Burkhead Gin Company

P.O. BOX 96 ● JAY, FLORIDA ● 32565

November 5, 2007

To Whom It May Concern:

If there are any problems with the application or information that I have submitted, please feel free to contact me at (850)-675-4636 or burkgin@bellsouth.net.

burkgin@bellsouth.net

Thank You,

Sherre Burkhead

Sherre Burkhead

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Emissions Unit ID ID1130027

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section must be completed for each emissions unit addressed in this Application for Non-Title V Air Permit Renewal. If submitting the form in hard copy, indicate, in the space provided at the top of each page, the Emissions Unit ID of the emissions unit addressed on the page, as given in the unit's most current air operation permit.

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Cyclones 1 thru 12, Cyclones 13 thru 25 and heaters 1 thru 4	
2. Emissions Unit Status Code: A	3. Long-Term Reserve Shutdown Date: N/A
4. Control Equipment Method/Description (limit to 200 characters per device or method):	

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: 12			mmBtu/hr
2. Maximum Incineration Rate:	lb/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate: 60,000 bales/yr			
5. Requested Maximum Operating Schedule:			
	hours/day		days/week
	weeks/year	3,000	hours/year

Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR NON-TITLE V AIR PERMIT RENEWAL

See Instructions for Form No. 62-210.900(4)

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: Burkhead Gin Company	
2. Site Name:	
3. Facility Identification Number: 1130027	4. Facility Status Code: A

Application Contact

1. Name and Title of Application Contact: Buddy Z. Burkhead, Owner
2. Application Contact Mailing Address: Organization/Firm: Burkhead Gin Company Street Address: PO Box 69 City: Jay State: FL Zip Code: 32565
3. Application Contact Telephone Numbers: Telephone: (850)675-4636 Fax: (850)675-4402

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	

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DEP

Owner/Authorized Representative

1. Name and Title of Owner/Authorized Representative: Buddy Z. Burkhead, Owner

burkgin@bellsouth.net

2. Owner/Authorized Representative Mailing Address:

Organization/Firm: Burkhead Gin Company
Street Address: PO Box 69
City: Jay State: FL Zip Code: 32565

3. Owner/Authorized Representative Telephone Numbers:
Telephone: (850)675-4636 Fax: (850)675-4402

4. Owner/Authorized Representative Statement:

I, the undersigned, am the owner or authorized representative of the facility addressed in this Application for Air Permit. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. Further, I agree to operate and maintain the air pollutant emissions units and air pollution control equipment described in this application so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.*

Buddy Burkhead
Signature

11/5/07
Date

* Attach letter of authorization if not currently on file.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
001	Cotton Gin	A02B	1,000.00

Application Processing Fee

Check one: [x] Attached - Amount: $_1,000.00_____ [ ] Not Applicable_

Application Comment

II. FACILITY INFORMATION

Facility Contact

1. Name and Title of Facility Contact: Buddy Z. Burkhead, Owner
2. Facility Contact Mailing Address: Organization/Firm: Burkhead Gin Company Street Address: PO Box 69 City: Jay State: FL Zip Code: 32565
3. Facility Contact Telephone Numbers: Telephone: (850)675-4636 Fax: (850)675-4402

Facility Supplemental Requirements

1. Area Map Showing Facility Location: [x] Attached, Document ID:Doc. "A"[ ] Not Applicable [ ] Waiver Requested
2. Facility Plot Plan: [x] Attached, Document ID:Doc. "B"[ ] Not Applicable [ ] Waiver Requested
3. Process Flow Diagram(s): [x] Attached, Document ID:Doc. "C"[ ] Not Applicable [ ] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [x] Attached, Document ID:Doc. "D"[ ] Not Applicable [ ] Waiver Requested

Facility Comment

Emissions Unit ID_ID1130027_____

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section must be completed for each emissions unit addressed in this Application for Non-Title V Air Permit Renewal. If submitting the form in hard copy, indicate, in the space provided at the top of each page, the Emissions Unit ID of the emissions unit addressed on the page, as given in the unit's most current air operation permit.

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): See "Instroduction"	
2. Emissions Unit Status Code: A	3. Long-Term Reserve Shutdown Date: N/A
4. Control Equipment Method/Description (limit to 200 characters per device or method):	

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: 12			mmBtu/hr
2. Maximum Incineration Rate:	lb/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate: 60,000 bales/yr			
5. Requested Maximum Operating Schedule:			
	hours/day		days/week
	weeks/year	3,000	hours/year

Emissions Unit ID 113E027

Emissions Unit Supplemental Requirements

1. Fuel Analysis or Specification [ ] Attached, Document ID:_____ [x] Not Applicable[ ] Waiver Requested
2. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Not Applicable [x] Previously submitted, Date:_11/6/2007_____
3. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [x] Not Applicable[ ] Waiver Requested
4. Operation and Maintenance Plan [x] Attached, Document ID:Doc. "F" [ ] Not Applicable [ ] Waiver Requested
5. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [x] Not Applicable

Emissions Unit Comment

Introduction

Burkhead Gin is an existing cotton ginning facility located on approximately 2 acres of land on Highway 89 just North of Highway 4 in Jay, FL. Presently it is operating under DEP permit 1130027-002-AC. In November 2001, construction permit application was applied for to incorporate the changes that have been done to the facility through the years and to establish true picture of facility as it is now. It also incorporated an increase rate of production to 60,000 bales/yr and hours of operation increase to 3,000 hr/yr. DEP issued construction permit as listed above. Since it was too late in the 2001/2002 ginning season to conduct VE tests as required by construction permit, application for operating permit was postponed until this year's ginning season. VE tests were conducted by certified POC tester and facility inspected by POC engineer to verify that no additional changes have been done over and above the ones listed in construction application. Burkhead Gin in present configuration is fully capable of meeting requirements set forth in construction permit and it is the purpose of this application to obtain Operation Permit for this facility.

Process of ginning cotton consists of removing seeds, trash and motes from harvested cotton brought into the gin. Harvested cotton brought into the gin is called seed cotton; it contains seeds, trash, twigs and other trash and is usually damp. To enhance ginning process which basically removes all undesirable contents such as mentioned above, cotton is conveyed pneumatically by heated air. Heat is provided by several heaters using natural gas burners. Entire process of conveying cotton through different stages of ginning is accomplished by arrangement of push-pull air conveying systems consisting of supply and exhaust blowers/fans and a system of ductwork called blowpipes. After ginning process, cotton is called lint, or as referred to in this application lint cotton. Motes are cotton fibers of lower quality and are a byproduct of ginning. They are also collected and pressed into bales for resale.

Process of ginning for all practical purposes and for keeping filing fees economical is considered one single emissions unit. In actuality it consists of the following activities:

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Unloading (of seed cotton)
Drying and cleaning (of seed cotton)
Ginning (of seed cotton)
Cleaning of lint (cotton)
Pressing (baling) of lint (cotton)
Trash and motes removal
Trash handling
Seed handling

All the above activities are shown on attached process flow sheets.

Unloading

Unloading is done mainly by using unloading module, which is basically a building (enclosure) into which trailer loaded with cotton module is backed to. Rotating wheels with hooks chip cotton from module onto moving conveyor belt. From there seed cotton is picked up by suction blowpipe and carried to unloading separator. From unloading separator, seed cotton falls into feed controller. Feed controller is a device which controls speed of unloading of cotton to match process rate of ginning to avoid backups or overflows. Suction required to move cotton through blowpipe is provided by a suction (pull) fan. The exhaust from this fan terminates in cyclones #1 & #2. This facility also has the old system of unloading cotton, using suction pipe moved across trailer of loose cotton to be pulled into the process. This system is used infrequently.

From feed controller, seed cotton falls into a blowpipe which pneumatically conveys cotton into three streams of drying and cleaning. Cotton is pushed through this process by an air supply blower using heated air provided by air heaters #1 & #2.

Drying and Cleaning

As mentioned earlier, drying and cleaning of seed cotton is done in three streams each consisting of first step tower dryer, incline cleaner, stick and burr machine, second step tower dryer and incline cleaner. Between first step and second step of cleaning, additional conveying stream of air is provided by two additional push blowers and two air heaters, #3 & #4. Trash, burrs and sticks removed by incline cleaners and stick and burr machines are pneumatically removed by exhaust systems (fans) delivering its contents to facility main trash plenum.

Dried and clean seed cotton from all three streams falls into a distribution screw conveyor to be carried to gin stands.

Ginning

Ginning is accomplished by 4 gin stands into which seed cotton is feed by distribution conveyor. Gin stands separate seeds, motes and trash from seed cotton. From this point on, cotton is referred to as lint (cotton). Lint cotton is delivered by a pneumatic exhaust system to the next process called lint cleaning.
Trash and motes are picked up by an exhaust system terminating in cyclone #3.

Seeds fall into an enclosed screw conveyor which delivers them to seed handling system.

Lint (cotton) Cleaning and Pressing (Baling)

Lint cotton is pneumatically removed from gin stands and delivered into four streams (one from each gin stand). Each stream is equipped with super jet, lint cleaner #1 and #2. After cleaning, lint cotton is delivered into battery condenser by suction conveying system. Lint cotton is separated from exhaust air system in battery condenser and falls through a chute into a bale press, where it is pressed into bales as a finished product. Bales weigh approximately 500 lbs each. Exhaust blower providing suction exhausts into a dust house.

Motes and trash removed from lint cotton by super jet and cleaners are removed by exhaust blowers terminating in cyclones #4, #5, #6 and #7.

Fine fibers, called nits, are exhausted from lint cleaners by a separate exhaust stream terminating into cycles #9, #10, #11 & #12.

Seed Handling

Seed handling consists of seed screw conveyor picking seeds from 4 gin stands and several additional screw conveyors which deliver seeds to a seed house. From there, seeds are pneumatically blown into truck trailers for removal.

Trash and Mote System

Motes and trash removed from gin stands, are delivered to cyclone #3 as mentioned earlier. Motes and trash removed from lint cleaning process are delivered to cyclones #4, #5, #6, #7, #9, #10, #11, #12. All of these cyclones sit atop and discharge into trash and mote screw conveyor. From this conveyor, trash and motes are carried by a suction system and delivered into cyclone #8. Cyclone #8 empties into an inclined screen where trash is separated from the motes. From this screen, motes fall into a motes baler to be pressed and baled similar to lint cotton. Trash is pneumatically conveyed into facility main trash plenum.

Trash Handling

All trash produced by various activities of ginning process ends up in facility main trash plenum. From it trash is removed by a system of vacuum wheels to be emptied into a pneumatic system terminating into cyclone #25. Trash is also removed from this plenum by air streams terminating in cyclones #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23 & #24. Cyclones #13, #15, #17, #19, #21, #23 & #25 sit atop and discharge trash into enclosed screw conveyor which delivers trash into a trailer parked underneath. Cyclones #14, #16, #18, #20, #22 & #24 also sit and discharge into another screw conveyor which delivers trash into a trailer parked underneath.

Cyclones used in this process are high efficiency type developed by Texas A & M University. Sizes are listed on attached list of cyclones.

PM Emissions are calculated using emission factors listed in table published in AP 42 as attached.

Facility is to be limited to 60,000 bales of lint cotton / year and 3,000 hr/yr. Limits are established facility from becoming a major source, by limiting emissions to less than 100 TPY,

Maximum baling speeds is 32 bales/hr

Heaters used in process are rated as follows:

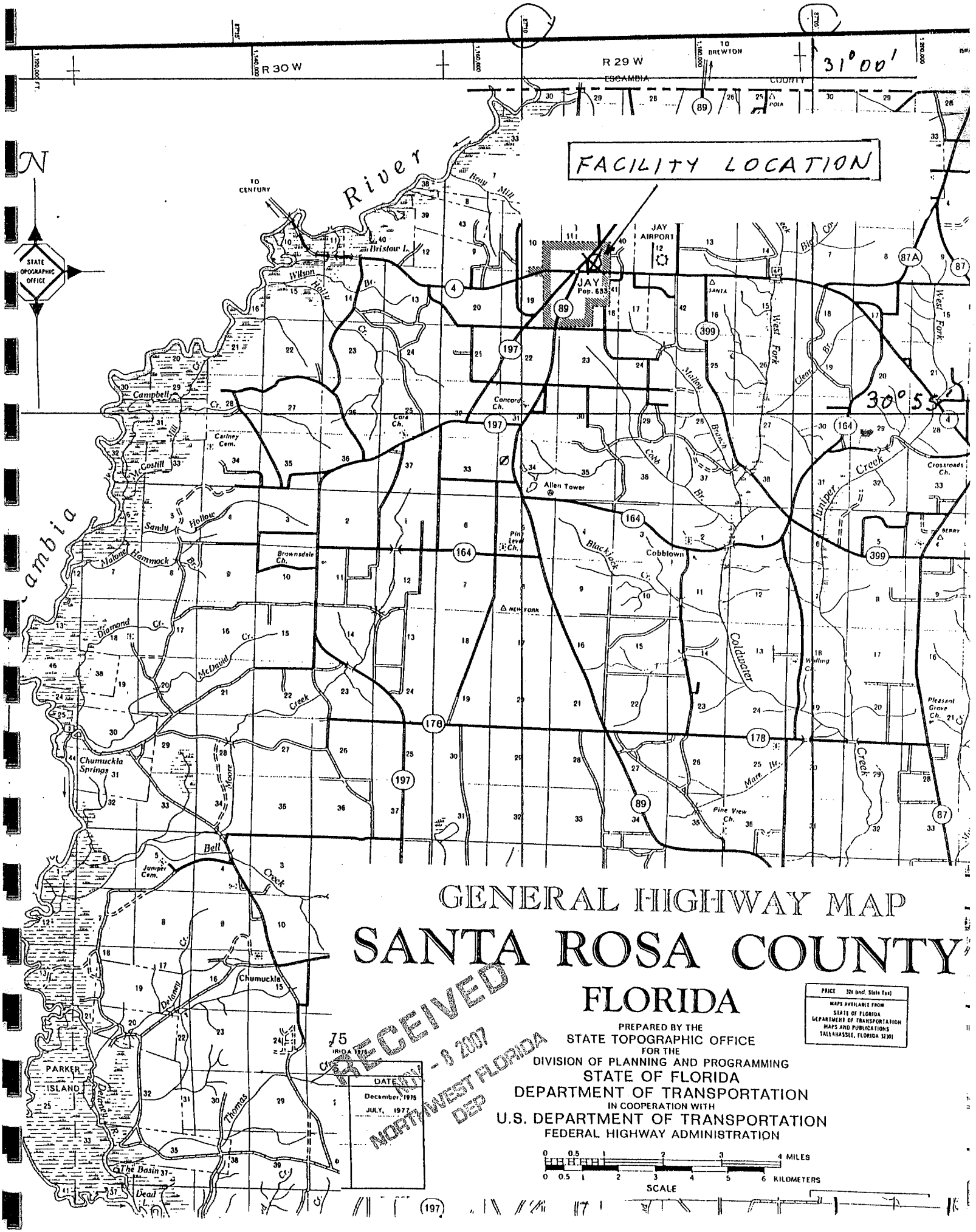
Heater #1 – 3 MM BTUH input
Heater #2 – 3 MM
Heater #3 – 3 MM

Heater #4 – 3 MM
Total - 12 MM BTUH input

Fuel used is natural gas

Emissions calculations from combustion of natural gas in these heaters shows emissions of less than 5 TPY of individual pollutant, allowing heaters to be exempt from permitting requirements according to rule 62-210(b)1.

Document "A"


FACILITY LOCATION
GENERAL HIGHWAY MAP
SANTA ROSA COUNTY
FLORIDA
PREPARED BY THE
STATE TOPOGRAPHIC OFFICE
FOR THE
DIVISION OF PLANNING AND PROGRAMMING
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION
IN COOPERATION WITH
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
PRICE 32¢ (incl. State Tax)
MAPS AVAILABLE FROM
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION
MAPS AND PUBLICATIONS
TALLAHASSEE, FLORIDA 32301
DATE
December, 1975
JULY, 1977
SCALE
MILES
KILOMETERS
RECEIVED
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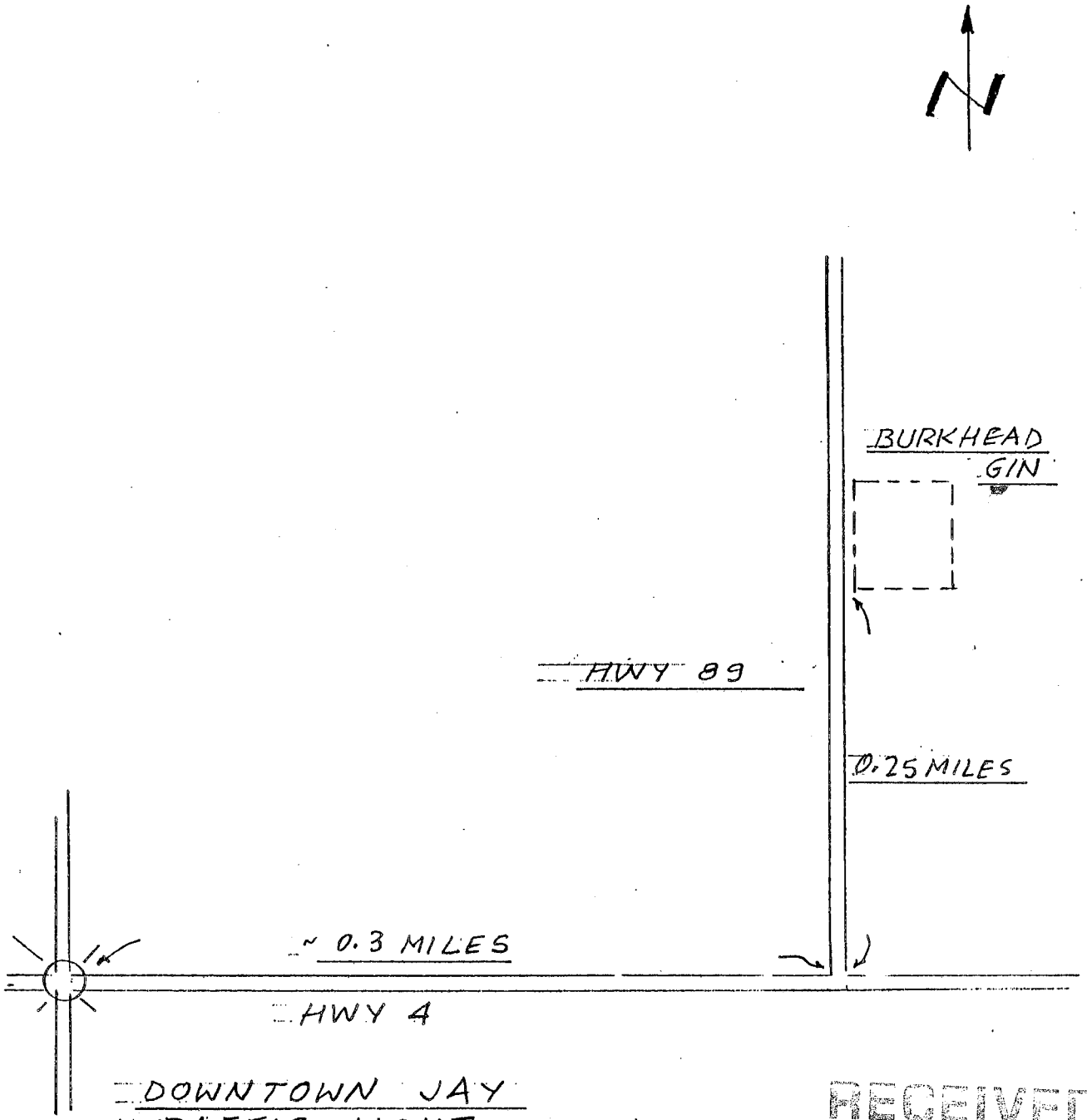
NORTHWEST FLORIDA
DEP
R 30 W
R 29 W
31° 00'
30° 55'
ESCAMBIA
COUNTY
TO BREWTON
TO CENTURY
JAY
Pop. 633
JAY AIRPORT
STATE TOPOGRAPHIC OFFICE
River
Bristow L.
Campbell
Carney Cem.
McCastill
Sandy Hollow
Malone Hammock Br.
Brownsdale Ch.
Concord Ch.
Cora Ch.
Allen Tower
Pine Level Ch.
Cobblown
Blackjack Cr.
Coldwater
Juniper Creek
Crossroads Ch.
Pleasant Grove Ch.
Pine View Ch.
Diamond Cr.
McDaid Creek
Chumuckla Springs
Moore
Bell Creek
Juniper Cem.
Chumuckla
Delaney
Thomas
PARKER ISLAND
The Basin
Dead
Mary
Walling Cr.
West Fork
Clear Br.
Big Cr.
Bray Mill
Wilson Holly Br.
Cr.
NEW YORK
SANTA
POLK
BERRY
4
87A
87
89
399
197
164
178

Document "R"



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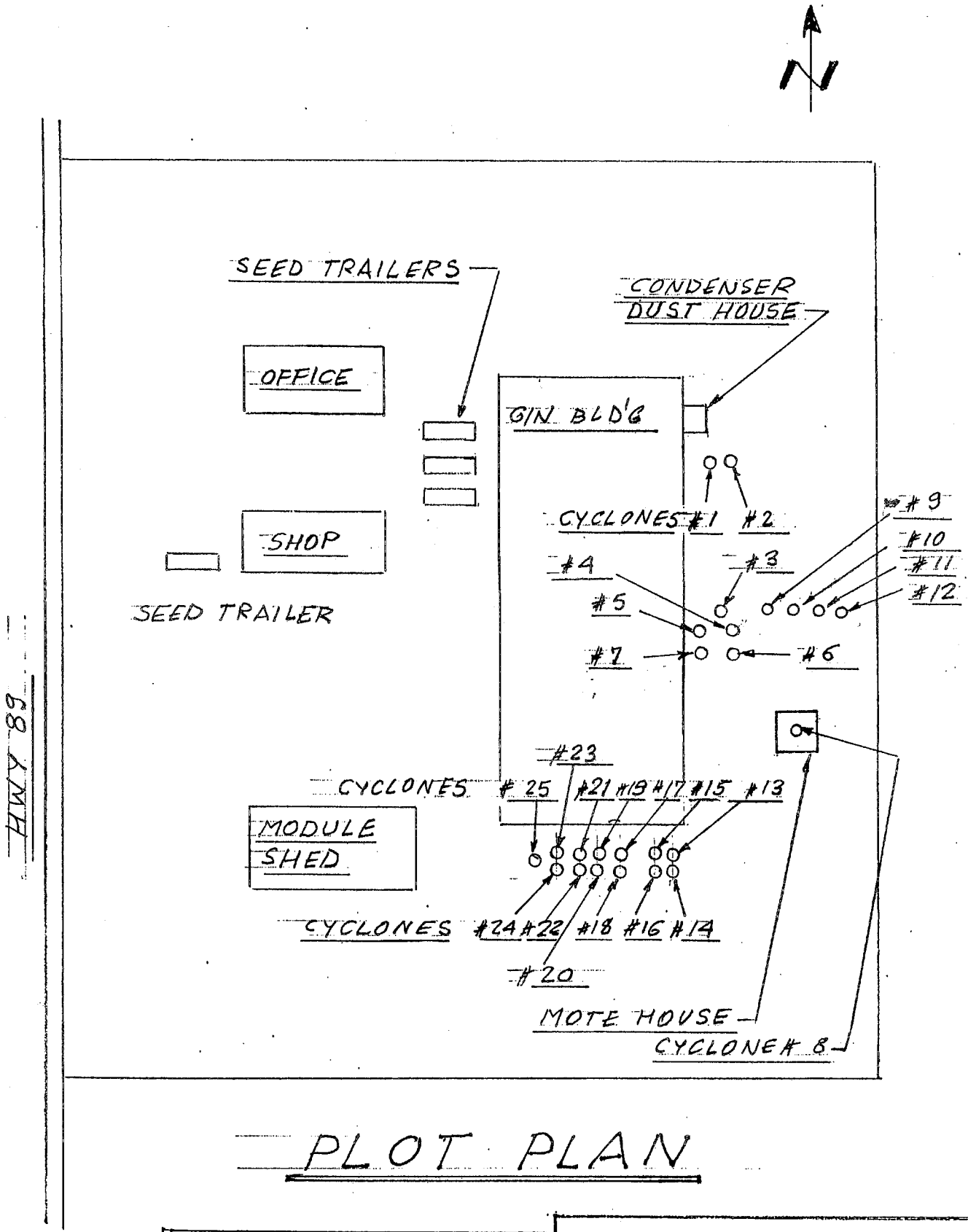
LOCATION PLAN

PENSACOLA P.O.C., INC.
109 South Second Street
Pensacola, FL 32507

BURKHEAD GIN
JAY FL.

Date	11/14/01
Scale	NONE



PLOT PLAN

REVISED 12/10/02

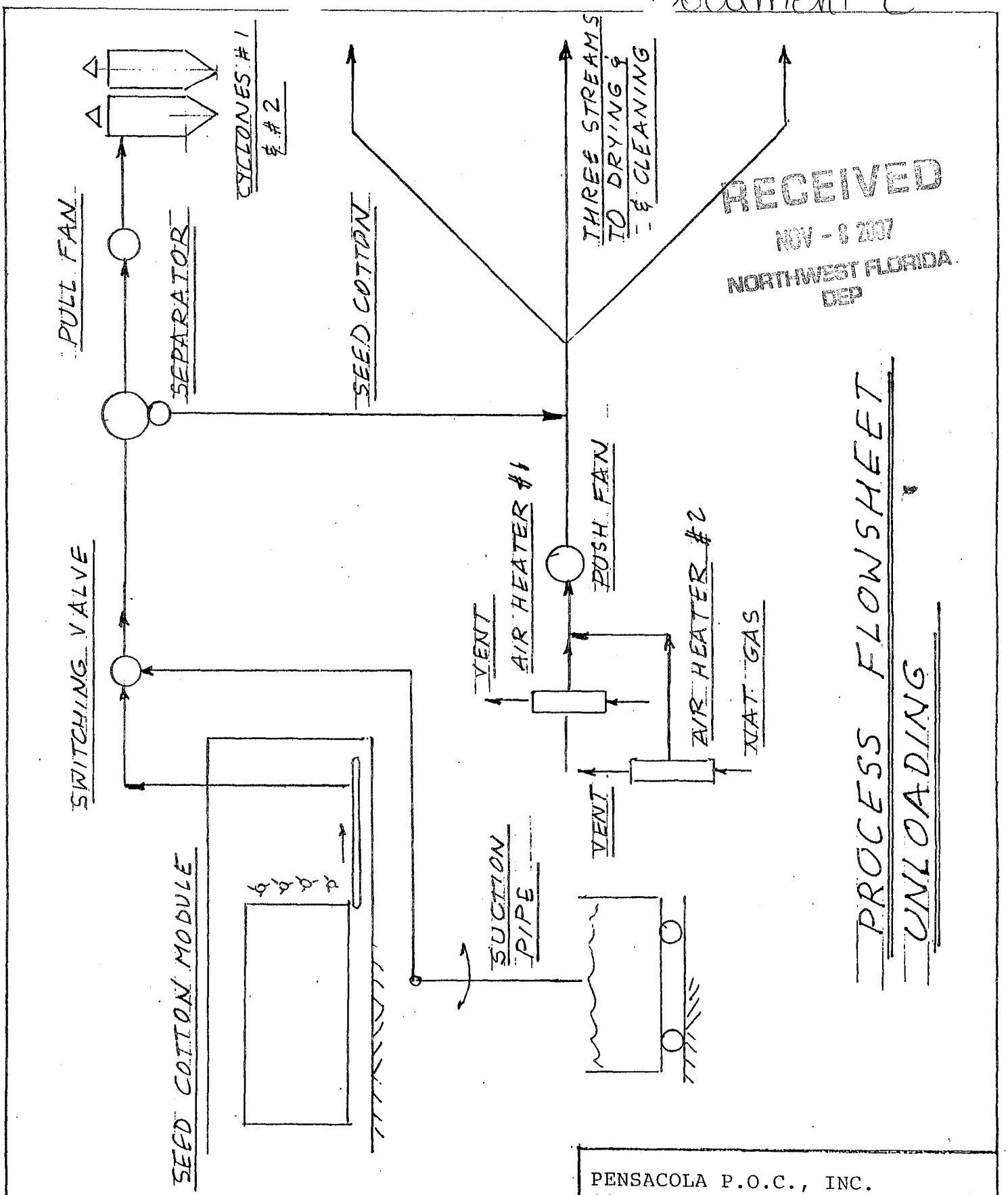
PENSACOLA P.O.C., INC.
109 South Second Street
Pensacola, FL 32507

BURKHEAD GIN
JAY FL.

Date	11/14/01
Scale	NONE

Sketch 2 of 2

Document "C"



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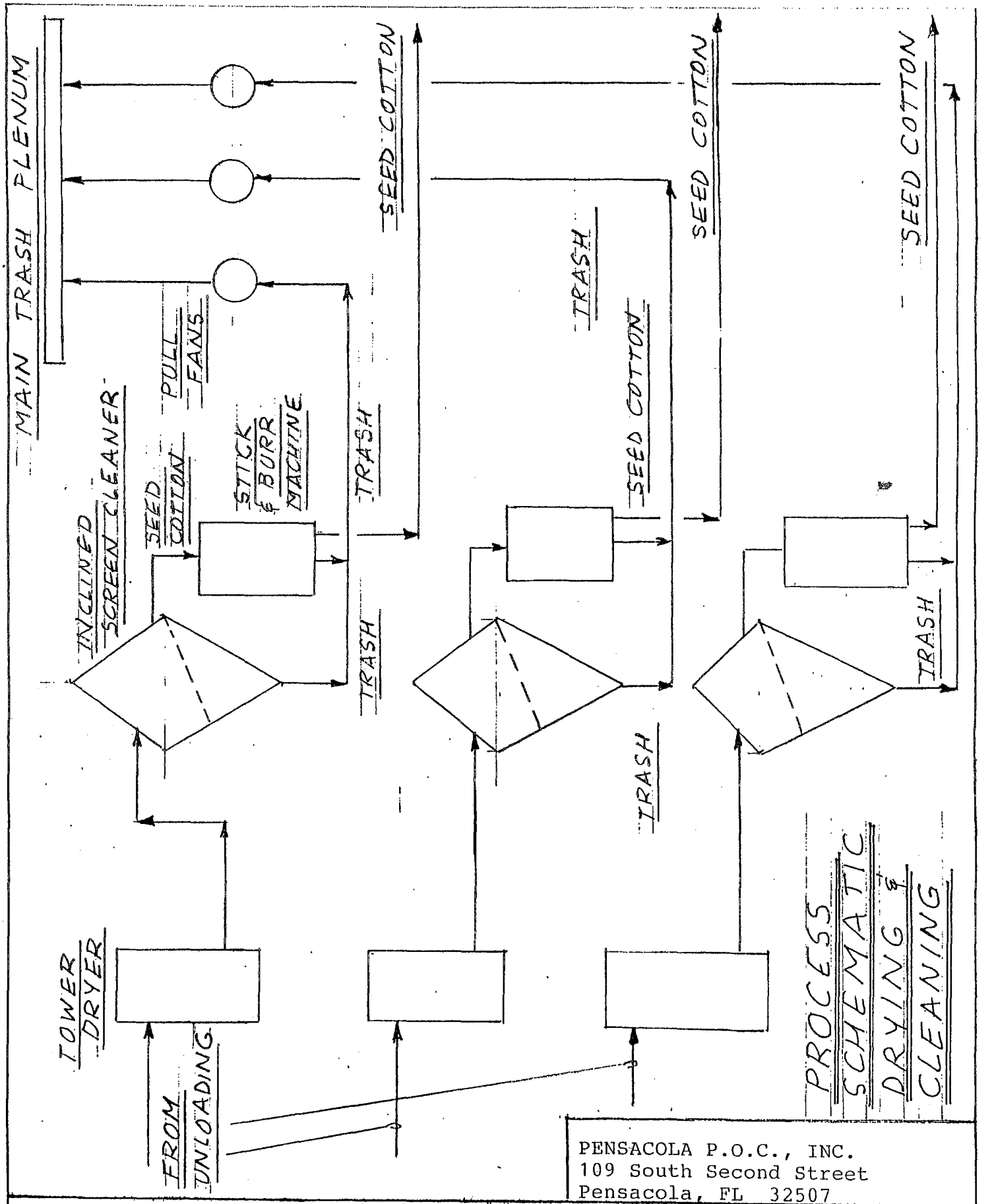
DEP

PENSACOLA P.O.C., INC.
109 South Second Street
Pensacola, FL 32507

BURKHEAD GIN
JAY FL.

Date	11/14/01
Scale	NONE

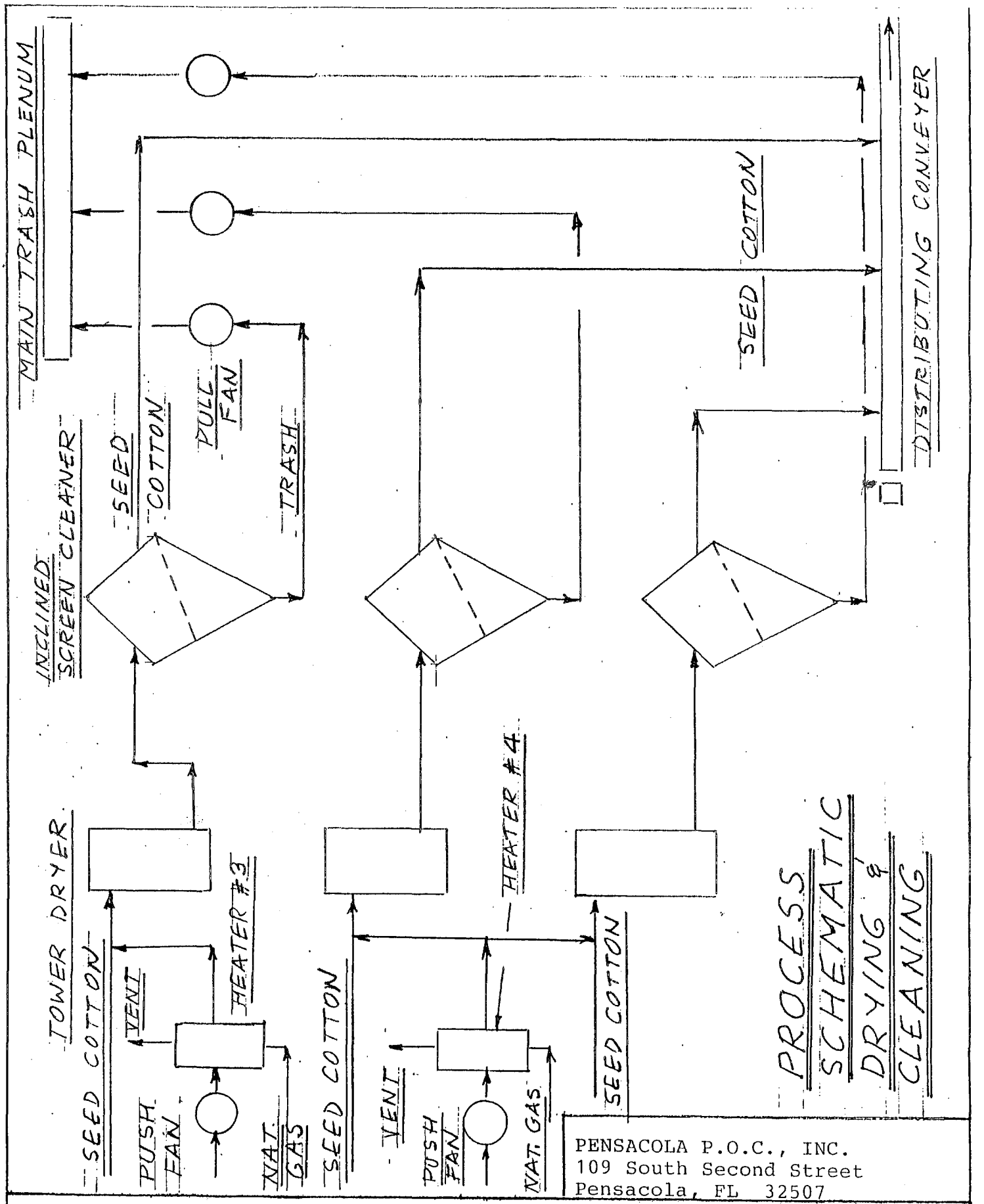


PENSACOLA P.O.C., INC.
109 South Second Street
Pensacola, FL 32507

BURKHEAD GIN
JAY FL.

Date	11/14/01
Scale	NONE

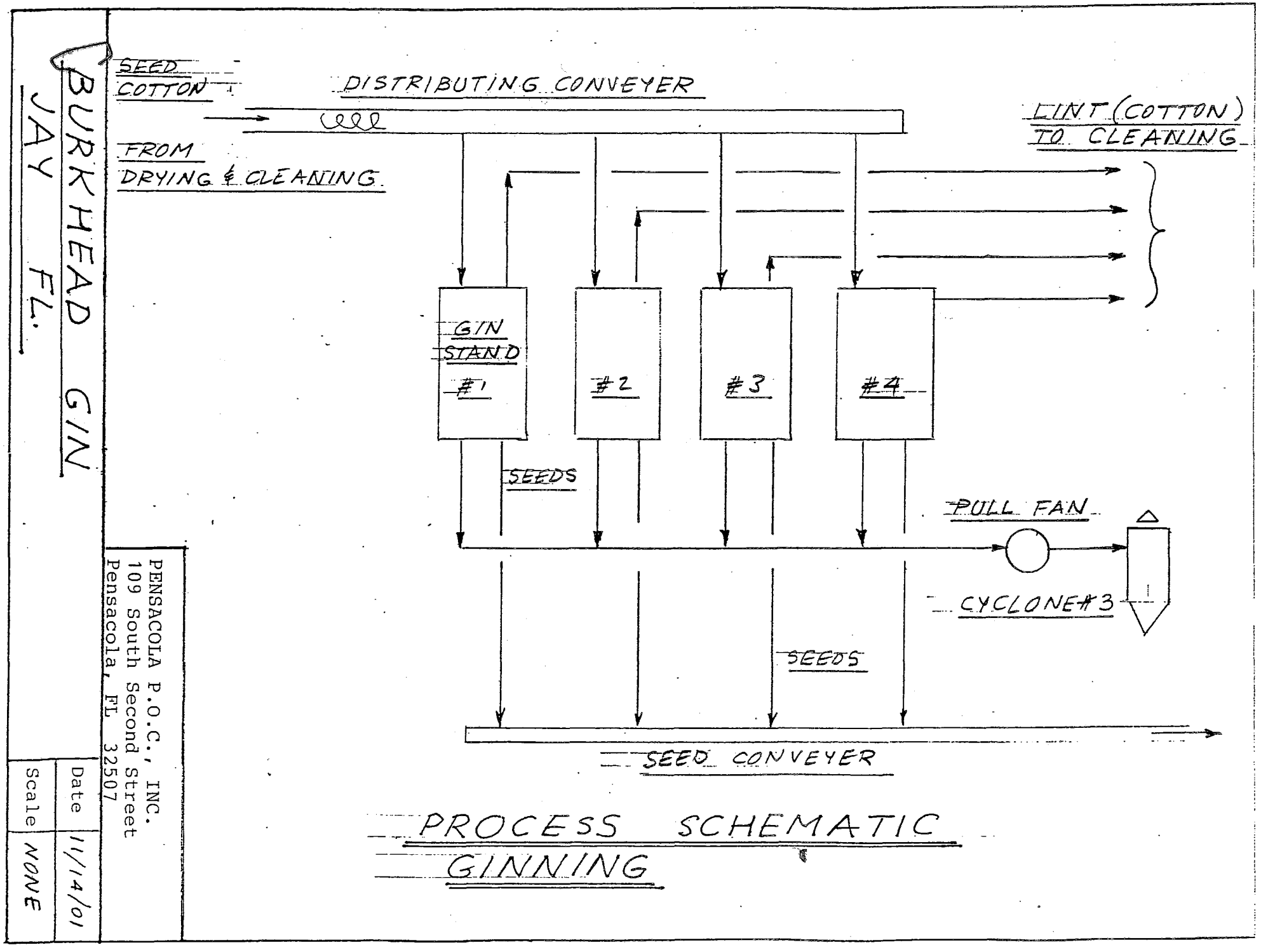
Sketch 2 of 12

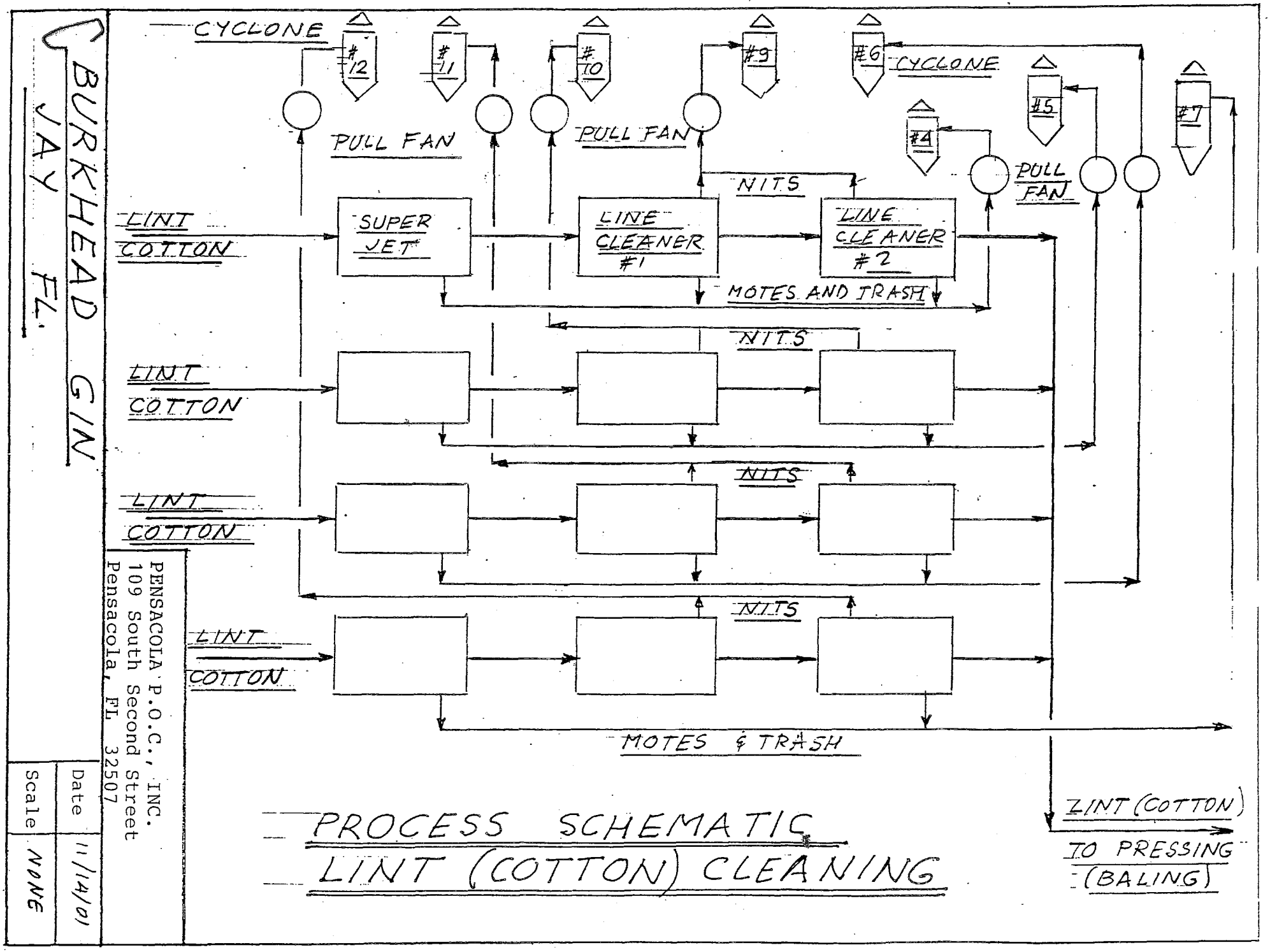


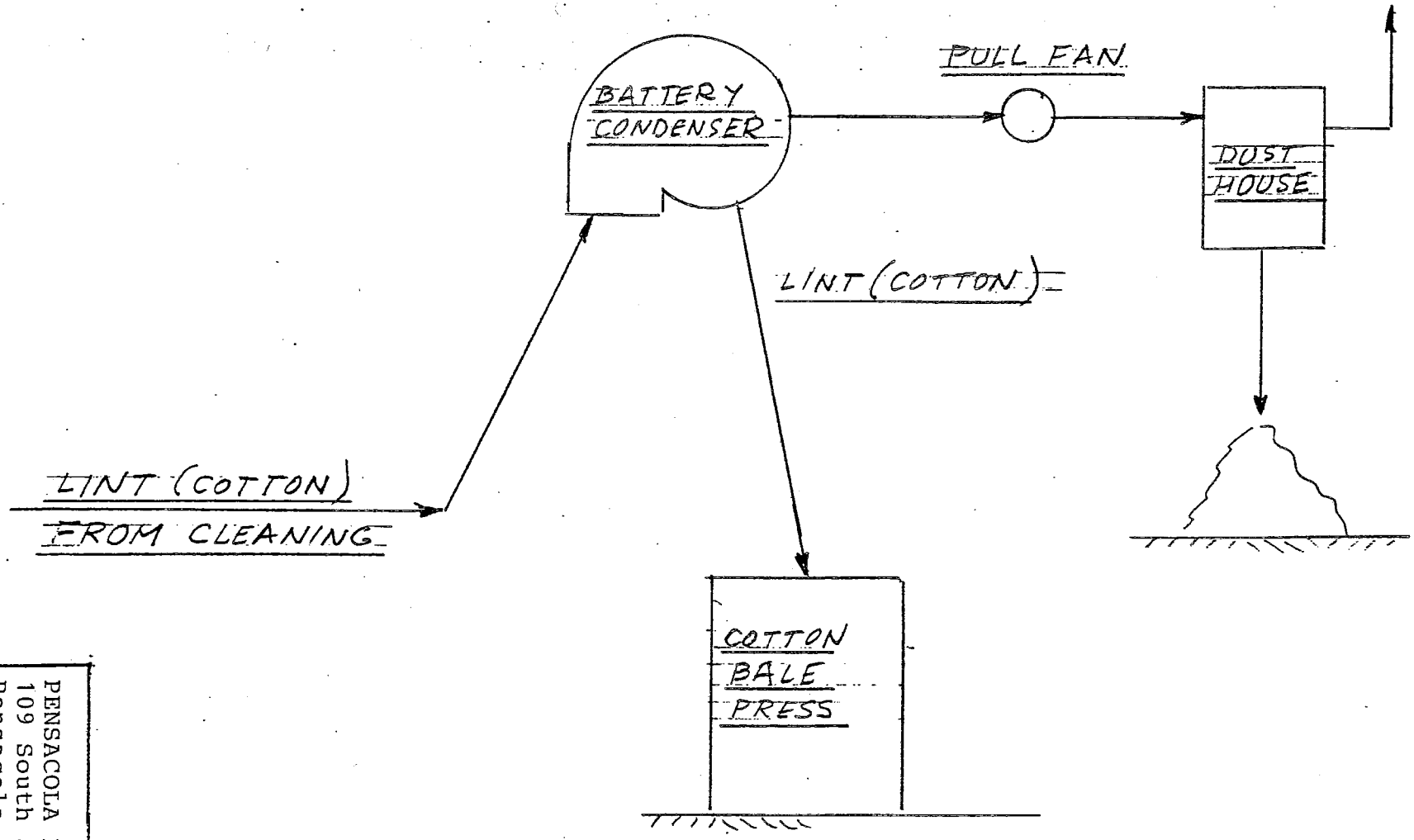
PENSACOLA P.O.C., INC.
109 South Second Street
Pensacola, FL 32507

BURKHEAD GIN
JAY FL.

Date	11/14/01
Scale	NONE


SEED COTTON
FROM DRYING & CLEANING
DISTRIBUTING CONVEYER
LINT (COTTON) TO CLEANING
GIN STAND #1
#2
#3
#4
SEEDS
PULL FAN
CYCLONE #3
SEEDS
SEED CONVEYER
PROCESS SCHEMATIC
GINNING
BURKHEAD GIN
JAY FL.
PENSACOLA P.O.C., INC.
109 South Second Street
Pensacola, FL 32507
Date
11/14/01
Scale
NONE


BURKHEAD GIN
JAY FL.
CYCLONE
#12
#11
#10
#9
#6
CYCLONE
#5
#7
#4
PULL FAN
PULL FAN
PULL FAN
NITS
LINT COTTON
SUPER JET
LINE CLEANER #1
LINE CLEANER #2
MOTES AND TRASH
NITS
LINT COTTON
NITS
LINT COTTON
NITS
LINT COTTON
MOTES & TRASH
LINT (COTTON) TO PRESSING (BALING)
PROCESS SCHEMATIC
LINT (COTTON) CLEANING
PENSACOLA P.O.C., INC.
109 South Second Street
Pensacola, FL 32507
Date 11/14/01
Scale NONE

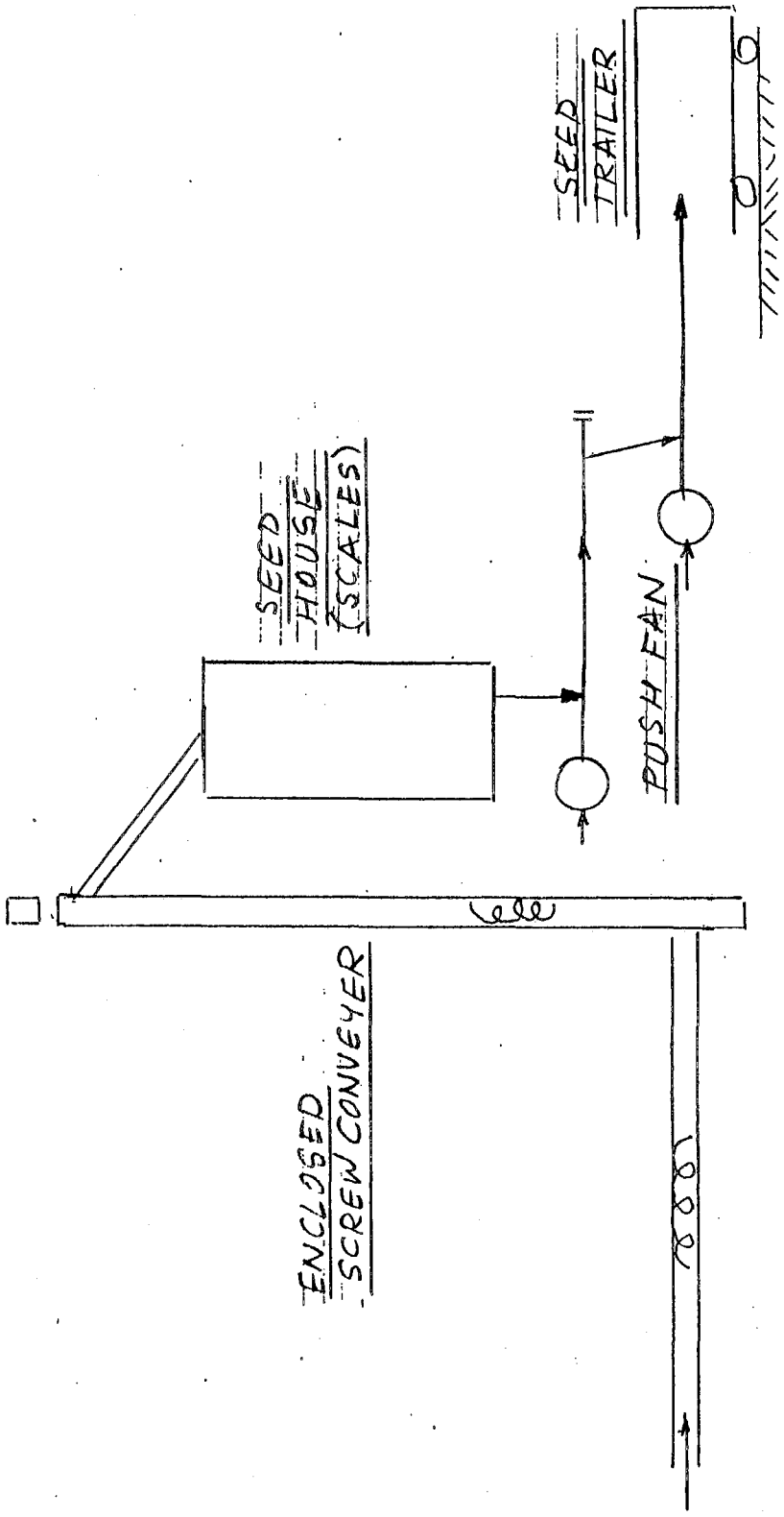


BURKHEAD GIN
JAY FL.

PENSACOLA P.O.C., INC.
109 South Second Street
Pensacola, FL 32507

Date	11/14/01
Scale	NONE

PROCESS SCHEMATIC
LINT (COTTON) PRESSING (BALING)



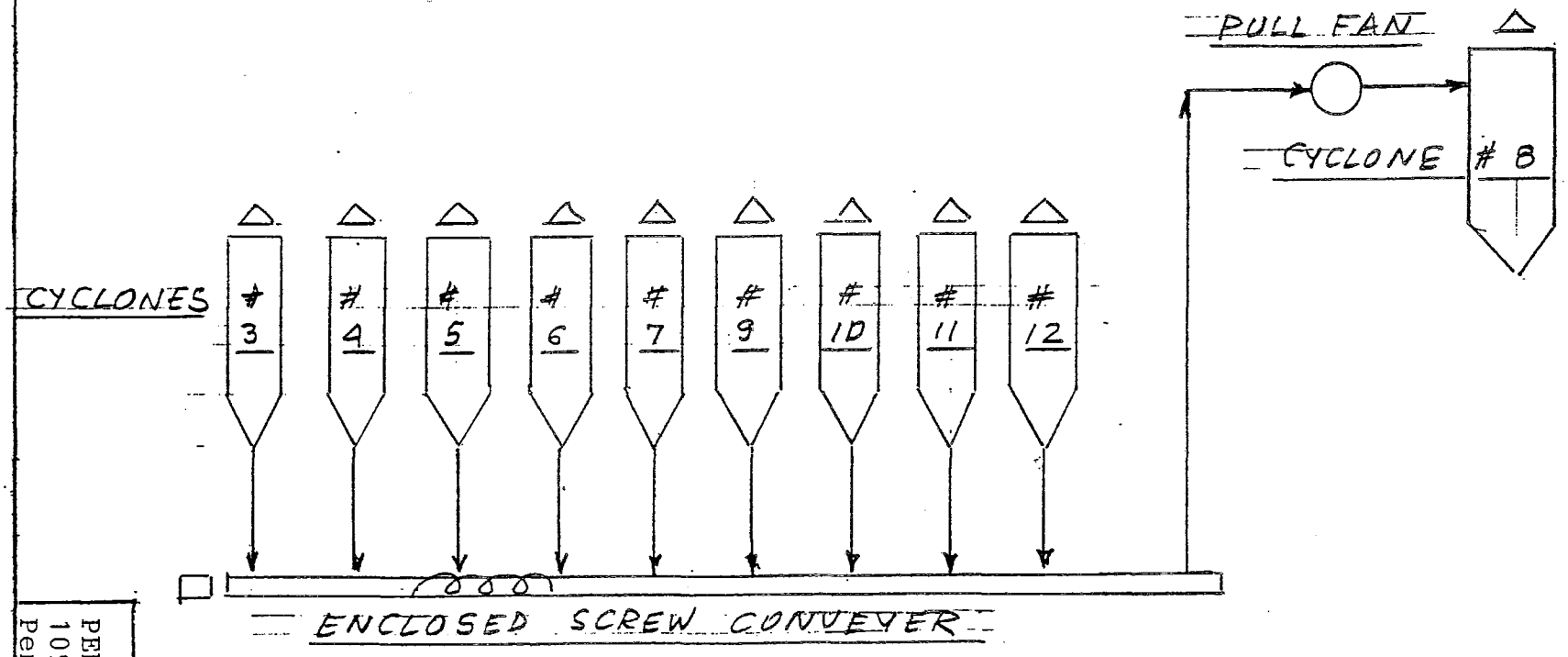
PROCESS SCHEMATIC
SEED HANDLING

PENSACOLA P.O.C., INC.
109 South Second Street
Pensacola, FL 32507

BURKHEAD GIN
JAY FL.

Date	11/14/01
Scale	NONE

Sketch 7 of 12

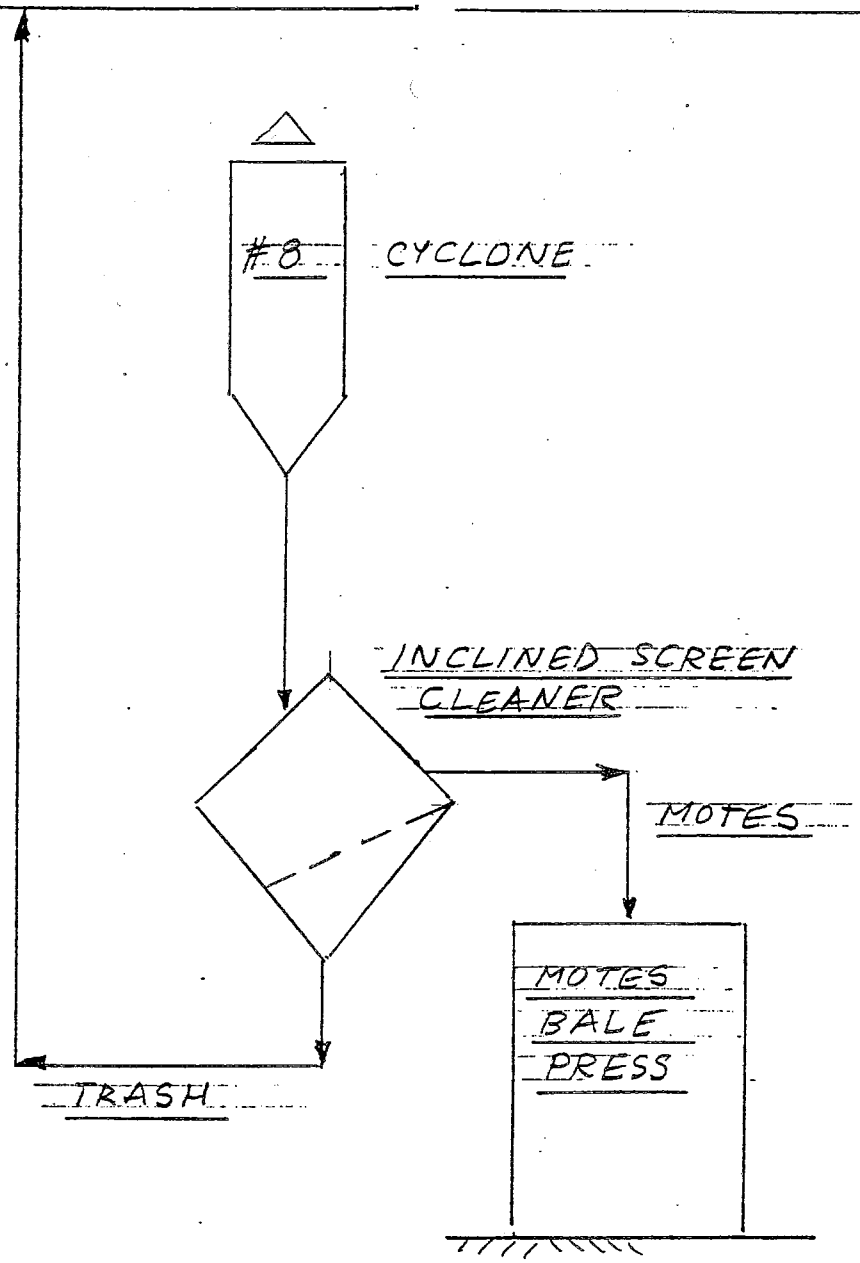


BURKHEAD GIN
JAY FL.

PENSACOLA P.O.C., INC.
109 South Second Street
Pensacola, FL 32507

Date	11/14/01
Scale	NONE

PROCESS SCHEMATIC
TRASH AND MOTES HANDLING

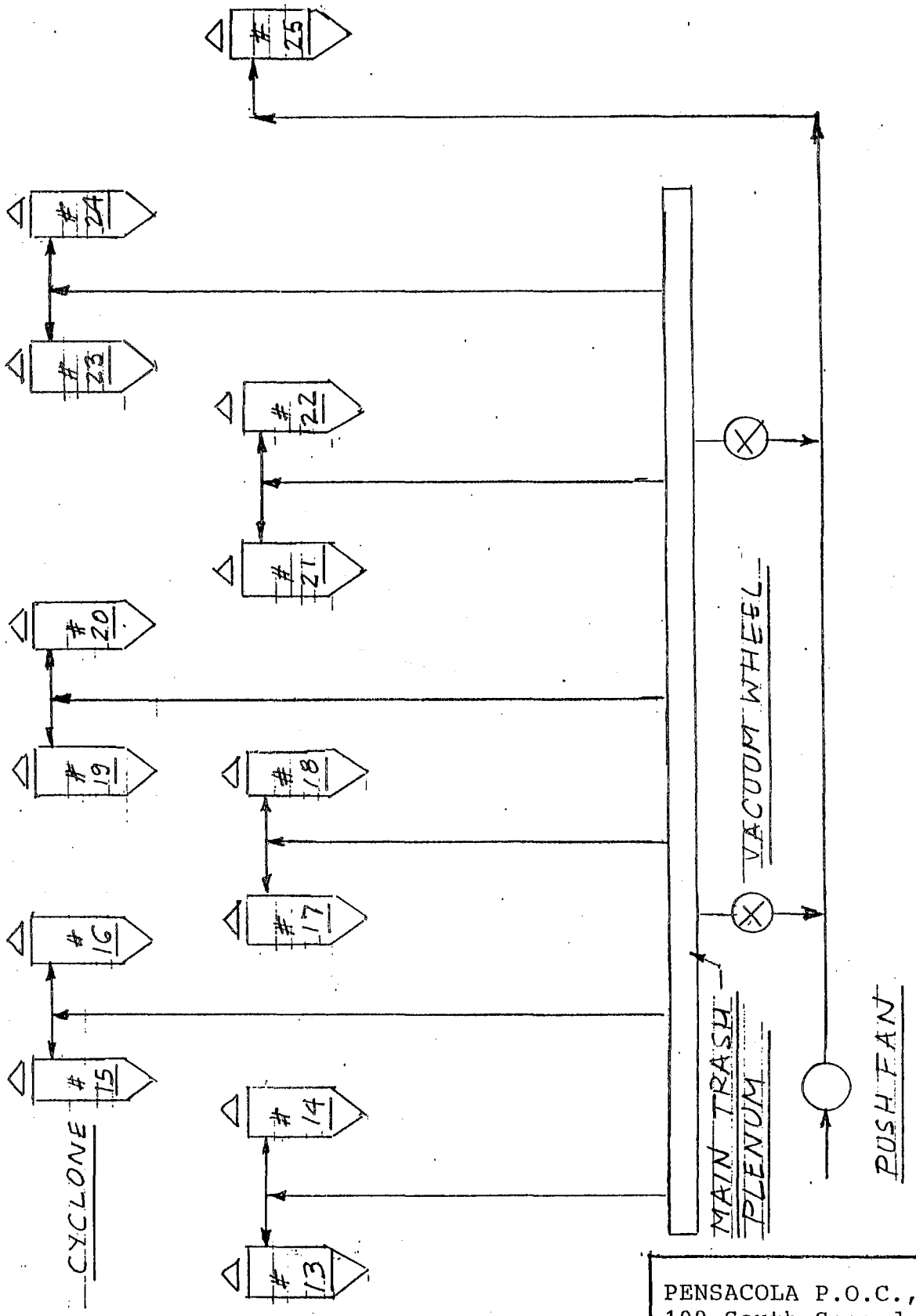


PROCESS SCHEMATIC - TRASH & MOTES

BURKHEAD GIN
JAY FL.

PENSACOLA P.O.C., INC.
109 South Second Street
Pensacola, FL 32507

Date	11/14/01
Scale	NONE

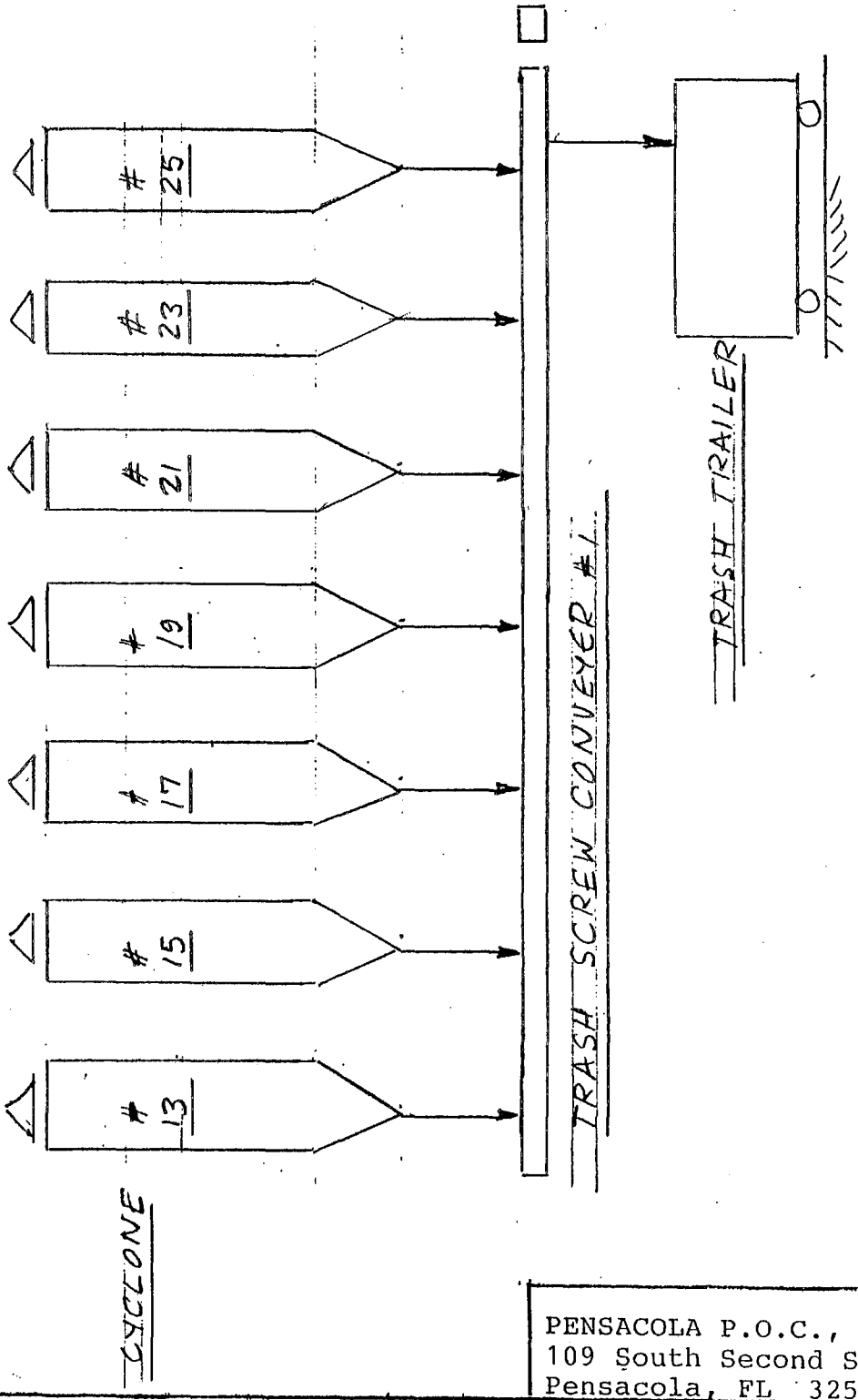


PROCESS SCHEMATIC
TRASH HANDLING

PENSACOLA P.O.C., INC.
109 South Second Street
Pensacola, FL 32507

BURKHEAD GIN
JAY FL.

Date	11/14/01
Scale	NONE

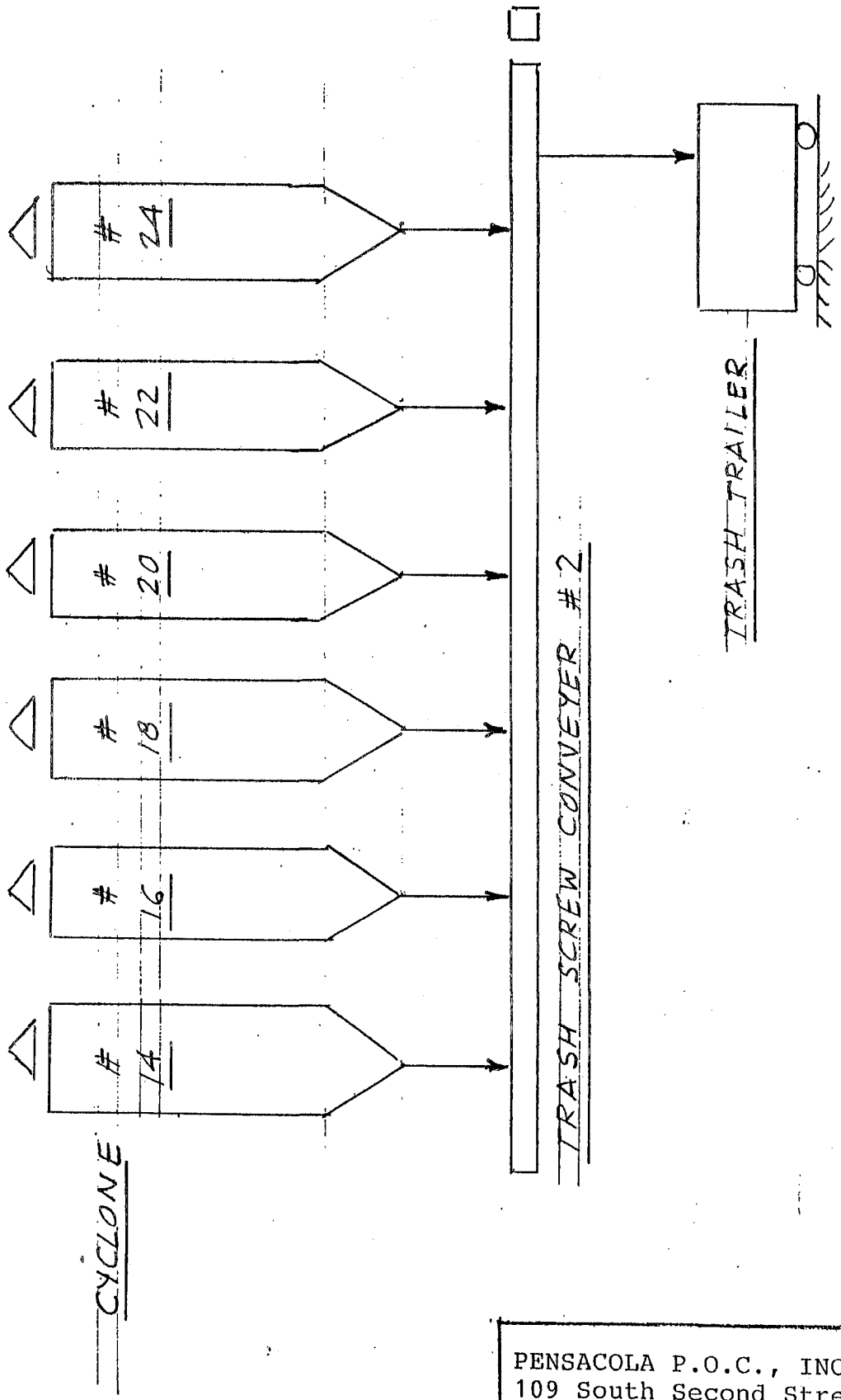


PROCESS SCHEMATIC
TRASH HANDLING

PENSACOLA P.O.C., INC.
109 South Second Street
Pensacola, FL 32507

BURKHEAD GIN
JAY FL

Date	11/14/01
Scale	NONE



PROCESS SCHEMATIC
TRASH HANDLING

PENSACOLA P.O.C., INC.
109 South Second Street
Pensacola, FL 32507

BURKHEAD GIN
JAY FL.

Date	11/14/01
Scale	NONE

Sketch 12 of 12

Document "D"

Burkhead Gin Company

Precautions to Prevent Emissions of Unconfined PM

This facility is located in a farming area and surrounded by farm land. Ginning and handling of cotton is accomplished under roof inside gin building. All cotton and byproducts such as lint, trash and seeds are handled by fully enclosed screw conveyors or blow pipes which are terminated by cyclones located in the open. All trash produced by this operation is terminated in cyclones from which it is dumped into trailers, closed on four sides (only tops are open). All seeds produced by this process are handled by fully enclosed screw conveyors and blow pipes to be delivered inside enclosed trailers.

In general, cotton ginning is accompanied by a certain amount of fugitive emissions in spite of the latest improvements and technologies associated with ginning process. By maintaining the equipment, watching the process, and removal of debris and trash from facility on a regular basis will help keep fugitive emissions to a minimum. Important aspect regarding fugitive emissions is the fact that these emissions are bio-degradable and are a good fertilizer for surrounding farms.

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Document "F"

Burkhead Gin Company

Operation and Maintenance Plan

Prior to the ginning season, facility is started and gone over thoroughly to identify and correct any problems.

During ginning season, weekly check of cyclones and blowpipes for integrity and proper operation will be conducted. Any problems will be corrected as they are found.

Permitting Application - Permit Detail and Log Permit

ARMS Facility

POINT | AIRS ID 1130027 | STATUS A | OFFICE NWD | NW: PENSACOLA

SITE NAME BURKHEAD GIN | COUNTY SANTA ROSA

OWNER/COMPANY BURKHEAD GIN

Project

AIR Permit # - - | Project # 004 | CRA Reference # 302152

Permit Office NWD (DISTRICT) | Agency Action Pending

Project Name BURKHEAD GIN | Desc Burkhead Gin Renewal

Type/Sub/Des AO / 2B | Minor Source - Other Sample $1000 | Logged 11/14/2007

Received 11/08/2007 | Issued | Expires | OGC

Fee 1000.00 | Fee Recd 1000.00 | Dele | Override NONE

Related Party

Role APPLICANT | Begin 11/14/2007 | End

Name BURKHEAD, BUDDY Z. | Company BURKHEAD GIN

Address P O BOX 69, 225 N MAGNOLIA ST

City JAY | State FL | Zip 32565 - | Country

Phone 850-675-4636 | Fax 850-675-4402

Processors

Processor PRUSA_R | Y | Active 11/14/2007 | Inactive | Events

Florida Department of Environmental Protection

Northwest District Office
160 Governmental Center, Suite 308
Pensacola, Florida 32502-5794

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

PERMIT DATA FORM DATE: November 8, 2007

PROJECT SOURCE NAME Burkhead Tin Company

TYPE CODE Air AO SUBCODE 2B

CORRECT FEE 1,000.00

AMOUNT RECEIVED 1,000.00

AMOUNT TO BE REFUNDED

PROCESSOR PRUSA

COMMENTS:

PERMIT APPLICATION SITE NUMBER 1130027-004-AO

WAFER SITE NUMBER

ARMS SITE NUMBER

CASH RECEIVING RECEIPT NUMBER 606121

CHECK SUBMITTED BY Burkhead Tin Co., LLC

CHECK# 10050

MISC:

OGC INFO:

Cash Receiving Application - Collection Point Log Remittance

CL AREA: NWD

CRAF006A

Logged Total: $31,271.23

Collection Point Log Remittance

Remittance ID: 754816 | Type*: CP | Received Date*: 11/08/2007 | Status: RECEIVED

System Receipt: 606121 | PNR: | Check #*: 10050 | Amount*: 1,000.00

SSN/FEID:

Name*: BURKHEAD GIN CO LLC

First: | Middle: | Title: | Suffix:

Address1: P O BOX 95

Address2:

City: JAY | ST: FL | Zip: 32565

Country: | Short Comments: 1130027004 - MBC

PAYMENT(S)

Payment ID	Distribution CL Area	Object Code/Description		Payment Amount	Reference#	Appl	Fund*	Status
847608	NWD	002223	AIR OPERATE	$1,000.00	1130027004	ARM	PFTF	COMPLETE

COMMIT FREQUENTLY

$1,000.00 Payment Total