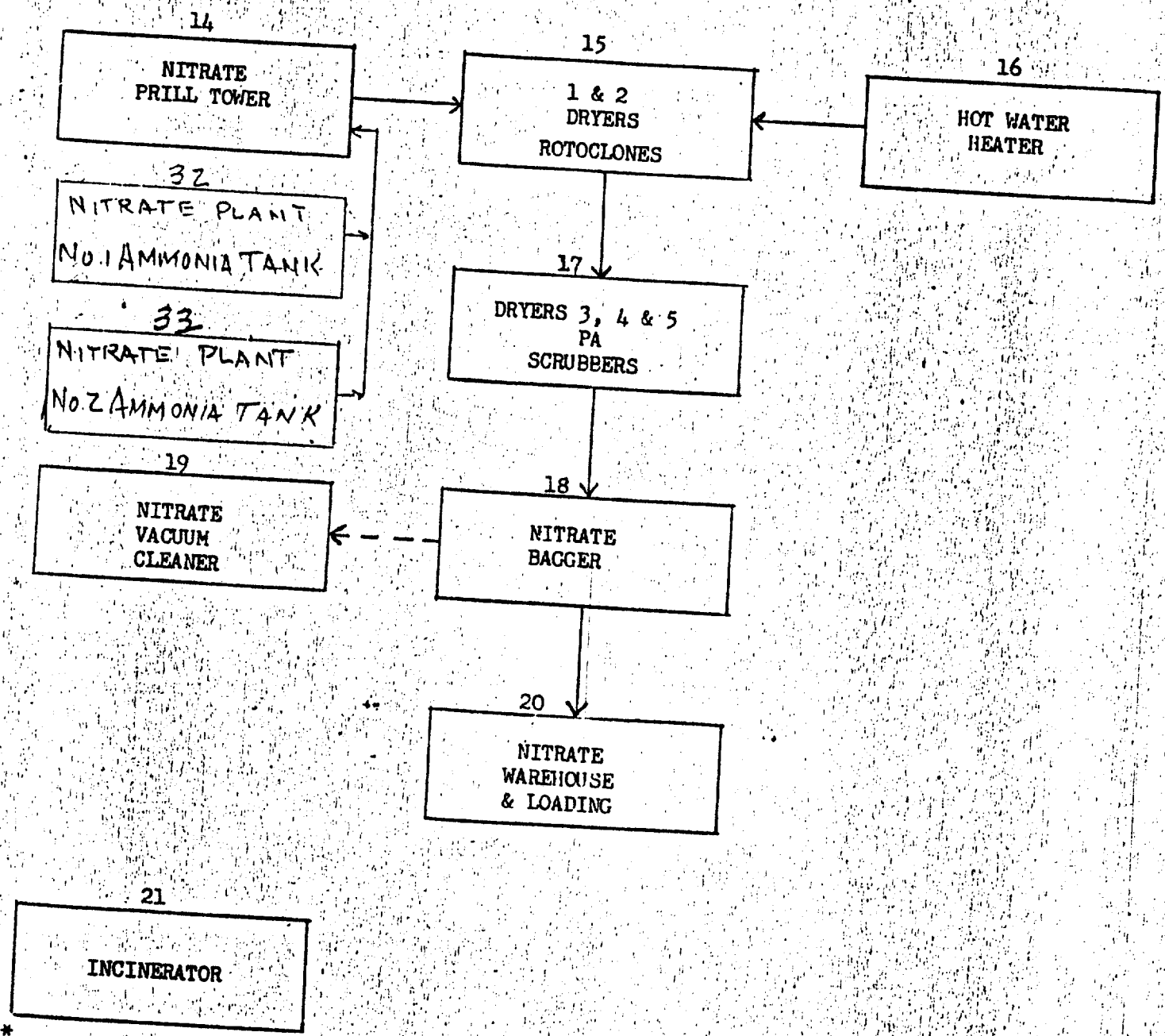


OVERALL PLANT FLOW PATTERN

NITRIC ACID PLANT

NITRATE PLANT

OVERALL PLANT FLOW PATTERN



* FOR ALL PLANTS

AMMONIA PLANT

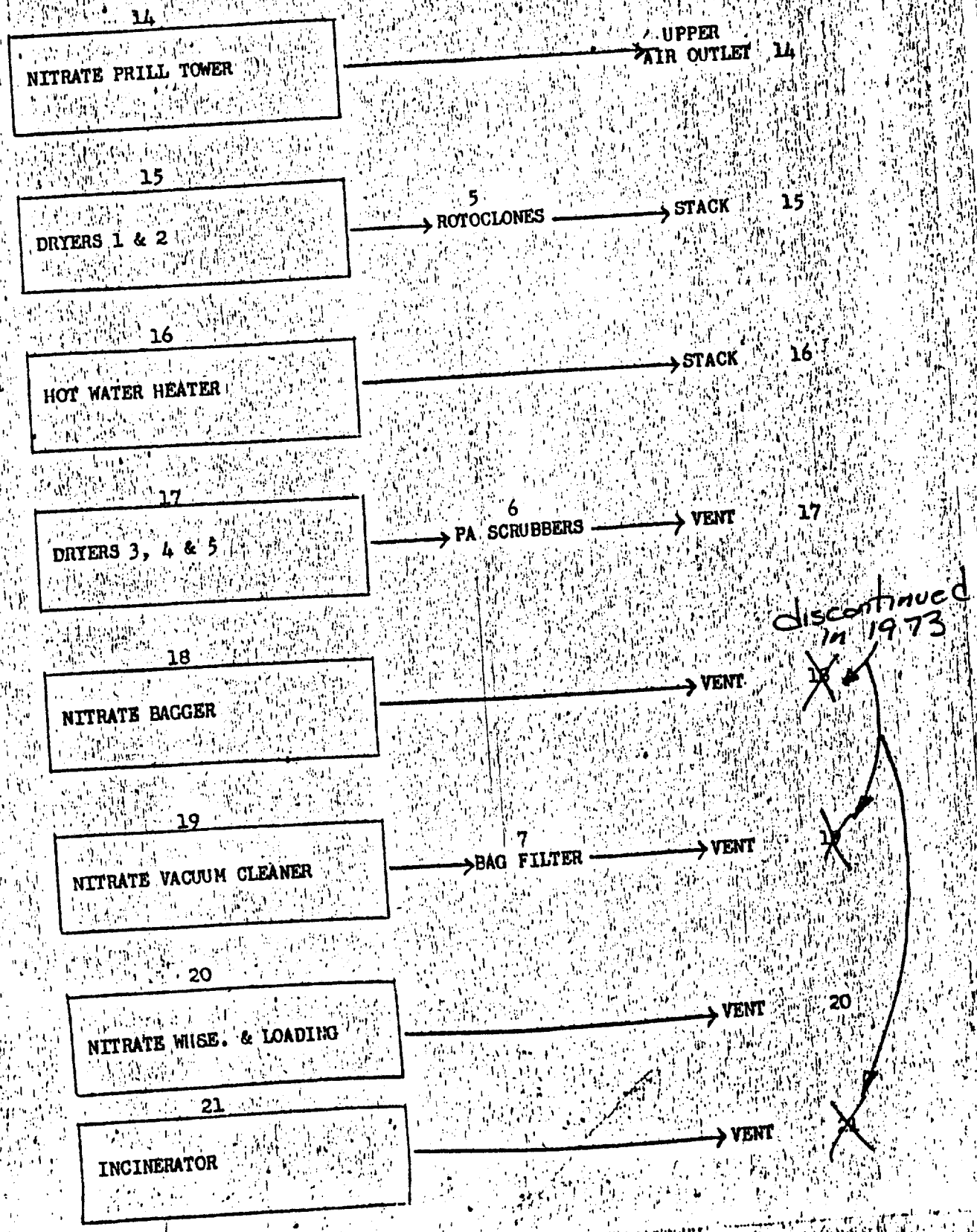
PROCESS BLOCK DIAGRAMS

This Section shut down 11/11/73

PROCESS NO.					SOURCE NO.
1 S & P BOILERS	→ STACK				1
2 GAS REFORM	→ STACK				2
3 LP COMPRESSORS	→ EXHAUST				3
4 LP COMPRESSOR RELIEF VALVES	→ VENT				4
5 CO_2 REMOVAL	→ 1 CONDENSER	→ 2 DEMISTER	→ VENT		5
6 IP COMPRESSORS	→ EXHAUST				6
7 IP COMPRESSOR RELIEF VALVES	→ VENT				7

AMMONIUM NITRATE PLANT

PROCESS BLOCK DIAGRAMS



AMMONIA PLANT PROCESS BLOCK DIAGRAMS (CONT'D)

Shut down 11/11/73

8

P & R REGENS → 3 BOILER FUEL — OFFGAS → STACK

9

HP COMPRESSORS → EXHAUST

10

LOADING & STORAGE → 3 BOILER FUEL OFFGAS → STACK 10

LIMITED USE

11

PETRO CHEM FURNACES → STACK 11

NITRIC ACID PLANT

PROCESS BLOCK DIAGRAMS

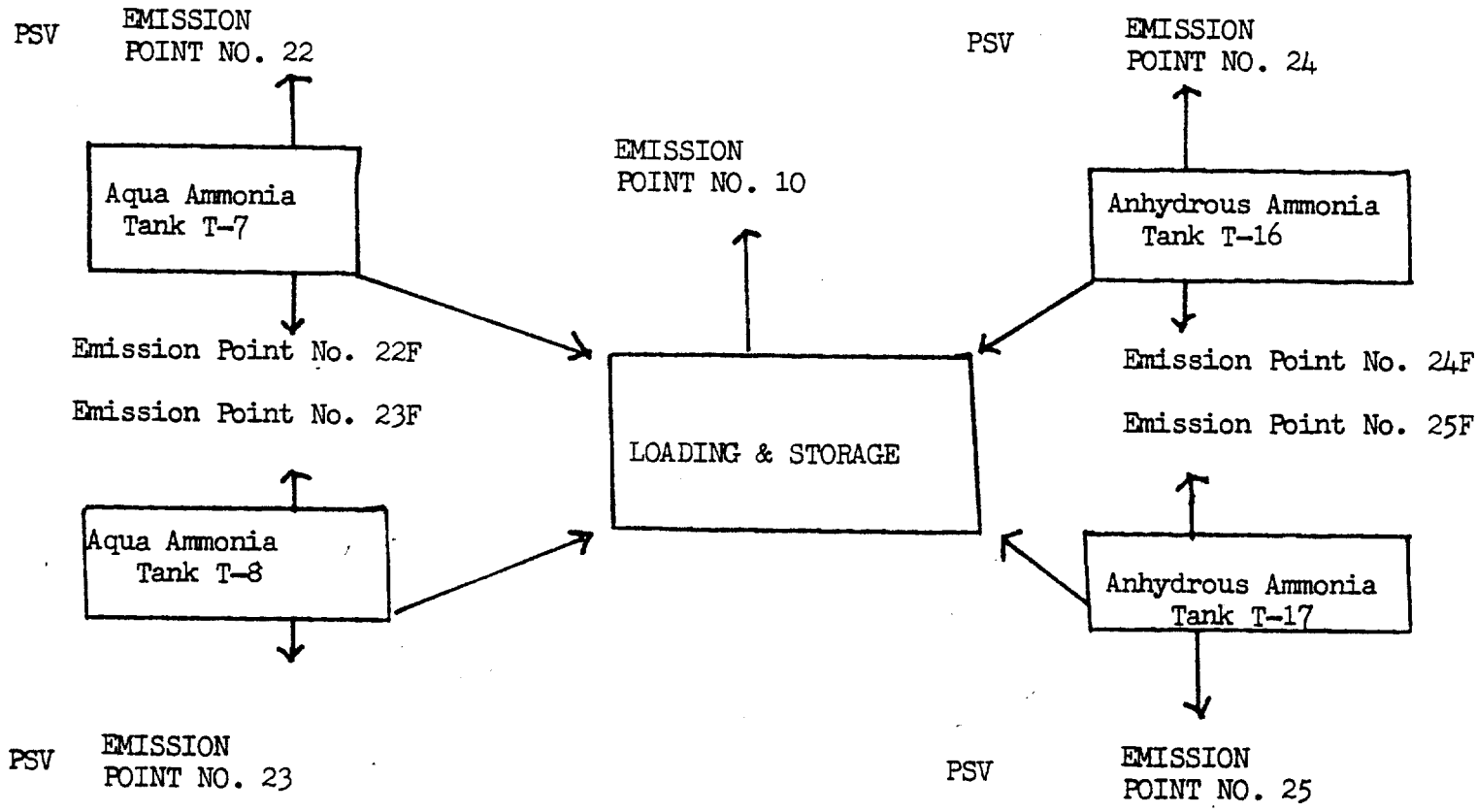
12

NITRIC ACID PLANT — 4 AFTERBURNER → STACK 12

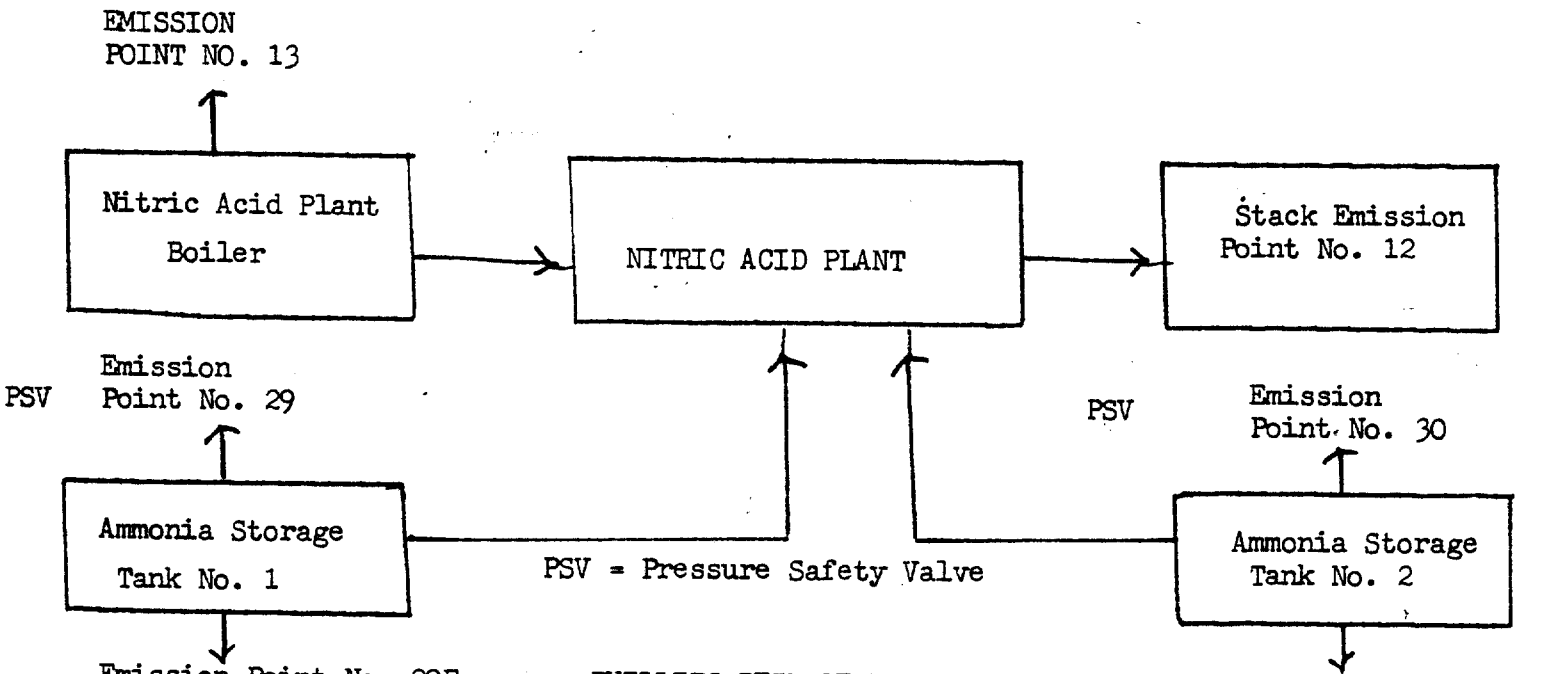
13

NITRIC ACID PLANT BOILER → STACK 13

OVERALL FLOW PATTERN - LOADING AND STORAGE



OVERALL FLOW PATTERN NITRIC ACID PLANT



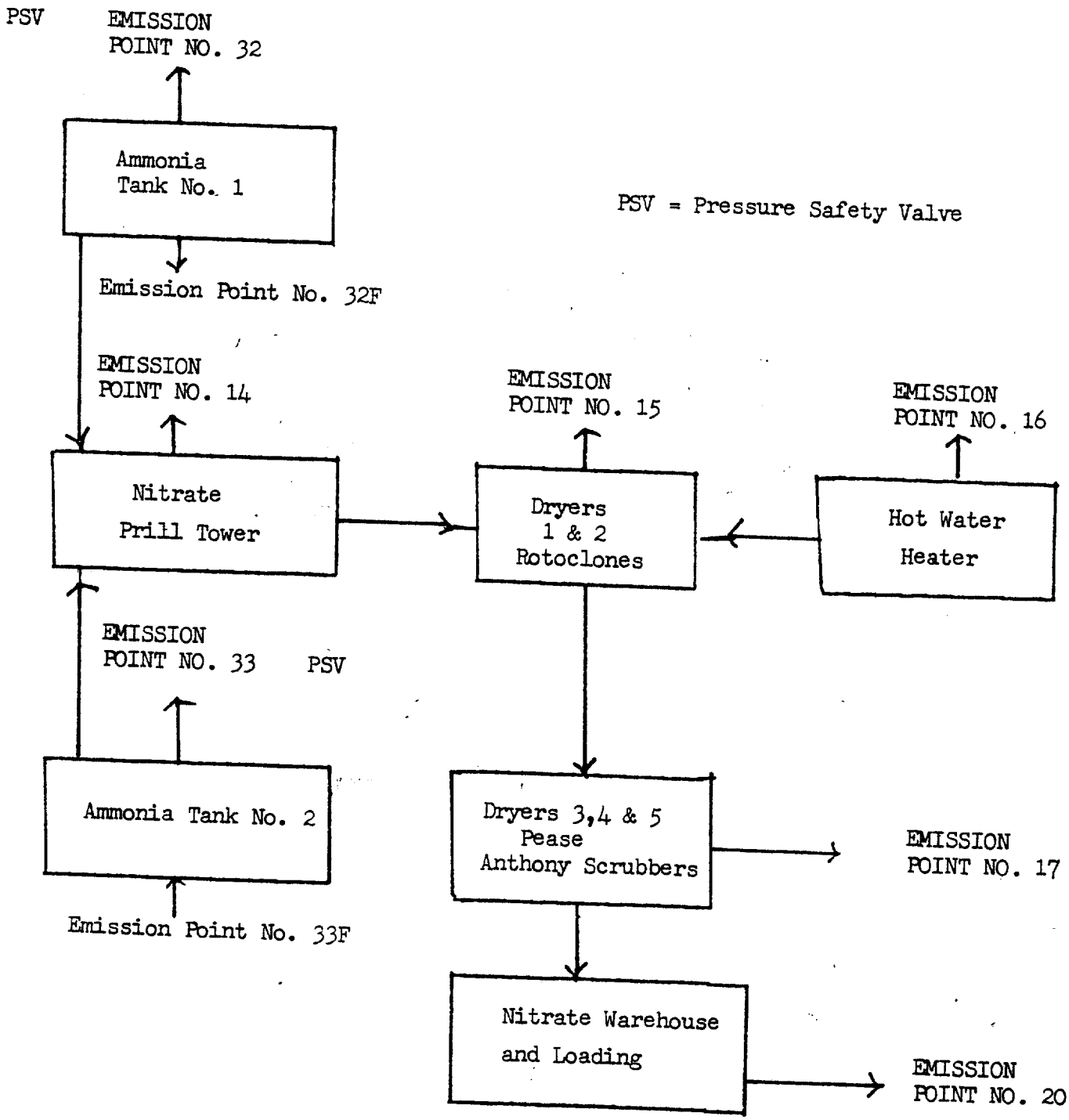
PHILLIPS PETROLEUM COMPANY

CACTUS PLANT

5/3/76 JLK

NITRATE PLANT

OVERALL FLOW PATTERN



PHILLIPS PETROLEUM COMPANY

CACTUS PLANT

5/3/76 JLK

Emissions Inventory
Data For Year 1975

Account No. 110-411-0

TOTAL EMISSIONS

Emission Point Number	Emission Point Type	Nitrogen Oxides	Sulfur Dioxide	Carbon Compds.	Carbon Monoxide	Particu-lates	H_2S	H_2SO_4	Fluo-rides	NH_3	Cl_2	HCl	Other (Specify)
33F	Fugitive									10 D			Aldehydes
34	1	5.3C	0.02D	0.6C		0.46C							0.072
Total This Page		5.3	0.02	0.6		0.46				10			0.072
Subtotal From Previous Page		256.34	0.12	2071.39	3612	140.99				631			0.16
Page Total (Tons Per Year)		261.64	0.14	2071.99	3612	141.45				641			0.232

Please Note: Fugitive Ammonia Loss Includes Some Inert Gases

TEXAS AIR CONTROL BOARD
Emissions Inventory
Data For Year 1975

Account No. 110-411-0

TOTAL EMISSIONS

Emission Point Number	Emission Point Type	Nitrogen Oxides	Sulfur Dioxide	Carbon Compds.	Carbon Monoxide	Particu-lates	H_2S	H_2SO_4	Fluo-rides	NH_3	Cl_2	HCl	Other (Specify)
STG Pg 4	* PSV									Nil			Aldehydes
LD Pg 5	1									Nil			
10F										360 D			
12	1	*** 234A	0.07D	2070	3612					21 D			
12**	1	10.3D											
13	1	5.14C	0.03D	0.6C		0.4C							0.07C
14	1					62 D							
15	1					44 D							
16	1	6.9C	0.02D	0.79C		0.59C							0.09C
17						23D							
20						11D							
22F	Fugitive									10 D			
23F	"									10 D			
24F	"									100 D			
25F	"									100 D			
29F	"									10 D			
30F	"									10 D			
32F	"									10 D			
Page Total (Tons Per Year)		256.34	0.12	2071.39	3612	140.99				631			0.16

* PSV = Pressure Safety Valve

** Emission During Startup Shutdown and Upsets

*** Interpreted from NO Analyses

TEXAS AIR CONTROL BOARD
Emissions Inventory
Data For Year 1975

Account No. 110-411-0

STREAM COMPOSITION AND STACK DATA

1	2			3			4	5	6				
Emission Point Number	Stream Composition			Normal Flow Rate of Each Component			Total Flow Rate (Tons Year)	Latitude Longitude (To The Nearest Second)	Stack or Vent Information				
				Gas	Particulate				Height Above Ground (Ft)	Inside Diam At Exit (Ft)	Temp (°F)	Velocity (Ft/Sec)	Total Flow Rate (ACFM)
	Component	Mol Wt	Conc.	SCFM (70°F)	Lb/Hr	% Fines							
12	Water		1.49	566				36:2:15 101:59:45	92	2.9	510	C 180	71202
	Nitrogen		96.46	36732									
	Carbon Dioxide		0.75	286									
	Carbon Monoxide	28	0.75	286			3612						
	Methane	16	0.75	286			2070						
	Ammonia	17	0.0073	2.8			21						
	Nitrogen Dioxide	46	0.0295	11.3			234						
	Sulfer Dioxide	64	0.000011	0.0024			0.07						

TEXAS AIR CONTROL BOARD
Emissions Inventory
Data For Year 1975

Account No. 110-411-0

STREAM COMPOSITION AND STACK DATA

1	2			3			4	5	6				
Emission Point Number	Stream Composition			Normal Flow Rate of Each Component			Total Flow Rate (Tons/Year)	Latitude / Longitude (To The Nearest Second)	Stack or Vent Information				
	Component	Mol Wt	Conc.	Gas SCFM (70°F)	Particulate Lb/Hr	Particulate % Fines			Height Above Ground (Ft)	Inside Diam At Exit (Ft)	Temp (°F)	Velocity (Ft/Sec)	Total Flow Rate (ACFM)
13	Moisture		17.5	428				36:2:15 / 101:59:45	61	2.6	550	C 15	4760
	Nitrogen		72.6	1785									
	Carbon Dioxide		9.72	237									
	Sulfer Dioxide	64	0.0004	0.0011			0.03						
	Nitrogen Dioxide	46	0.0173	0.42			5.14						
	Hydro Carbon	16	0.0058	0.142			0.6						
	Particulate	12			0.26		0.4						
	Aldehydes	30	0.00036	0.009			0.07						

Emissions Inventory
Data For Year 1975

Account No. 110-411-0

STREAM COMPOSITION AND STACK DATA

1	2			3			4	5	6				
Emission Point Number	Stream Composition			Normal Flow Rate of Each Component			Total Flow Rate (Tons/Year)	Latitude / Longitude (To The Nearest Second)	Stack or Vent Information				
	Component	Mol Wt	Conc.	Gas SCFM (70°F)	Particulate Lb/Hr	Particulate % Fines			Height Above Ground (Ft)	Inside Diam At Exit (Ft)	Temp (°F)	Velocity (Ft/Sec)	Total Flow Rate (ACFM)
14	Moisture		1.1	18.5				36:2:15 / 101:59:45	180	**Rectangular 535 ft²	85	5.78 C	185000
	Air		98.9	177000									
	Particulate NH_4NO_3	80			238	*	62						
15A	Moisture		6.0	3300				36:2:15 / 101:59:45	39	*** Rectangular 3.66 ft²	88	92 C	58700
	Air		94.0	52300									
	Particulate NH_4NO_3	80			16.9	*	44		36				
15B										3.0	88	92 C	

* Unknown *** Discharge Upward

Emissions Inventory
Data For Year 1975

Account No. 110-411-0

STREAM COMPOSITION AND STACK DATA

1	2			3			4	5	6				
Emission Point Number	Stream Composition			Normal Flow Rate of Each Component			Total Flow Rate (Tons/Year)	Latitude / Longitude (To The Nearest Second)	Stack or Vent Information				
				Gas	Particulate				Height Above Ground (Ft)	Inside Diam At Exit (Ft)	Temp (°F)	Velocity (Ft/Sec)	Total Flow Rate (ACFM)
	Component	Mol Wt	Conc.	SCFM (70°F)	Lb/Hr	% Fines							
16	Moisture			364				36:2:15 / 101:59:45	22	2.0	500	19.5 C	3690
	Nitrogen			1528									
	Carbon Dioxide			192									
	Sulfer Dioxide	64	0.00004	0.0007			0.02						
	Nitrogen Dioxide	46	0.017	0.365			6.9						
	Hydrocarbon	16	0.0057	0.119			0.79						
	Particulate	12			0.23		0.59						
	Aldehyde	30	0.00035				0.09						

Emissions Inventory
Data For Year 1975

Account No. 110-411-0

STREAM COMPOSITION AND STACK DATA

1	2			3			4	5	6				
Emission Point Number	Stream Composition			Normal Flow Rate of Each Component			Total Flow Rate (Tons/Year)	Latitude / Longitude (To The Nearest Second)	Stack or Vent Information				
	Component	Mol Wt	Conc.	Gas SCFM (70°F)	Particulate Lb/Hr	Particulate % Fines			Height Above Ground (Ft)	Inside Diam At Exit (Ft)	Temp (°F)	Velocity (Ft/Sec)	Total Flow Rate (ACFM)
17	Particulate NH_4NO_3	80			5.2		23	36:2:15 / 101:59:45	54	* 4.8	80	65 C	73500
	Air		95.8	70400									
	Moisture		4.2	3100									
17B									54	* 3.9	80	65 C	
17C									54	* 3.2	80	65 C	
20	Particulate NH_4NO_3	80			2.5		11	36:2:15 / 101:59:45	51	1.5	80	0	

STREAM COMPOSITION AND STACK DATA

1	2			3			4	5	6				
Emission Point Number	Stream Composition			Normal Flow Rate of Each Component			Total Flow Rate (Tons/Year)	Latitude / Longitude (To The Nearest Second)	Stack or Vent Information				
	Component	Mol Wt	Conc.	Gas SCFM (70°F)	Particulate Lb/Hr	Particulate % Fines			Height Above Ground (Ft)	Inside Diam At Exit (Ft)	Temp (°F)	Velocity (Ft/Sec)	Total Flow Rate (ACFM)
34	Moisture	18	17.2	303				36:2:15 / 101:59:45	42	3	500	8 C	3380
	Nitrogen	28	74.0	1300									
	Carbon Dioxide	44	8.6	152									
	Nitrogen Dioxide	46	0.016	0.285			5.3						
	Hydrocarbon	16	0.0052	0.92			0.6						
	Particulate	12			0.211		0.46						
	Aldehyde	30	0.00031	0.0059			0.072						
	Sulfer Dioxide	64	0.00004	0.0007			0.02						

Emissions Inventory
Data for Year 1975

Account No. 110-411-0

PROCESS DATA

Process Name or Description Nitric Acid Plant

Operating Rate: 100 % of Maximum Capacity Operating Schedule: 24 Hours/Day 7 Days/Week 34.3 Weeks/Year

List All Emission Point Numbers Associated With This Process 12

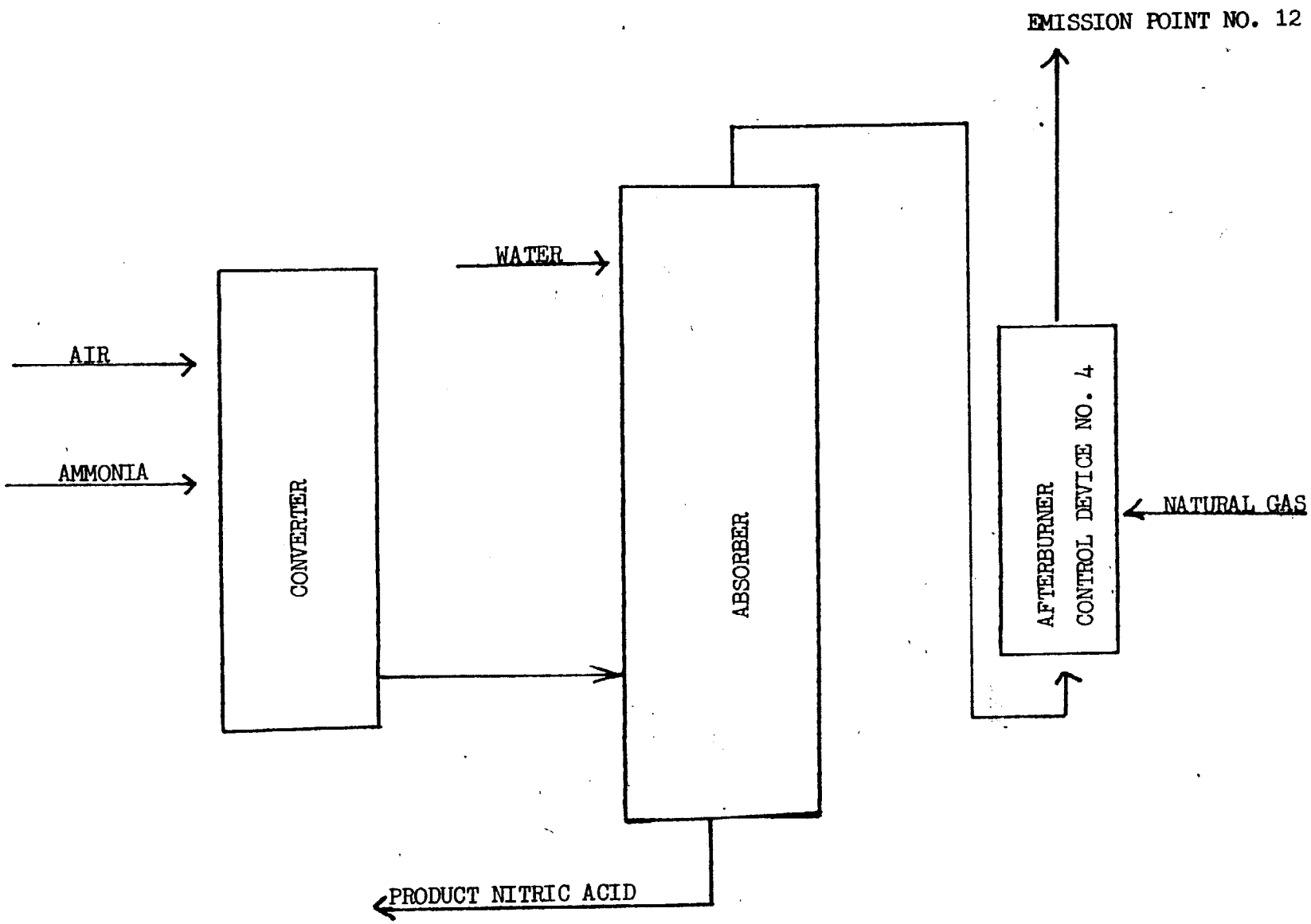
PROCESS FEED/YEAR

Material	Quantity	Units
Air	586452	T/Yr
Natural Gas	4140	T/Yr
Ammonia	31158	T/Yr
Water	36599.47	T/Yr
Total	658349.47	T/Yr

PROCESS PRODUCT/YEAR

Material	Quantity	Units
Water	4590	T/Yr
Nitrogen	463297	T/Yr
Carbon Dioxide	5692	T/Yr
Carbon Monoxide	3612	T/Yr
Methane	2070	T/Yr
Ammonia	21.4	T/Yr
Nitrogen Dioxide	234	T/Yr
Sulfer Dioxide	.07	T/Yr
Nitric Acid Product	178833	T/Yr
Total	658349.47	T/Yr

Emission Point Number	Associated Air Pollution Control Device	Control Number	Pollutants Controlled	Avg % Eff	Date Installed	Total Installed Cost	Energy Consumed (Specify Quantity and Units)
12	Afterburner	4	Nitrogen Dioxide		1962	$150,000	Natural Gas 4140 T/Yr



NITRIC ACID PLANT

CACTUS PLANT PHILLIPS PETROLEUM COMPANY

4/28/76 JLK

Emissions Inventory
Data for Year 1975

Account No. 110-411-0

PROCESS DATA

Process Name or Description Nitric Acid Plant Auxiliary Steam Boiler

Operating Rate: 50 % of Maximum Capacity

Operating Schedule: 24 Hours/Day 7 Days/Week 34.2 Weeks/Year

List All Emission Point Numbers Associated With This Process 13

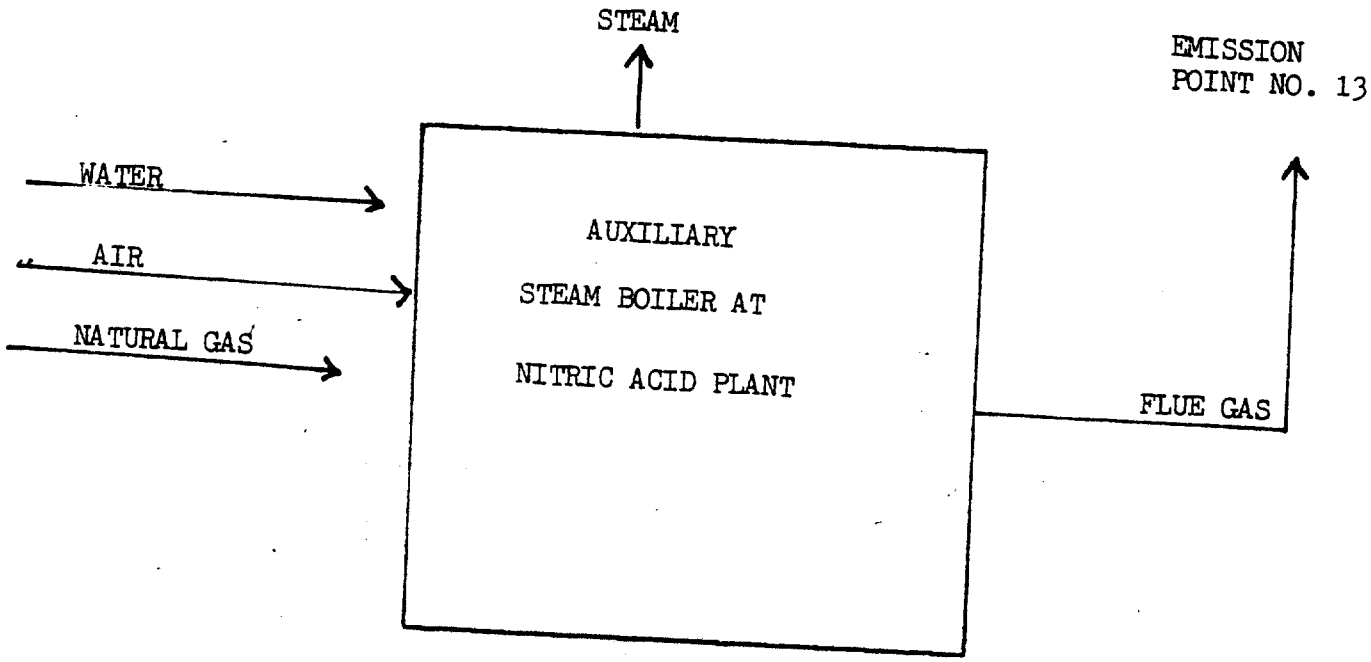
PROCESS FEED/YEAR

Material	Quantity	Units
Natural Gas	1910	Tons/Yr
Air	28440.60	Tons/Yr
Total	30350.60	Tons/Yr

PROCESS PRODUCT/YEAR

Material	Quantity	Units
Moisture	3470	T/Yr
Nitrogen	22400	T/Yr
Carbon Dioxide	4470	T/Yr
Sulfer Dioxide	0.03	T/Yr
Nitrogen Dioxide	8.75	T/Yr
Hydro Carbon	1.02	T/Yr
Particulate	.68	T/Yr
Aldehyde	0.12	T/Yr
	30350.60	

Emission Point Number	Associated Air Pollution Control Device	Control Number	Pollutants Controlled	Avg % Eff	Date Installed	Total Installed Cost	Energy Consumed (Specify Quantity and Units)



AUXILIARY BOILER

CACTUS PLANT PHILLIPS PETROLEUM COMPANY

5/3/76 JLK

Emissions Inventory
Data for Year 1975

Account No. 110-411-0

596 T/D 24.8 ~~472~~ T/H

PROCESS DATA

Process Name or Description NITRATE PRILLING

Operating Rate: 90 % of Maximum Capacity Operating Schedule: 24 Hours/Day 7 Days/Week 30.9 Weeks/Yea

List All Emission Point Numbers Associated With This Process 14

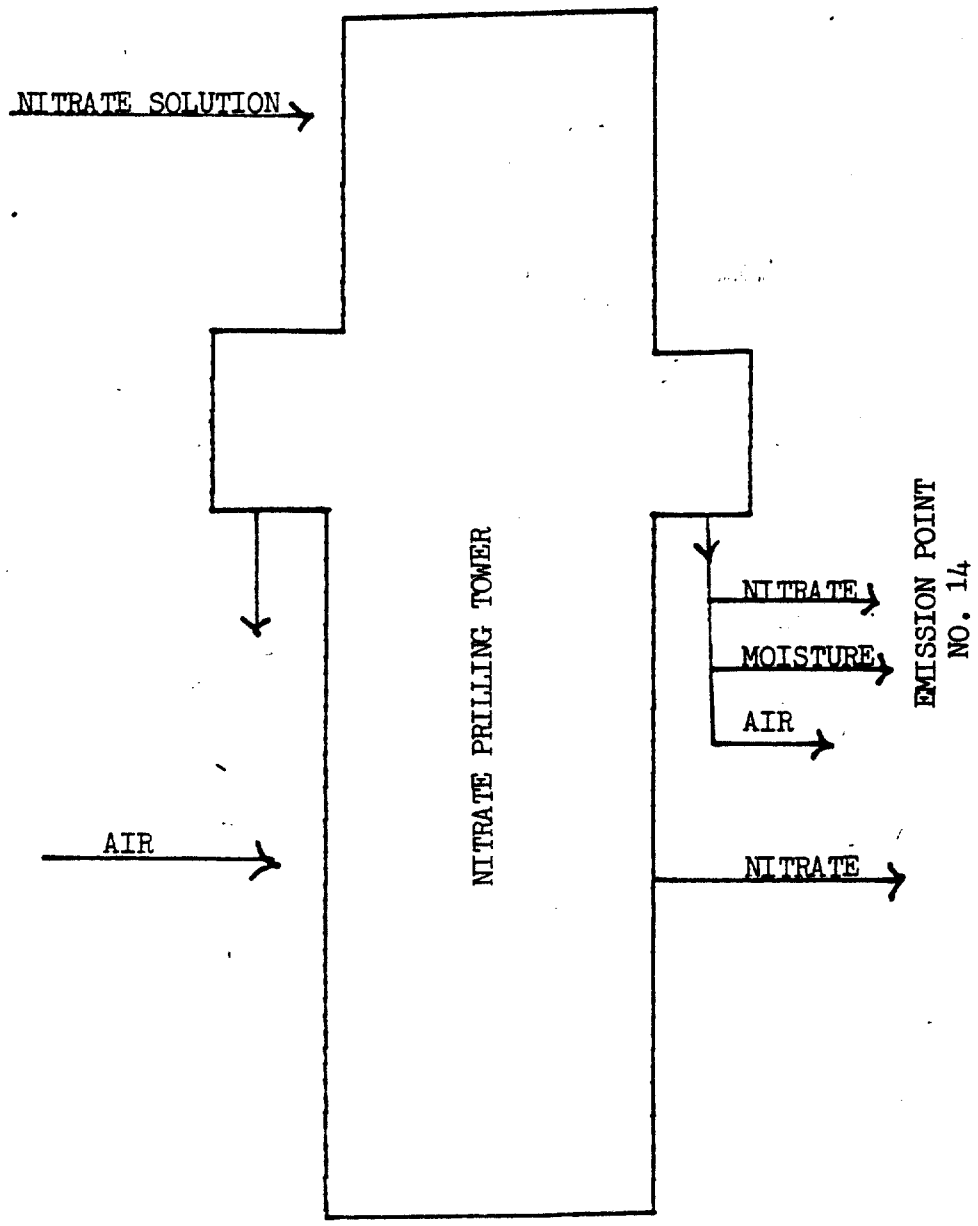
PROCESS FEED/YEAR

Material	Quantity	Units
Nitrate	129000	T/Yr
Moisture	12000	T/Yr
Air	2100000	T/Yr
Total	2241000	T/Yr

PROCESS PRODUCT/YEAR

Material	Quantity	Units
Nitrate to Air	62	T/Yr
Moisture	14350	T/Yr
Nitrate to Process	126588	T/Yr
Air	2100000	T/Yr
Total	2241000	T/Yr

Emission Point Number	Associated Air Pollution Control Device	Control Number	Pollutants Controlled	Avg % Eff	Date Installed	Total Installed Cost	Energy Consumed (Specify Quantity and Units)



NITRATE PRILLING TOWER

CACTUS PLANT PHILLIPS PETROLEUM COMPANY

5/3/76 JLK

Emissions Inventory
Data for Year 1975

Account No. 110-411-0

PROCESS DATA

Process Name or Description DRYERS 1 & 2

Operating Rate: 90 % of Maximum Capacity

Operating Schedule: 24 Hours/Day 7 Days/Week 30.9 Weeks/Year

List All Emission Point Numbers Associated With This Process 15

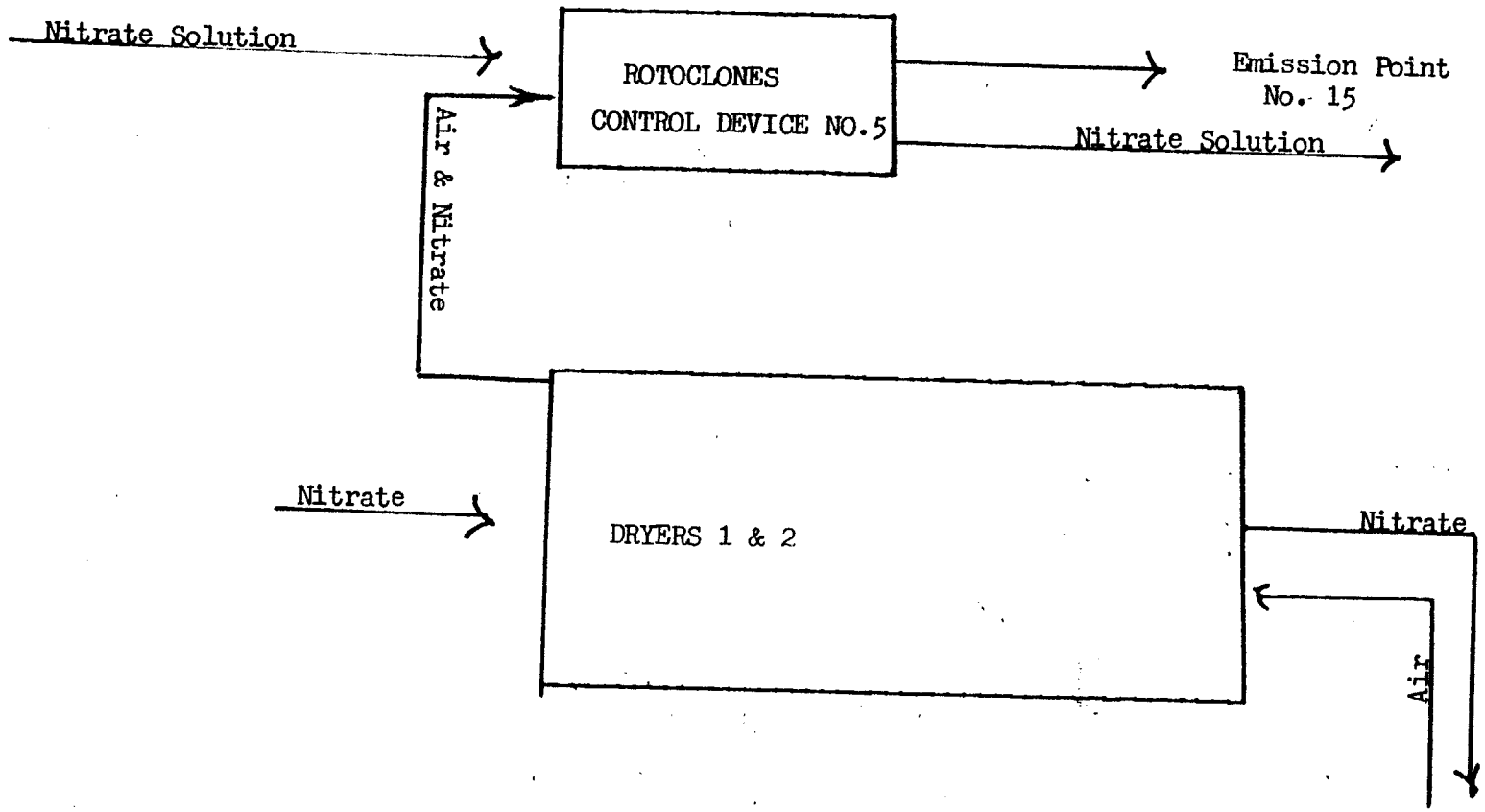
PROCESS FEED/YEAR

Material	Quantity	Units
Nitrate	10536	T/Yr
Moisture	24400	T/Yr
Air	625000	T/Yr
Total	659936	T/Yr

PROCESS PRODUCT/YEAR

Material	Quantity	Units
Nitrate to Solution	10500	T/Yr
Nitrate to Air	36	T/Yr
Moisture	24400	T/Yr
Air	625000	T/Yr
Total	659936	T/Yr

Emission Point Number	Associated Air Pollution Control Device	Control Number	Pollutants Controlled	Avg % Eff	Date Installed	Total Installed Cost	Energy Consumed (Specify Quantity and Units)
15	Rotoclone	5	Nitrate	99.7	1956	$150000	408×10^6 KWH/Yr



CACTUS PLANT PHILLIPS PETROLEUM COMPANY

5/3/76 JLK

Emissions Inventory
Data for Year 1975

Account No. 110-411-0

PROCESS DATA

Process Name or Description Hot Water Heater

Operating Rate: 90 % of Maximum Capacity

Operating Schedule: 24 Hours/Day 7 Days/Week 30.9 Weeks/Year

List All Emission Point Numbers Associated With This Process 16

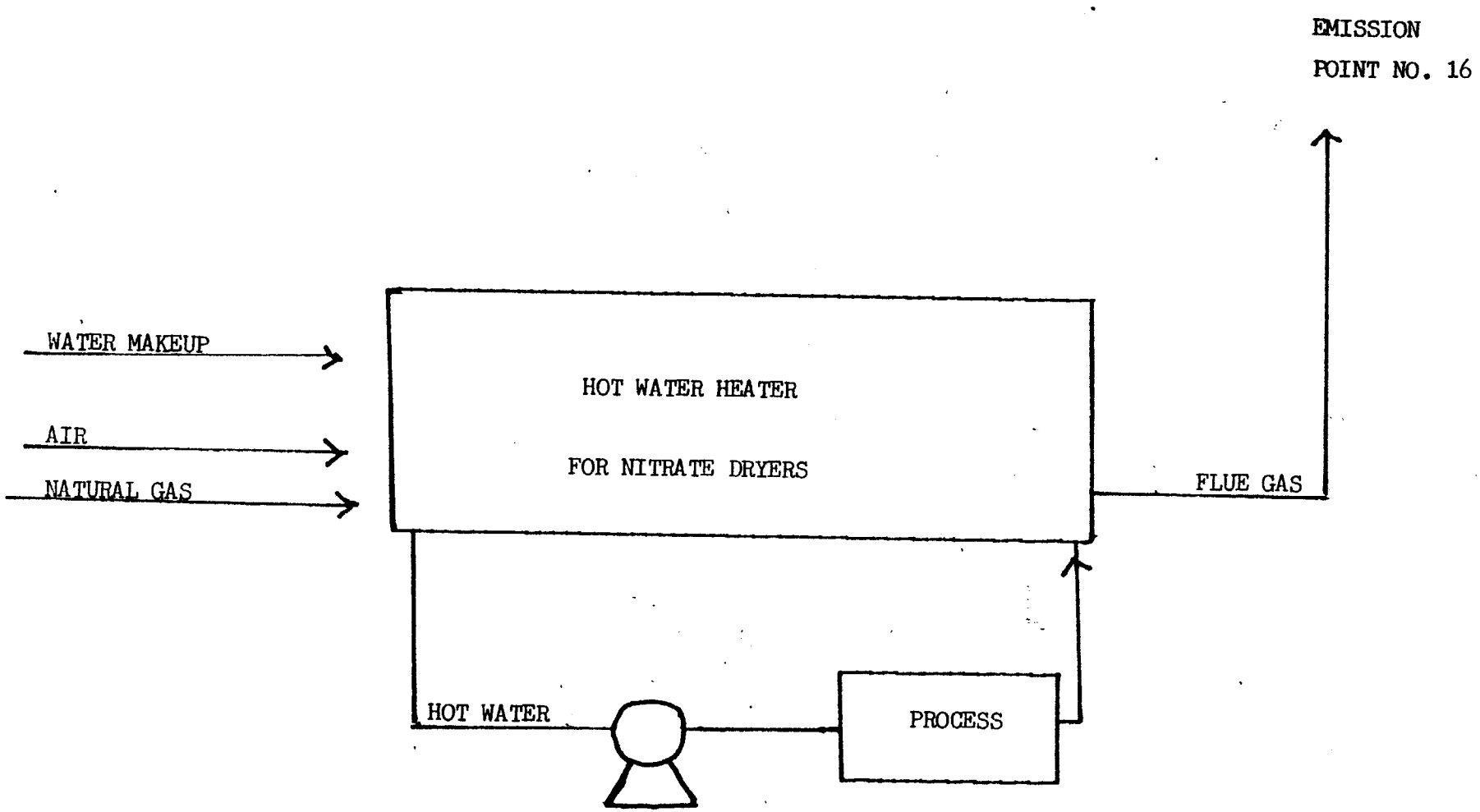
PROCESS FEED/YEAR

Material	Quantity	Units
Natural Gas	1520	T/Yr
Air	22258.39	T/Yr
Total	23778.39	T/Yr

PROCESS PRODUCT/YEAR

Material	Quantity	Units
Moisture Nitrogen	2700 17600	T/Yr
Carbon Dioxide Sulfer Dioxide	3470 .02	T/Yr
Nitrogen Dioxide Hydro Carbon	6.9 .79	T/Yr
Particulate Aldehyde	.59 .09	T/Yr
Total	23778.39	T/Yr

Emission Point Number	Associated Air Pollution Control Device	Control Number	Pollutants Controlled	Avg % Eff	Date Installed	Total Installed Cost	Energy Consumed (Specify Quantity and Units)



HOT WATER HEATER

CACTUS PLANT PHILLIPS PETROLEUM COMPANY

5/3/76 JLK

Emissions Inventory
Data for Year 1975

Account No. 110-411-0

PROCESS DATA

Process Name or Description Dryers 3, 4, & 5

Operating Rate: 90 % of Maximum Capacity

Operating Schedule: 24 Hours/Day 7 Days/Week 30.9 Weeks/Year

List All Emission Point Numbers Associated With This Process 17

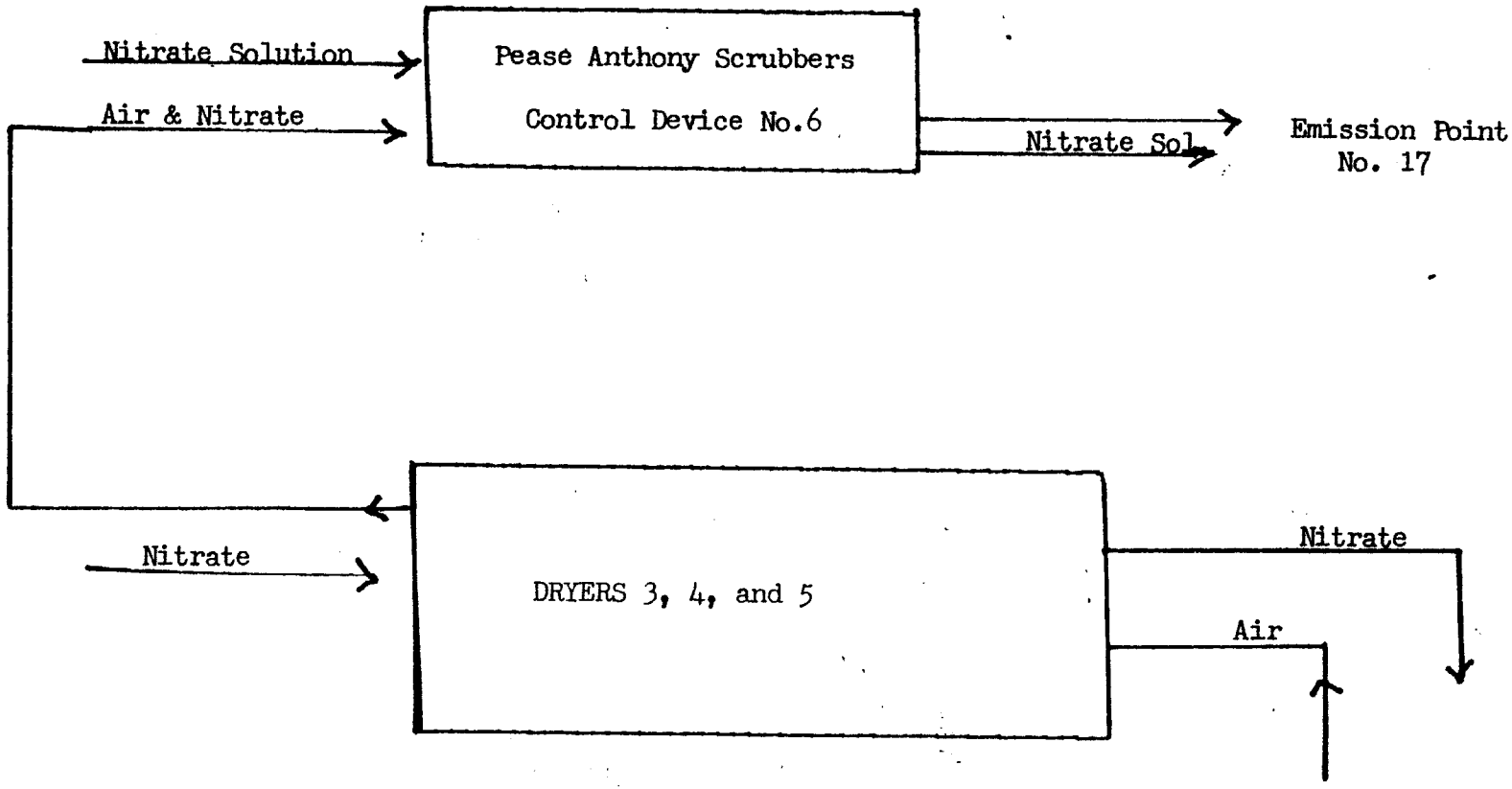
PROCESS FEED/YEAR

Material	Quantity	Units
Air	845000	T/Yr
Nitrate	10843	T/Yr
Moisture	23000	T/Yr
Total	878843	T/Yr

PROCESS PRODUCT/YEAR

Material	Quantity	Units
Air	845000	T/Yr
Nitrate to Air	23	T/Yr
Nitrate to Solution	10820	T/Yr
Moisture	23000	T/Yr
Total	878843	T/Yr

Emission Point Number	Associated Air Pollution Control Device	Control Number	Pollutants Controlled	Avg % Eff	Date Installed	Total Installed Cost	Energy Consumed (Specify Quantity and Units)
17	Pease Anthony Scrubbers	6	Nitrate	99.8	1950	$125000	1297×10^6 KWHrs/Yr



PHILLIPS PETROLEUM COMPANY CACTUS PLANT

5/3/76 JLK

Emissions Inventory
Data for Year 1975

Account No. 110-411-0

PROCESS DATA

Process Name or Description Nitrate Warehouse & Loading

Operating Rate: 58.4 % of Maximum Capacity

Operating Schedule: 24 Hours/Day 7 Days/Week 365 Weeks/Year

List All Emission Point Numbers Associated With This Process 20

PROCESS FEED/YEAR

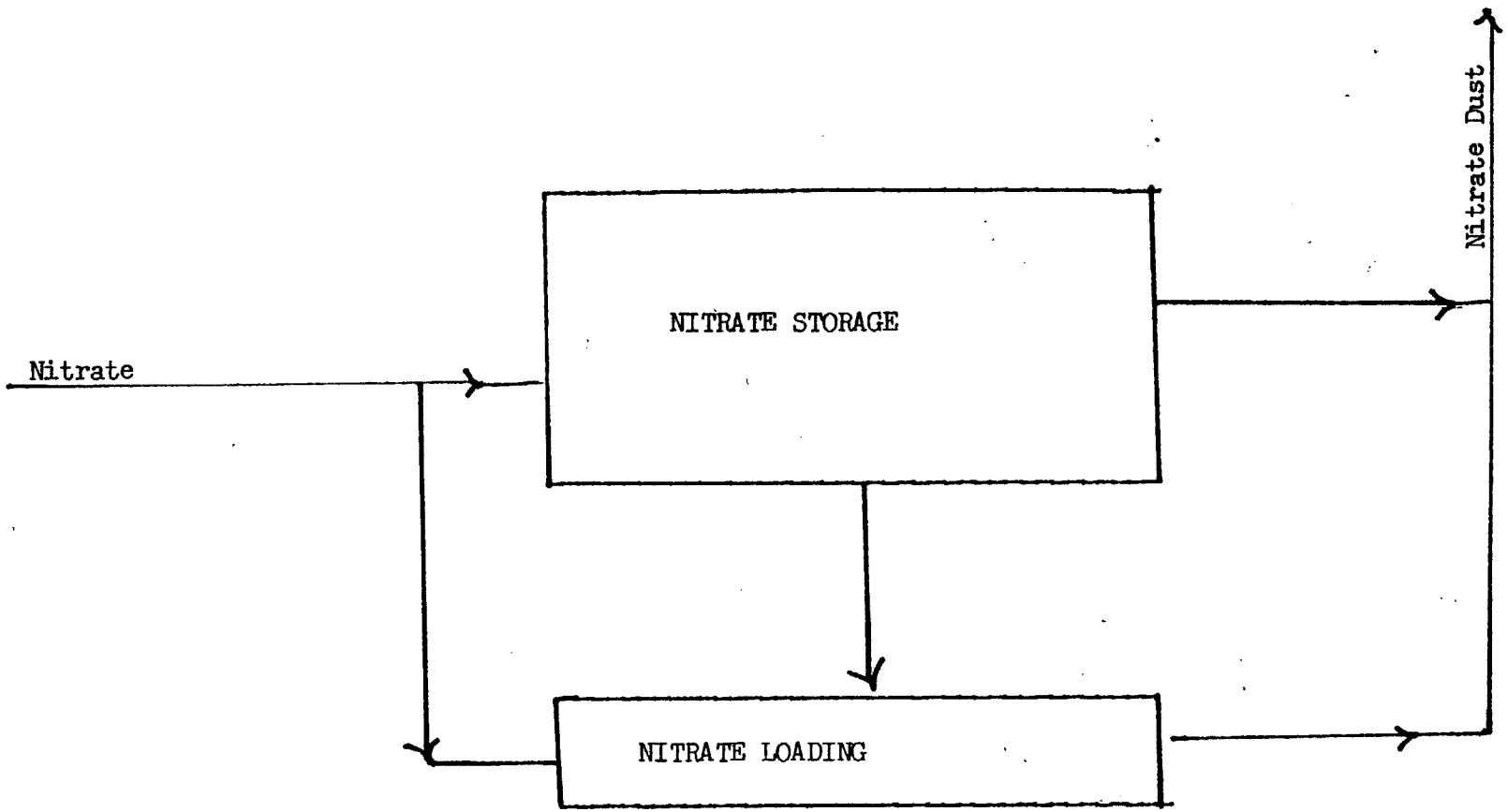
Material	Quantity	Units
Nitrate	119400	T/Yr
Total	119400	T/Yr

PROCESS PRODUCT/YEAR

Material	Quantity	Units
Nitrate to Storage	119289	T/Yr
Nitrate to Air	11	
Total	119400	T/Yr

Emission Point Number	Associated Air Pollution Control Device	Control Number	Pollutants Controlled	Avg % Eff	Date Installed	Total Installed Cost	Energy Consumed (Specify Quantity and Units)

EMISSION POINT
NO. 20



CACTUS PLANT PHILLIPS PETROLEUM COMPANY

5/3/76