PUBLIC COMMENT REQUEST OF THE
SAN JOAQUIN VALLEY UNIFIED
AIR POLLUTION CONTROL DISTRICT
FOR THE PROPOSED ISSUANCE OF AN
EMISSION REDUCTION CREDIT CERTIFICATE

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District solicits public comment on the proposed issuance of emission reduction credit certificates to Producers Cotton Oil Company for the shutdown of a Vegetable Oil Mill located at 2365 E. North Avenue in Fresno, California. Emission reduction credits are proposed for 21,987 pounds per year of Nitrogen Oxides, 95 pounds per year of Sulfur Oxides, 121,975 pounds per year of volatile organic compounds, 390,759 pounds per year of PM10, and 5498 pounds per year of Carbon Monoxide.

The analysis of the regulatory basis for this certificate, and of the resulting effect on ambient air quality, is available for public inspection at the District office at the address below. Written comments on this proposal must be submitted within 30 days of the publication date of this notice to:

SAN JOAQUIN VALLEY UNIFIED
AIR POLLUTION CONTROL DISTRICT
CENTRAL REGION
1999 Tuolumne St., Suite 200, Fresno, CA 93271

DAVID L. CROW EXECUTIVE OFFICER/APCO



San Joaquin Valley Unified Air Pollution Control District

June 8, 1993

Mr. Matt Haber New Source Section U.S. Environmental Protection Agency 75 Hawthorne Street San Francisco, CA 94105

Re: <u>Preliminary Public Notice - Emissions Reduction Credits</u>
<u>Certificate C-0026-(1 through 5)</u>

Dear Mr. Haber:

Enclosed for your review and comment is the District's revised analysis of Producer's request for emission reduction credits (ERC's) resulting from the shutdown of a Vegetable Oil Mill located at 2365 E. North Avenue in Fresno, California. The original analysis, mailed under a January 4, 1993 cover letter, has been revised in response to comments by the applicant.

The preliminary public notice for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. Should you have any questions, please contact Mr. Richard McVaigh of the Permit Services Division at (209) 497-1000.

Sincerely,

Seved Sadredin

Director of Permit Services

Enclosure

ss/RM/rm

David L. Crow

Executive Director/Air Pollution Control Officer

1999 Tuolumne Street, Suite 200 • Fresno, CA 93721 • (209) 497-1000 • FAX (209) 233-2057



San Joaquin Valley Unified Air Pollution Control District

June 8, 1993

Mr. Steven White Producers Cotton Oil Co. P.O. Box 1832 Fresno, CA 93717

Re: <u>Preliminary Public Notice - Emissions Reduction Credits</u>
<u>Certificate C-0026-(1 through 5)</u>

Dear Mr. White:

Enclosed for your review and comment is the District's revised analysis of Producer's request for emission reduction credits (ERC's) resulting from the shutdown of a Vegetable Oil Mill located at 2365 E. North Avenue in Fresno, California. The original analysis, mailed under a January 4, 1993 cover letter, has been revised in response to comments by the applicant

The preliminary public notice for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

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Executive Director/Air Pollution Control Officer

1999 Tuolumne Street, Suite 200 • Fresno. CA 93721 • (209) 497-1000 • FAX (209) 233-2057



San Joaquin Valley Unified Air Pollution Control District

June 8, 1993

Mr. Raymond Menebroker Stationary Source Division California Air Resources Board P.O. Box 2815 Sacramento, CA 95815

Re: <u>Preliminary Public Notice - Emissions Reduction Credits</u>
<u>Certificate C-0026-(1 through 5)</u>

Dear Mr. Menebroker:

Enclosed for your review and comment is the District's revised analysis of Producer's request for emission reduction credits (ERC's) resulting from the shutdown of a Vegetable Oil Mill located at 2365 E. North Avenue in Fresno, California. The original analysis, mailed under a January 4, 1993 cover letter, has been revised in response to comments by the applicant.

The preliminary public notice for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. Should you have any questions, please contact Mr. Richard McVaigh of the Permit Services Division at (209) 497-1000.

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SS/RM/rm

David L. Crow

Executive Director/Air Pollution Control Officer

1999 Tuolumne Street, Suite 200 • Fresno, CA 93721 • (209) 497-1000 • FAX (209) 233-2057

Application Review

Project # 920318 Deemed Complete: October 2, 1992

Engineer: Richard McVaigh

Date: October 6, 1992

Revised June 2, 1993

Reviewed by:

Date:

Facility Name:

Producer's Cotton Oil Co.

Mailing Address: P.O. Box 1832

Fresno, CA 93717

Contact Name: Steve White

Phone:

(209) 487-7935Application: Emission Reduction Credits for Fresno Oil Mill

Section 1 _ - Proposal

Producers Cotton Oil Co. operated a vegetable oil mill in The facility cleaned, crushed, and Fresno, California. extracted vegetable oil from up to 600 tons per day of cottonseed and safflower. The facility operated year round. The emissions at the facility included PM10 from processing seed, volatile organic compounds from extraction processes, and combustion exhaust from two natural gas-fired boilers. The operation was shut down in January of 1991. The processing equipment was subsequently removed and sold.

Producers has requested that a San Joaquin Valley Unified Air Pollution Control District emission reduction certificate be issued for the actual emissions reductions that occurred due to the shutdown of the oil mill. An application was submitted to the Fresno County APCD for emission reduction credits for the shutdown on April 3, 1991.

The Unified District resumed evaluation of this application upon full merger of the Fresno Co. APCD, subject to Rule 230.1 of the Unified District.

Annual production and fuel usage data for the baseline period from the facility were supplied with the 1991 banking application. The production and fuel usage data from the original application will be used for this evaluation also. Some of the calculation procedures and emission factors were revised.

Current District Rules require that historical emissions be calculated on a quarterly basis. The quarterly

Application Review

Project # 920318 Deemed Complete: October 2, 1992

Engineer: Richard McVaigh

Date: October 6, 1992

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Reviewed by:

Date:

Facility Name:

Producer's Cotton Oil Co.

Mailing Address:

P.O. Box 1832 Fresno, CA 93717

Contact Name: Steve White

Phone:

Application:

(209) 487=7935 347 Emission Reduct Emission Reduction Credits for Fresno Oil Mill

Section 1 - Proposal

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Producers has requested that a San Joaquin Valley Unified Air District emission reduction Pollution Control certificate be issued for the actual emissions reductions that occurred due to the shutdown of the oil mill. An application was submitted to the Fresno County APCD for emission reduction credits for the shutdown on April 3, 1991.

The Unified District resumed evaluation of this application upon full merger of the Fresno Co. APCD, subject to Rule 230.1 of the Unified District.

Annual production and fuel usage data for the baseline period from the facility were supplied with the 1991 banking application. The production and fuel usage data from the original application will be used for this evaluation also. Some of the calculation procedures and emission factors were revised.

Current District Rules require that historical actual emissions be calculated on a quarterly basis. The quarterly production records for this facility are no longer available. Quarterly fuel use data will used to determine the portion of the each year's production occurring during each quarter of the year.

Section 2 - Applicable Rules

District Rule 220.1 - New and Modified Stationary Source Review Rule. (Adopted September 19, 1991)

District Rule 230.1 - Emission Reduction Credit Banking. (Adopted September 19, 1991)

Fresno County APCD Rule 409.1 - Vegetable Oil Processing Operations (Adopted March 1, 1988)

Section 3 - Project Location

Producers Cottonseed Oil Mill was located at 2365 E. North Avenue in Fresno, California.

<u>Section 4 - Process Description</u>

The plant was capable of processing up to 600 tons of seed per day. The plant operated for up to 24 hours a day year round. Equipment lists for the facility are on the attached Fresno County APCD permits.

Cottonseed Unloading and Storage (Fresno Co. APCD Permit No. 1030040101)

Cottonseed and Safflower were received at the mill by truck. Belt conveyers, screw conveyors, and elevators were used to transport the seed to four seed houses and six seed piles. The seed houses and seed piles were cooled with forced air. Two cyclone collectors were used to control particulate emissions from the unloading process.

Cottonseed Cleaning

(Fresno Co. APCD Permit No. 1030040102)

Elevators were used to transport the seed to the seed cleaning operation. Twelve seed cleaners were used to remove sticks, leaf trash, cracked seed, and underdeveloped seed. The air exhausted from the aspirators in the seed cleaners contained particulate matter. Emissions of particulate matter were controlled with twelve high-efficiency cyclone collectors.

Delinting

(Fresno Co. APCD Permit No. 1030040102)

Cottonseed was transported into the delinting room by screw conveyor. Delinting was accomplished by five first-cut linters and eight second-cut linters. The linters used gin saws and doffing brushes to remove the remaining cotton lint from the seed. Twelve beaters were used to remove fine particulate matter from the lint. Lint was pneumatically conveyed out of the delinting room to the bale presses. Delinted seeds were cleaned in two scalping shakers and screw-conveyed to the hulling and separating room. Control equipment for the delinting process is described in table I of this review.

Hulling and Separating (Fresno Co. APCD Permit No. 1030040103)

The hulling and separating machines included hullers, shaker separators, beaters, and pneumatic conveyors. The hullers were used to crack delinted cottonseed and safflower seed. The shakers separated the seed meats and hulls. The hulls were pneumatically conveyed to beaters that further separated meats and hulls. Cottonseed meats were flaked in three rolling mills. Safflower was not flaked. Emissions from the hulling and separating processes were controlled by thirteen high-efficiency 2D-2D cyclones.

Oil was removed from the meat in the expelling room. The oil was separated from the seed in screw presses called expellers. The products of the expelling room were filtered oil and seed cake. The seed cake was then granulated in the presscake room. The expeller and presscake rooms did not have significant emissions of air contaminants.

Solvent Extraction (Fresno Co. Permit No. 1030040104)

Oil was separated from the granulated presscake by solvent extraction with normal hexane in a rotary extractor called a rotocell. The mixture of oil and solvent leaving the rotocell, called miscella, contained approximately 25% oil by weight. A portion of the solvent remained in the seedcake.

The cake was conveyed to a desolventizer-toaster vessel. The cake was showered with sparge steam, which was used to volatilize the remaining solvent. A solvent condenser was used to reclaim the solvent volatized by the steam. The desolventized cake was cooled by a stream of forced air. Particulate emissions from the stream were controlled by a cyclone collector and a fabric filter baghouse.

The miscella from the extraction process was refined by centrifugation, filtration, and soapstock desolventization. The solvent and vegetable oil were separated by distillation. Solvent emissions from the distillation process were controlled by a mineral oil scrubber as required by Fresno Co. APCD Rule 409.1.

Bulk Meal Storage

(Fresno Co. APCD Permit No. 1030040105)

Cottonseed and safflower meal were loaded into bulk storage pneumatically. The emissions from the operation were controlled by fabric filter baghouses with cyclone collectors as precleaners.

Cottonseed Meal Processing and Loading (Fresno Co. APCD Permit No. 1030040106 and 1030040107)

Cottonseed meal processing operations included blending, hammermilling, pelletizing, and loading. Emissions from the operations were controlled with cyclone collectors and fabric filter baghouses.

Planting Seed and Acid Delinting (Fresno Co. APCD Permit No. 1030040108 and 1030040109)

Planting seed and acid delinting operations were not shut down. The applicant is not proposing to obtain emission reduction credits for these operations.

Boilers

(Fresno Co. APCD Permit No. 1030040110 and No. 1030040111)

Two 400 B.O.H.P. boilers were used to provide process steam to the operation. The boilers were natural gas fired.

Section 5 - Equipment Listing

The equipment lists for the facility are on the Fresno Co. APCD Permits attached to this evaluation.

<u>Section 6 - Control Equipment Evaluation</u>

The control equipment for the unloading operation included two 84" 2D2D cyclone collectors. The cyclones were approximately 70% efficient for controlling the emissions of PM10. The emissions control equipment for the delinting and pressing operations was as follows:

Table I Control Equipment

OPERATION	CONTROLS	EMISSIO	NS TSP	REFERENCE
		LB HR	GR DSCF	
Seed Cleaners	12 - 44" 2D2D cyclones	0.25 each	0.0080	1-4-77 Source test
1st Cut Linters	16 - 36" 2D2D cyclones	0.21 each	0.0069	1-4-77 Source test
2nd Cut Linters	32 - 36" 1D3D cyclones	0.67 each	0.023	1-4-77 Source test
1st Cut Beaters	4 - 30" 2D2D cyclones	0.38 each	0.021	1-4-77 Source test
2nd Cut Beaters	8 - 26" 1D3D cyclones	1.26 each	0.065	1-4-77 Source test
Bale Press Room	10 Asst. Cyclones	14.4 Total	0.072	7-11-75 Source Test

The emissions control equipment for hulling and separating room was twenty-seven 2D2D cyclones. Source tests for these units are not available. The emission factor will be used from a source test on a similar hulling and separating operation at Rancher's Cotton oil Mill in Fresno Co.

Particulate emissions from meal handling in the plant were controlled by cyclone collectors and fabric filter baghouses. No source tests were performed on these devices.

The mineral oil scrubber was tested on 3/19/87 by Ecoserve, Inc. The scrubber was found to be 99.4% efficient for the control of VOC emissions.

Section 7 - Calculations

A. Assumptions

The emissions from the unloading of cottonseed and safflower are assumed to have been equal to the emissions for the

unloading of grain at country elevators as described in section 6.4 of AP-42.

The emissions per ton of seed processed from the hulling and separating operations are assumed to have been equal to the emissions at Ranchers Cotton Oil Mill in Fresno Co.

The emissions per ton from the cooling of the seed meal will be assumed to be the same as the emissions from the cooling of soybean meal as described in section 6.4 of AP-42.

The emissions from loading the meal into bulk meal storage and processing operations and the loading of meal for shipment are assumed to be the same as the emissions from the loading of soybean meal in Section 6.4 of AP-42.

50% of the TSP from the unloading and cleaning operations, in the absence of other data, are assumed to have been PM10.

100% of the TSP from the combustion of natural gas are assumed to have been PM10.

77.7% of the TSP from the lint room is PM10 , based on the average of the four mills described in table IV of reference 1.

67.6% of the TSP from the meal handling is PM10 , based on the average of the two mills described in table IV of reference 1.

87.2% of the TSP from hulling and separating is PM10 , based on the average of the four mills described in table IV of reference 1.

The fabric filter baghouses in the facility are assumed to be 99.7% efficient for the control of PM10. This is an estimate based on the data in Figure 2 of page 115 of the 1992 AP-40.

The cyclone collectors the facility are assumed to be 70% efficient for the control of PM10. This is an estimate based on the data in Figure 12 of page 77 of the 1992 AP-40.

Some of the cyclone collector emissions could be diverted to baghouses or to the atmosphere. All emissions from cyclone collectors that were ducted to baghouses were assumed to be fabric-filtered.

Reference 1 - Curry, J.H., <u>Proceedings of the Control Technology</u> <u>for Agricultural Air Pollutants Specialty Conference</u>, APCA, Pittsburgh, 1974

The throughput of meal shall be assumed to be 47% of the throughput of whole seed. This estimate was submitted as part of an application for Kings County APCD permit No. 7803 for the J.G. Boswell Oil Mill.

The emissions from the baghouses in the meal processing area will be assumed to be negligible compared to the emissions from the cyclones because approximately 30% of the PM10 entering the cyclones is emitted and only 0.3% of the PM10 from the baghouses is emitted.

The percentage of the production during the baseline period occurring in each calendar quarter will be calculated from the percentage of the natural gas usage occurring in each calendar quarter. The seed throughput and solvent usage will be assumed to be directly proportional to the natural gas usage.

B. Emission Factors

The uncontrolled TSP emission factor from AP-42 Table 6.4-1 for the unloading of grain is 0.6 lb/ton. This factor shall be used for the seed receiving operation.

The TSP emission factors for the operations in the delinting room are given in the table below. The emission factors from the delinting room were determined from source tests performed at the facility on 1-4-77.

The total emission rate for the baling room was 14.4 lb TSP per hour according to a 7-11-75 source test of the facility. The process rate during the source test was 20.1 tons per hour. The emission factor was:

$$\frac{14.4 \ lb \ TSP/Hr.}{20.1 \ tons/Hr.} = 0.716 \ lb \ TSP/Hr.$$

There are no source test data available for the Producers hulling and separating operation. Source test data from Ranchers Cotton Oil Mill in Fresno Co. will be used for this application. The emission factor from the 8-24-76 source test was 1.47 lb TSP/Ton. Emission summary sheets for these tests are attached to this report.

The uncontrolled emission factor for the cooling of soybean meal is 1.8 lb/ton of meal processed from table 6.4-1 of AP-42. This factor shall be used for the cottonseed meal cooler.

There were no source test data available for the five cyclone collectors controlling emissions from meal that was pneumatically conveyed into the meal processing room and

pelletized. The AP-42, table 6.4-6, emission factor for soybean meal loading will be used. The AP-42 emission factor is 0.27 lb TSP/ton of meal processed. The AP-42 emission factor for pelletizing meal is 1.8 lb/ton.

factor for pelletizing meal is 1.8 lb/ton.
The TSP emission factors are summarized in table II. Emission factors for uncontrolled operations are identified as "unc.".

Table IIEmission Factors

OPERATION	CONTROLS AT POINT	EMISSIO	N FACTOR	REFERENCE
	OF EMISSION	LB HR	LB TSP TON	
Seed Cleaners	12 - 44" 2D2D cyclones	0.249 each	0.146	1-4-77 Source test
1st Cut Linters	16 - 36" 2D2D cyclones	0.207 each	0.162	1-4-77 Source test
2nd Cut Linters	32 - 36" 1D3D cyclones	0.666 each	1.04	1-4-77 Source test
1st Cut Beaters	4 - 30" 2D2D cyclones	0.380 each	0.074	1-4-77 Source test
2nd Cut Beaters	8 - 26" 1D3D cyclones	1.26 each	0.494	1-4-77 Source test
Unloading	2 2D2D cyclones	_	0.6 (unc.)	AP-42 Section 6.4
Bale Presses	10 Asst. Cyclones	14.4 total	0.72	7-11-75 Source Test
Hulling and Separating	27 cyclones	_1.47	1.47 gB	8-24-76 Source Test
Solvent Extraction	1 baghouse	Mari	1.8 (unc.)	AP-42, Table 6.4-1
Pellet cooler	2 cyclones		1.8 (unc.)	AP-42, Table 6.4-1
Meal Processing	3 cyclones	_	0.27 (unc)	AP-42, Table 6.4-1
Meal Loading	3 baghouses	_	0.27 (unc)	AP-42, Table 6.4-1

The emission rates in pounds per hour are from the source tests. (See attached source test emissions summaries.) Emission factors were calculated by dividing the emission rate in pounds per hour for each cyclone by the process rate in tons per hour and multiplying by the number of cyclones. For the seed cleaners, for example,:

$$\frac{0.249 \; lbTSP/Hr.}{20.4 \; tons/Hr.} \times 12 \; cyclones = 0.146 \; lb \; TSP/ton.$$

The VOC emissions from the solvent extraction process were calculated from the quantity of solvent used. Emission factors were not used.

Emission factors for the combustion of natural gas in industrial boilers are from table 1.4-1 of AP-42. The emission factors in lb/MMSCF are:

<u>PM10</u>	<u>sox</u>	<u>NOx</u>	<u>ço</u>	<u>voc</u>
3.0	0.6	140	35	2.8

C. Calculations

Baseline Period

The baseline period for the Historical Actual Emissions is the two years immediately preceding the submission of the complete application, or another period of at least two years in the five years prior to the submission of the complete application determined by the control officer to better represent normal source operation.

The period of two years immediately preceding the submission of the application was not used as the baseline period. The two year period from the first quarter of 1988 through the fourth quarter of 1989 better represent normal source operation. This period is the last two calendar years of full operation.

The production records for the facility were submitted to the Fresno Co. District with the application on April 4, 1991. The production records were for the last two full calendar years of operation immediately prior to the submission of the application. These annual production records are still available and will be used to determine the Historical Actual Emissions. Quarterly production rates will be estimated by multiplying the annual production rate by the fraction of the baseline natural gas usage that occurred in each quarter.

The fraction of the baseline natural gas usage occurring in each calendar quarter is calculated by dividing the quarterly natural gas usage by the baseline gas usage in the table below.

Table III
Quarterly Gas Usage

Quarter	Quarter Usage (Therms)	Baseline Usage (Therms)	Fraction of Total Usage
First 1988	439,269	3,490,870	0.126
Second 1988	543,208	3,490,870	0.156
Third 1988	284,148	3,490,870	0.081
Fourth 1988	489,541	3,490,870	0.140
First 1989	363,283	3,490,870	0.104
Second 1989	524,421	3,490,870	0.150
Third 1989	403,941	3,490,870	0.116
Fourth 1989	443,059	3,490,870	0.127

The cottonseed and safflower throughput, in tons, for the three baseline years was:

Table IV

<u>Year</u>	<u>Cotton</u>	<u>Safflower</u>	<u>Total</u>
1988 <u>1989</u> Total	108,420 103,869	42,108 53,874	150,528 157,583
10041	269 ,232 - 211,289	149,69 6 95982	4 18,768 308,1()

The quarterly oilseed throughputs were calculated in spreadsheet SS 1. The throughput of meal is 47% of the throughput of whole seed above.

The cottonseed, safflower, and total oilseed throughputs were calculated in spreadsheet SS 1 by multiplying the fraction of the baseline natural gas usage in the given quarter by the baseline oilseed throughput from table IV above.

The results of these calculations are as follows:

Table V
Quarterly Throughputs

	Average Cottonseed Throughput (tons)	Average Safflower Throughput (tons)	Average Total Throughput (tons)
1st Qtr.	24413	11038	35451
2nd Qtr.	32480	14685	47165
3rd Qtr.	20911	9454	30365
4th Qtr.	28341	12814	41154

The use of natural gas in the boilers during the baseline period was also submitted by the applicant:

Table VI
Natural Gas Consumption

<u>Quarter</u>	Average MMSCF
First	40.1
Second	53.4
Third	34.4
Fourth	46.6

The hexane usage for solvent extraction during the baseline period was submitted by the applicant. The hexane usage for each calendar quarter was determined in spreadsheet SS 2 by multiplying the hexane usage during the baseline period by the fraction of the baseline natural gas usage that occurred in the given quarter.

The quantity of hexane used by the applicant was far in excess of the 370 lb VOC/day limit in the applicant's Permit to Operate (No. 1030040104). The VOC emissions in excess of the 370 lb/day limit do not meet the definition of Actual Emission Reductions in Section II.B.3.a of District Rule 220.1 and are not creditable. The actual quarterly usages that were used to calculate the average usage for each quarter in spreadsheet SS were reduced to a maximum of 33,760 lb/qtr, which is 370 lb/day.

The results of the calculations are as follows:

Table VII
Creditable Hexane Usage

	Quarterly Average Hexane Usage (1b)	Creditable Avg. Hexane Usage (lb)
1st Qtr.	249,310 310,012	33,760
2nd Qtr.	331,691 306,760	33,760
3rd Qtr.	2)3,540 197,280	33,760
4th Qtr.	28941 268,822	33,760

Actual Emissions Reductions

Actual Emissions Reductions (AER) for the shutdown of an emissions unit, in accordance with section V.E.2 of District Rule 220.1, is calculated from the Historical Actual Emissions (HAE) as follows:

AER = HAE (for the emissions unit prior to shutdown)

The Historical Actual Emissions of PM10 from the seed processing operations were calculated for each quarter in spreadsheets SS 3, SS 4, SS 5, and SS 6 by using the following equation:

$$E = Q \times E.F. \times (1 - \frac{C.E.}{100\%}) \times \frac{\%PM10}{100\%}$$

where,

E = the PM10 emissions for the baseline period.

Q = the process throughput during the baseline period in tons.

E.F. = the emission factor in 1b PM10/ton.

C.E. = the control efficiency in percent if applicable. This factor is not used when a controlled emission factor is available.

The total Historical Actual PM10 Emissions from the processing operations for each quarter (calculated in spreadsheets SS 3, SS 4, SS 5, SS 6) is as follows:

Table VIII
Historical Actual PM10 Emissions
Processing Operations

<u>Quarter</u>	PM10 Emissions (lb/qtr)	; -
First	99,739	57485
Second	132,698	76,480
Third	-85,431	49,239
Fourth	115,78 5	66,733

The quantity of VOC creditable from the shutdown of the hexane solvent extraction operation was calculated in Table VII above.

The HAE from the combustion of natural gas in the boilers is calculated for each quarter in spreadsheet SS 7. The emissions were calculated by multiplying the quarterly natural gas usage in MMSCF by the emissions factor in lb/MMSCF. The results of the calculations are:

Table IX
Gas Combustion Emissions

	NOx (LB)	SOx (LB)	VOC (LB)	PM10 (LB)	CO (LB)
FIRST QUARTER	5,614	24	112	120	1,404
SECOND QUARTER	7,476	32	150	160	1,869
THIRD QUARTER	4,816	21	96	103	1,204
FOURTH QUARTER	6,524	28	130	140	1,631

The total Historical Actual Emissions are determined by summing the PM10 emissions from processing operations in Table VIII, the creditable VOC emissions from hexane usage from Table VII, and emissions from the combustion of natural gas in Table IX.

Table X
Historical Actual Emissions

	NOx (LB)	SOX (LB)	VOC (LB)	PM10 (LB)	CO (LB)
FIRST QUARTER	5,614	24	33,872	57,605 99,859	1,404
SECOND QUARTER	7,476	32	33,910	732,650	1,869
THIRD QUARTER	4,816	21	33,856	44,342 -85,534	1,204
FOURTH QUARTER	6,524	28	33,890	46873 1157925	1,631

The net quantity of bankable actual emission reductions is 90% of the quarterly Historical Actual Emissions:

Table XI
Bankable Actual Emissions Reductions

	NOX (LB)	SOx (LB)	VOC (LB)	PM10 (LB)	CO (LB)
FIRST QUARTER	5,053	22	30,485	51 845 897873	1,264
SECOND QUARTER	6,728	29	30,519	68,976 119,572	1,682
THIRD QUARTER	4,334	19	30,470	76,98408	1,084
FOURTH QUARTER	5,872	25	30,501	404,333	1,468

The community bank contribution is 10% of the Historical Actual Emissions. The contribution, in pounds per day, was calculated by taking 10% of the quarterly creditable Historical Actual Emissions and dividing by 91 days per quarter.

Table XII

	NOX (LB/DAY)	SOx (LB/DAY)	VOC (LB/DAY)	PM10 (LB/DAY)	CO (LB/DAY)
FIRST QUARTER	6.2	0.0	37.2	109.7 43.3	1.5
SECOND QUARTER	8.2	0.0	37.3	146.0 84.2	2.1
THIRD QUARTER	5.3	0.0	37.2	94.0 54.2	1.3
FOURTH QUARTER	7.2	0.0	37.2	127.3 73.5	1.8

Section 8 - Compliance

The conditions for banking emissions reductions occurring prior to September 19, 1991 are discussed in Section IV.A.1 of District Rule 230.1. Emissions reductions that were previously formally recognized in writing as being available for use as offsets are eligible for banking providing:

- A. The Control Officer determines that the emissions reductions comply with the definition of actual emissions reductions.
- B. The reductions are Real, Surplus, Permanent, Quantifiable, and Enforceable.
- C. The reductions have not been used for the approval of an Authority to Construct or used as offsets.

The emisison reduction credits were recognized in an evaluation dated April 10, 1991 by the Fresno Co. District.

The reductions must comply with the definition of Actual Emissions Reductions. The definition of Actual Emissions Reductions in District Rule 230.1 is "as defined in the District's New Source Review Rule". This refers to the current New Source Review Rule, which is District Rule 220.1.

In accordance with the definition of Actual Emissions Reductions in District Rule 220.1, the reductions must be:

<u>Real</u> - The emissions reductions were calculated from actual production and inventory data and recognized emission factors. The reductions are real.

<u>Surplus</u> - The shutdown of the stationary source was voluntary and not required by any law, rule, agreement, or regulation. The reductions could not be attributed to a control measure noticed for public workshop, or proposed or contained in a State Implementation Plan at the time that the shutdown occurred or at the time when the application for emission reduction credits was originally submitted. In addition, those emissions that occurred in excess of those allowed by permit conditions were not banked. The reductions are surplus.

<u>Permanent</u> - The source has been dismantled and the permit has been surrendered. The reductions are permanent.

<u>Quantifiable</u> - The reductions were calculated using the procedures described in the U.S. EPA AP-42 and by using emission factors from actual source tests. The emissions are quantifiable.

Enforceable - The stationary source has been dismantled and is no longer permitted. The reductions are enforceable.

Not used for the approval of an Authority to Construct or as offsets. The emission reduction credits for the shutdown were not used for the approval of an Authority to Construct or as offsets.

Section V.E. of District Rule 230.1 requires that applications for ERC certificates for emission reductions occurring prior to the adoption of District Rule 230.1 be submitted to the District within 180 days of the date of the adoption of the rule, which was September 19, 1991. In this case, the application for an ERC certificate had already been declared complete on 7/9/91 and was being evaluated by the Fresno Co. APCD at the time of rule adoption. A San Joaquin Valley Unified APCD ERC certificate was drafted on December 27, 1991, but was not issued. The certificate was not issued because of a dispute between the applicant and the Fresno Co. APCD over the calculation procedures used.

The \$650 application fee required by District Rule 230.1 for the ERC certificate application was paid on 7/23/92 in response to a request by the District.

Section 9 - Recommendation

I recommend, based on the analysis above, that an emission reduction credit certificate be issued for the following quantities:

	NOx (LB)	SOx (LB)	VOC (LB)	PM10 (LB)_	CO (LB)
FIRST QUARTER	5,053	22	30,485	89,873	1,264
SECOND QUARTER	6,728	29	30,519	119,572	
THIRD QUARTER	4,334	19	30,470	76,981	1,084
FOURTH QUARTER	5,872	25	30,501	104,333	1,468

Quarterly Oilseed Throughputs

SS 1

Quar	ter	Fraction of Baseline Throughput	(tons)	(tons)	(tons)	(tons)	Quarter (tons) Total
1st 2nd 3rd	'88 '88	0.126 0.156 0.081	212289 212289	95982 95982 95982	33117 17195	12094 14973 7775	24970
1st 2nd 3rd	' 89 ' 89	0.14 0.104 0.15 0.116	212289 212289 212289 212289	95982 95982 95982 95982	29721 22078 31843 24626	13438 9982 14397 11134	43158 32060 46241 35759
4th		0.127	212289	95982		12190	39150
			2	Lst Avg. 2nd Avg. 3rd Avg. 1th Avg.	24413 32480 20911 28341	11038 14685 9454 12814	35451 47166 30365 41154

SS 2 Quarterly Hexane Usages

Quarter	Fraction of Baseline Throughput	Baseline Usage Gallons	Quarterly Usage Gallons	Quarterly Usage Pounds	Creditable Usage Pounds
1st '88	0.126	591250	74498	409736	33760
2nd '88	0.156	591250	92235	507293	33760
3rd '88	0.081	591250	47891	263402	33760
4th '88	0.14	591250	82775	455263	33760
1st '89	0.104	591250	61490	338195	33760
2nd '89	0.15	591250	88688	487781	33760
3rd '89	0.116	591250	68585	377218	33760
4th '89	0.127	591250	75089	412988	33760
	,				
			1st Avg.	249310	22507
			2nd Avg.	331691	22507
			3rd Avg.	213540	22507
			4th Avg.	289417	22507

Historical Actual PM10 Emissions SS 3 FIRST QTR. AVG.

OPERATION	EMISSION FACTOR (LB TSP/TON)	≹PM10	CONTROL EFF. %	THROUGHPUT TONS	EMISSIONS (LB/QTR)
SEED CLEANERS	0.146	50	0	24413	1782
1ST LINTERS	0.162	77.7	0	24413	3073
2ND LINTERS	1.04	77.7	0	24413	19728
1ST BEATERS	0.074	77.7	0	24413	1404
2ND BEATERS	0.494	77.7	0	24413	9371
UNLOADING	0.6	50	70	35451	3191
BALE PRESSES	0.72	50	0	24413	8789
HULL & SEP.	1.470.10	87	0	35451	4533 8 3
SOLVENT EXTR.	1.8	67.6	99.7	16662	61
PELLET COOLER	1.8	67.6	70	16662	6082
MEAL PROCESSING	0.27	67.6	70	16662	912
MEAL LOADING	0.27	67.6	99.7	16662	9
TOTAL			, — — _{— —} , , , , , , , , , , , , , , , ,		99739- 5

Historical Actual PM10 Emissions SS 4 SECOND AVG.

OPERATION	EMISSION FACTOR (LB TSP/TON)	PM10	CONTROL EFF. %	THROUGHPUT TONS	EMISSIONS (LB/QTR)
SEED CLEANERS	0.146	50	0	32480	2371
1ST LINTERS	0.162	77.7	0	32480	4088
2ND LINTERS	1.04	77.7	0	32480	26246
1ST BEATERS	0.074	77.7	0	32480	1868
2ND BEATERS	0.494	77.7	0	32480	12467
UNLOADING	0.6	50	70	47166	4245
BALE PRESSES	0.72	50	0	32480	11693
HULL & SEP.	1.470.10	87	0	47166	-6 032 1 4
SOLVENT EXTR.	1.8	67.6	99.7	22168	81
PELLET COOLER	1.8	67.6	70	22168	8092
MEAL PROCESSING	0.27	67.6	70	22168	1214
MEAL LOADING	0.27	67.6	99.7	22168	12

132698 76480 TOTAL

Historical Actual PM10 Emissions SS 5 THIRD QTR AVG.

OPERATION	EMISSION FACTOR (LB TSP/TON)	%PM10	CONTROL EFF. %	THROUGHPUT TONS	EMISSIONS (LB/QTR)
SEED CLEANERS	0.146	50	0	20911	1527
1ST LINTERS	0.162	77.7	0	20911	2632
2ND LINTERS	1.04	77.7	0	20911	16898
1ST BEATERS	0.074	77.7	0	20911	1202
2ND BEATERS	0.494	77.7	0	20911	8026
UNLOADING	0.6	50	70	30365	2733
BALE PRESSES	0.72	50	0	20911	7528
HULL & SEP.	1.470.10	87	0	30365	.38834
SOLVENT EXTR.	1.8	67.6	99.7	14272	52
PELLET COOLER	1.8	67.6	70	14272	5210
MEAL PROCESSING	0.27	67.6	70	14272	782
MEAL LOADING	0.27	67.6	99.7	14272	8

Historical Actual PM10 Emissions SS 6 FOURTH QTR AVG.

OPERATION	EMISSION FACTOR (LB TSP/TON)	%PM10	CONTROL EFF. %	THROUGHPUT TONS	EMISSIONS (LB/QTR)	
SEED CLEANERS	0.146	50	0	28341	2069	-
1ST LINTERS	0.162	77.7	0	28341	3567	
2ND LINTERS	1.04	77.7	0	28341	22902	
1ST BEATERS	0.074	77.7	0	28341	1630	
2ND BEATERS	0.494	77.7	0	28341	10878	
UNLOADING	0.6	50	70	41154	3704	
BALE PRESSES	0.72	50	0	28341	10203	
HULL & SEP.	1.470,10	87	0	41154	~ 52632	3
SOLVENT EXTR.	1.8	67.6	99.7	19342	71	_
PELLET COOLER	1.8	67.6	70	19342	7061	
MEAL PROCESSING	0.27	67.6	70	19342	1059	
MEAL LOADING	0.27	67.6	99.7	19342	11	
			~~			_

46,73.3 TOTAL

SS 7

Natural Gas Emissions

QUARTER	POLLUTANT	EMISSION FACTOR (LB/MMCF)	GAS USAGE (MMSCF)	EMISSIONS (LB/QTR)
FIRST	NOx	140	40.1	5614
	VOC	2.8	40.1	112
	CO	35	40.1	1404
	PM10	3	40.1	120
	SOx	0.6	40.1	24
SECOND	NOx	140	53.4	7476
•	VOC	2.8	53.4	150
	CO	35	53.4	1869
	PM10	3	53.4	160
	SOx	0.6	53.4	32
THIRD	NOx	140	34.4	4816
	VOC	2.8	34.4	96
	CO	35	34.4	1204
	PM10	3	34.4	103
	SOx	0.6	34.4	21
FOURTH	NOx	140	46.6	6524
	VOC	2.8	46.6	131
	CO	35	46.6	1631
	PM10	3	46.6	140
	SOx	0.6	46.6	28

ISSUE DATE: 12/27/91

CERTIFICATE NO. 1030040101

12/27/91 DATE:

EMISSION REDUCTION CERTIFICATE IS HEREBY GRANTED TO:

PRODUCERS COTTON OIL



ACTUAL HISTORICAL ERC:

Pollutant: PM10

SOx

мох

VOC

Amount: 514.96

CO

0.31 40.77 10.17 351.93 (lb/day) [all qtrs]

Location :

2365 E. North, Fresno

EMISSION REDUCTION CREDIT ACHIEVED BY:

Shutdown of cottonseed oil mill and operations

Validation Signature:

Manager of Engineering Evaluation

TABLE IV

HISTORICAL EMISSIONS SUMMARY

PM EMISSIONS

PRODUCTION			PRODUCTION	EMISSION	IS	EMISSIONS
YEAR	COMMODITY		TONNAGE	#/TON		TONYR
87-88	COTTONSEED		108420	7.86		426.09
	SAFFLOWER	1	42108	2.55		53.69
					SUBTOTAL	479.78
88-89	COTTONSEED		103869	7.86		408.21
	SAFFLOWER	1	53874	2.55		68.69
				•	SUBTOTAL	476.90
89-90	COTTONSEED		56943	7.86	-	223.79
	SAFFLOWER	1	53714	2.55		68.49
				`	SUBTOTAL	292.28
		KALENCE		<u> </u>	TOTAL	1248.96
		1,571	. <u>2</u> 4244	43	AVERAGE	416.32

1 ADJUSTMENT FACTOR OF 2.0 X APPLIED TO ACTUAL TONNAGE.

HEXANE USAGE				-	_
PRODUCTION		PRODUCTION	FACTOR		HEXANE EMISSION
YR	COMMODITY	TONNAGE	CIAL/TON		(GALLONS)
87-88	COTTONSEED	108420	1.12		121430.40
	SAFFLOWER	21054	3.88		81689.52
				SUBTOTAL	203119.92
88-89	COTTONSEED	103869	1.12		116333.28
	SAFFLOWER	26940	3.88		104515.56
				SUBTOTAL	220848.84
89-90	COTTONSEED	56943	1.12		63776.16
	SAFFLOWER	26857	3.88		104205.16
				SUBTOTAL	167981.32
	- 4-1			TOTAL	591950.08
				AVERAGE	197316.69

REACTIVE ORGANIC 5.5#/GAL AVG.#/G/T 542.62 T

	1444444444		TEST RE		<u> </u>			
	SEED	:	Grain Lo	ading Per l	rrocess			
TEST	(TONS	Seed	1st Cut	2nd Cut	1Cut Lint	2Cut Lint		Bale Pre
DATE	DAY)	Cleaner	Linter	Linter	Beater	Beater	Motes	Room
5/27/75	482	0.007	0.006	0.012		0.028		0.07
6/11/75	523	:	0.008	0.022		0.032		
1/4/77	489	0.008	0.007	0.023	0.021	0.064	0.011	
3/16/77				0.030				
4/19/77	696			0.013				
4/20/77	696			0.025				
						···		
AVE. =	g/dscf	0.008	0.007	0.021	0.021	0.041	0.011	0.07
	lb/ton	0.012	0.080	0.021	0.019	0.039	0.011	0.24

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EMISSION RATE SUMMARY

, C				EM1331	ON WALE DE	DERICK I I		
-i O	PROCESS		GR/SCF	<u>scfm</u>	LB/HR	#UNITS	TOTAL LBS/HR	TOTAL SCFM
^N S∈ ໜ	ed Cleaner Cyclone:	1. 2.	0.0071 0.0062			611 15 Ton		
)1 C)		Avg.	0.0066	3830	0.22	12	2.6	45,960
15	st Cut Cyclones:	1. 2.	0.0050 0.0060		0.23	116/10		
		Avg.	0.0055	4880	0.23	20	4.6	97,600
2r	nd Cut Cyclones:	2.	0.0065* 0.012		n.c	21514		•
		Avg.	0.012	3960	0.40	40	16.0	158,400
ls	st Cut Lint Beater:	NOT	TESTED	-	-	27 15/2m	-	-
2r	nd Cut Lint Beater:	1. 2.	0.029	2200	f *		7 7	71 020
		A v g•	0.028	2280	0.55	14	7.7	31,920
Ва	ale Press Room:	1. 2.	0.069 0.074		4.8 2	3**		
		A.vg.	0.072	7 840	4.8 ~	3	14.4	23,520
	TOTALS:					89	45.3	357,400
	Process W Allowed e	t., T	/hr: <u>2</u> 0	<u>].l</u> lbs/hr:			23.0	

/ *Tested just after fire and water cleaning.
2 Large units and several small.

^{1.} Flow rates reported are 0-20% low as a result of tangential vector(see profile data).

^{2.} Grainloadings reported are possibly low, depending on the dust particle size of emissions.



EMISSION RATE SUMMARY

PROCESS		GR/SCF	SCFM	LB/HR #UNITS	TOTAL LB/HR	TOTAL SCFM
lst Cut cyclones:	l.	0.0078	3540	0.24,011 20	4.8 = 22 15 70	70,800
2nd Cut cyclones:	1.	0.0228 0.0209	3150	0.59,027 40	23.6	126,000
2nd Cut Lint Beater:	1.	0.032	2200	0.61 02 14	8.5	30,800

Process weight, T/hr: 21.8 (based on 24 hours operation)

Allowed emission rate, lb/hr: 24.2

- 1. All flow rates and particulate determinations were taken with straightening vanes located within the duct extension. Note and compare velocity profiles of this report and previous runs (Chemecology report #273, May 27-28, 1975).
- 2. Considering the purpose of the test program, i.e. "To determine the effect of reduced flow through the 2nd Cut Cyclone Separators", caution is recommended in the comparison of these results and those of May 27, 1975. At least three interpretations are possible:
 - a. The samples of May 27 were taken soon after cleaning the test cyclone. Poor replicate agreement was attributed to this on May 27.

Or

b. Lower flow may mean lower efficiency.

10

c. The higher results of this test may be due to the increased accuracy of samples taken in a laminar flow gas stream.

Without particle size data, interpreting the comparison as 'b.' is questionable. Without particle size data, it is uncertain as to what recommendations can be made for improving performance of the present system; or if the present system is even capable of meeting the desired level of performance.

1-4-7	7	
EMISSION	MATCH	CUMMARY

PROCESS	GR/SCF	SCFM LE	B/HR #UNITS	TOTAL LBS/HR	TOTAL SCFM
2nd Out Lint Beater	10638 20655	2270 l.	24 .062 8	ave. 9.9 10.1 10.2	18,160
1st Cut Lint Beater	10218 2. 0.0210	2070 0.	388 619 4 372	1.6	8,280
Seed Cleaner	1. 0.0081 2. 0.0078	9 3670 O.	.254 .01215/104 .254 .01215/104	3.05 2.93 2.99	44,040
1st Cut Linter	1. 0.0068	* 3490 0.	.203 , 0 1 16 .210	3.25 3.36 3.31	55,840
2nd Cut Linter	1. 0.0222 ,0 ⁵⁵ 2. 0.0230	3440 : 0.	.655 ,0 ³² 32 .676	21.0 21.6 21.3	110,080
Mote Cyclone	1. 0.0111 ,6 ¹¹ 2. 0.0111	2410 ' 0.	.230 oll 8. .230	1.84 1.84	19,280,
Total	÷		. 80 **	41.0	• *
Allowed	0.1			23.3	

20.7

C489 tons/day

^{**} This is not the total mumber of units in this process weight system, therefore, this is not the total lbs/hr emission in this system.

SUMMARY (SELECTED RESULTS)

C	τ	יה	;;	
	1.	**	_	•

Second Cut Linter

DEVICE:	Present Cyclone	Long Cone Collector	Fresent Cyclone w/ Skimmer	Long Cone Collecto w/ Skimmer
DATE:	3/16/77	3/16/77	3/17/77	3/17/77
PROCESS CONDITIO	MS:			
Flow, ACFM:	3480 © 70°F & 29.67 "Нg	2050 @ 50 ⁰ F & 29.67 "Hg	2010 C 70 ⁰ F & 29.96 "Hg	1050 @ 76 ⁰ F & 29.92"Hg
Flow, SCFM:	3360	2070	1970	1020
EMISSION RESULTS:	_			
time;	<u>1540 1700</u>	1100 1225	<u>1020</u> 1135	<u>1350</u> <u>1510</u>
gr/SCF:	0.032 0.027	0,012 0.011	0.015 0.010	0.0076 0.011
Lbs/hr:	0.92 0.79	0.21 0.20	0.25 0.17	0.066 0.093
SATPLING CONDITION	DIS:			
% H ₂ O:	0.9 1.0	1.0 0.9	0.9 1.1	1.0 0.9
% Isokinetic:	99.2 100.5	100.6 101.5	100.5 98.6	102.8 101.9

rile No. Producers
Cotton
April 19, 1977

FRESNO CONTY AIR POLLUTION CONTROL ISTRICT

ENGINEERING EVALUATION UNIT SUMMARY OF TEST RESULTS

HE OF FIRM: Producers C	otton O	<u>i1</u>				
CATION: Cleaning and De						
SCRIPTION OF OPERATION: Sec	ond cut	linters	s - ехре	erimenta	l cones	
ANDARD CONDITIONS:						
m TESTED: Cyclone	· · · · · · · · · · · · · · · · · · ·					
•						
	72.25					
	Rule No.	1P1	1P2	d Fmissions		Allowable Emissions
est No. April 10 1077		TLI	1172	 -	Average	
ate of Test April 19, 1977	 	6,		ļ		
aration of Test, minutes	 	64	64			
Process Weight Rate, 1bs/hr		/212	/ 215			
as Flow Bate, SCFM (DRY)		4312	4315			
tank Gos Temp., OF CO ₂ % by Vol.		88.3	88.4	<u> </u>		
					 	
h & by Vol.		 		 		 -
on % by Vol.					<u> </u>	
50 % by Vol.						
Particulate Concentration, gr/scid		.012	.013	ļ	[
articulate Weight, 1bs/hr	ļ	.44	48	ļ	.46	
Combuntion Continuainants, pr/mef		n/a	n/a			
gr/scfv articulate Concentration,		.012	.013			
as Flow Rate, SCFM (vet)		4355	4359	ļ	4357	
Isokinetic		90.5	92.4			
	\					
						
rrected emissions, 1b/	hr	}			. 27	
			0 p/ p/45	אר		
Molecular weight	28.7 (a	ir)	- Gara			,- <u></u>
ject Engineer Ma	4	Chec	ked by	Done	128c	
		(how				
		. ^ •	١.			

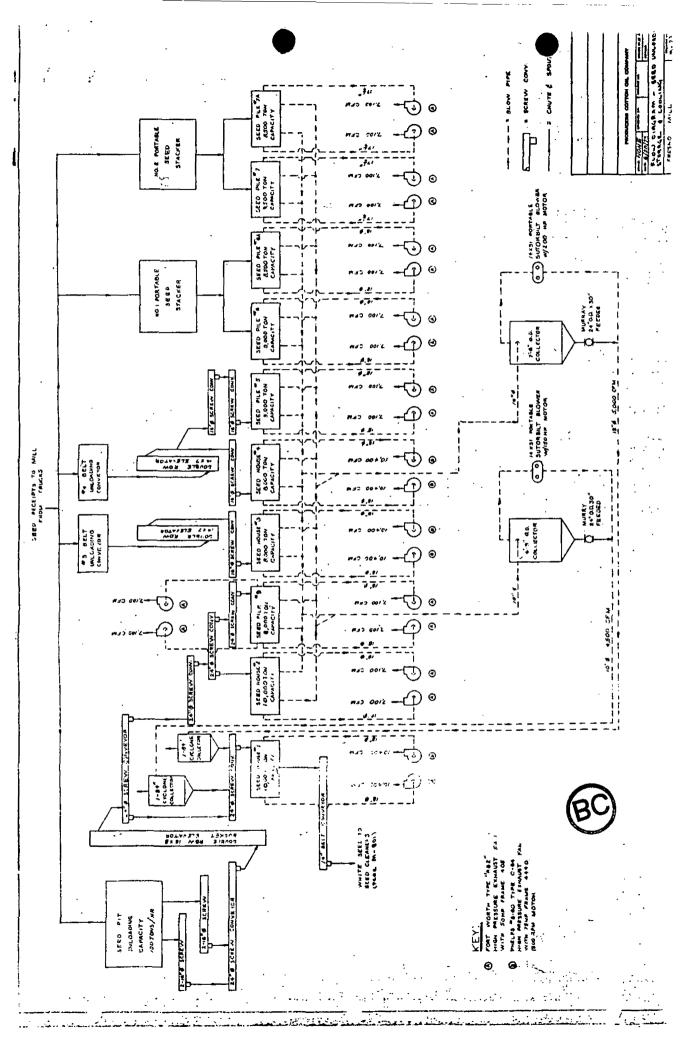
see introduction

File No. Producers Cotton April 20, 1977

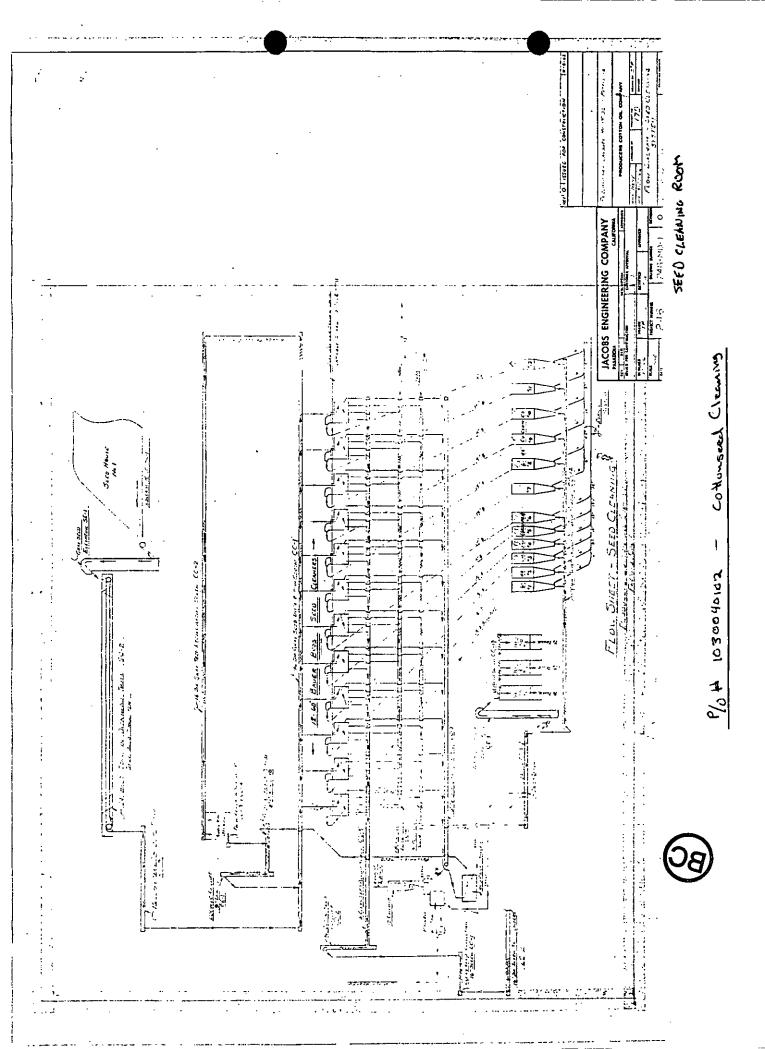
FRESNO JNTY AIR POLLUTION CONTRO ISTRICT

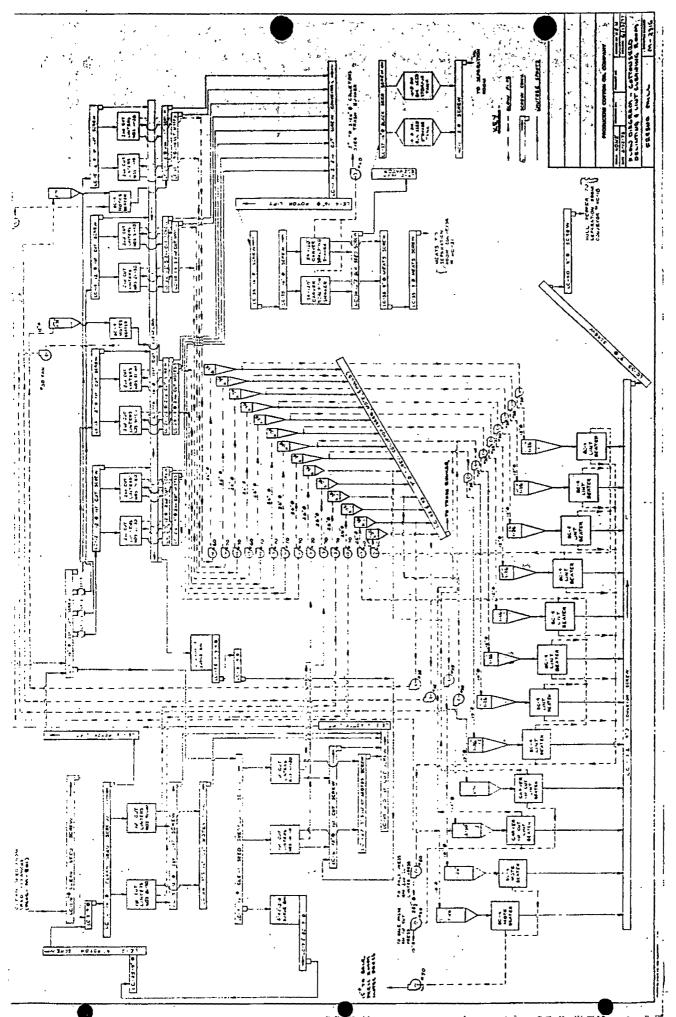
ENGINEERING EVALUATION UNIT SUMMARY OF TEST RESULTS

ME OF FIRM: Producers						
CATION: Cleaning and De	lintin	g - eas	t			
BURIPTION OF OPERATION: Exp	erimen	tal con	es - se	cond cut	linters	
ANDARD CONDITIONS:						
M TESTED: Cyclone						
					<u> </u>	······································
						
	Rule No.	071	T	ed Emissions		Allowable Faissions
ent Na.		2P1	2P2		Average	
btc of Test April 20, 1977		·	ļ. 			
nuration of Test, minutes		64	64		.	
Process Weight Pate, Ibs/hr		<u> </u>			<u> </u>	
Sac Flow Rote, SCFM (DRY)		3041	2919			
Stack Gas Temp., OF		93.1	93.8			
CO ₂ 5' by Vol.		1				
a, & by Vol.						
ca st by Val.						
150% by Vol.						
Particulate Concentration, gr/scfd		.025	.025			
Particulate Weight, 1bm/hr		.65	.63		.64	
Combustion Contaminants, pp/sef		n/a	n/a			
gr/sciw Particulate Concentration,		.025	.025			
Gas Flow Rate, SCFM (wet)		3071	2949		3010	
% Isokinetic		96.9	93	,		
		1				
		1				
orrected emissions, lb/	nr				.55	
······································	**-		12/14	19	<u></u>	
Molecular weight	28.7 (air)	,00			
tustio.		·				
111:11	11	<i>(</i> **-	cked	OBm.	skal-	2
oject Engineer)	cne	60			
a introduction	15		(6)	Į.		



P/0 # 1030040101 - Cathonseed Univerding & Storing

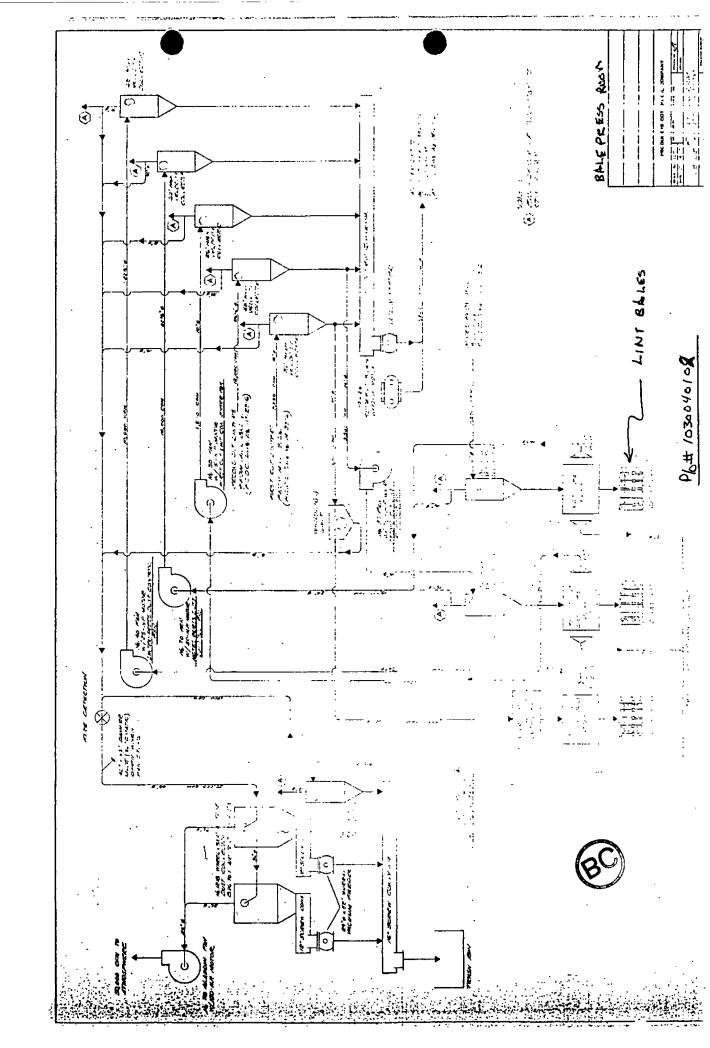




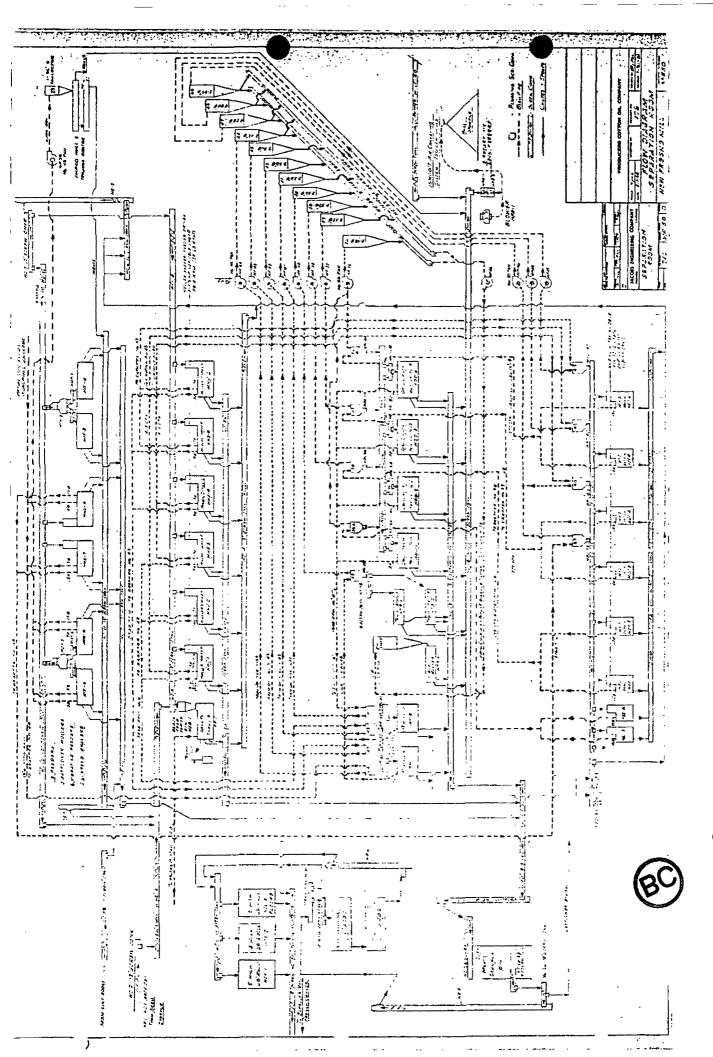
LINT ROOM

Ph # 1050040102 - Cottonseed Cleaning & Delfasting

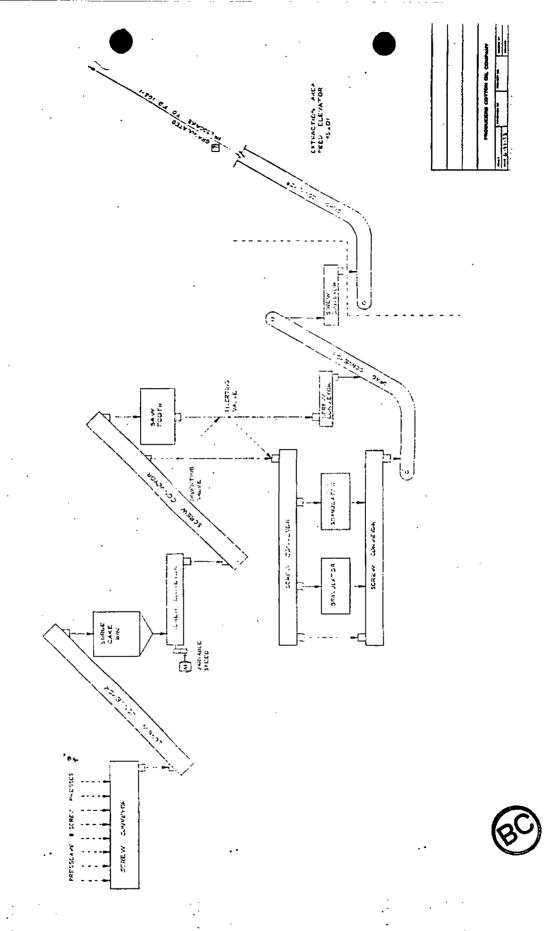




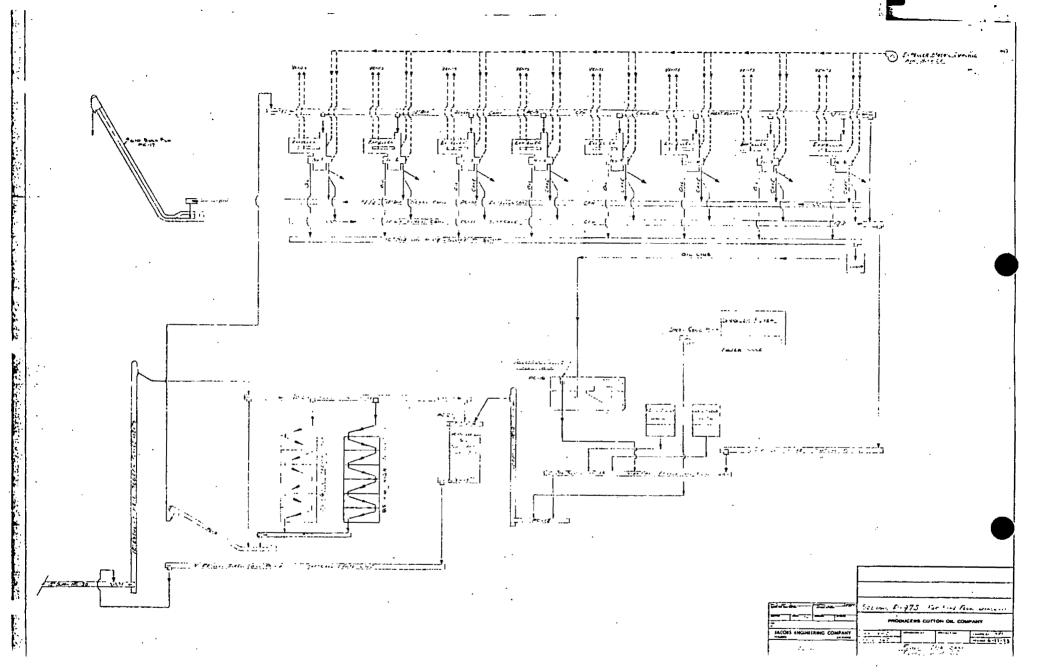
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10 # 1030040103 - COTTONSEED HULLING 3 SEFERBETING

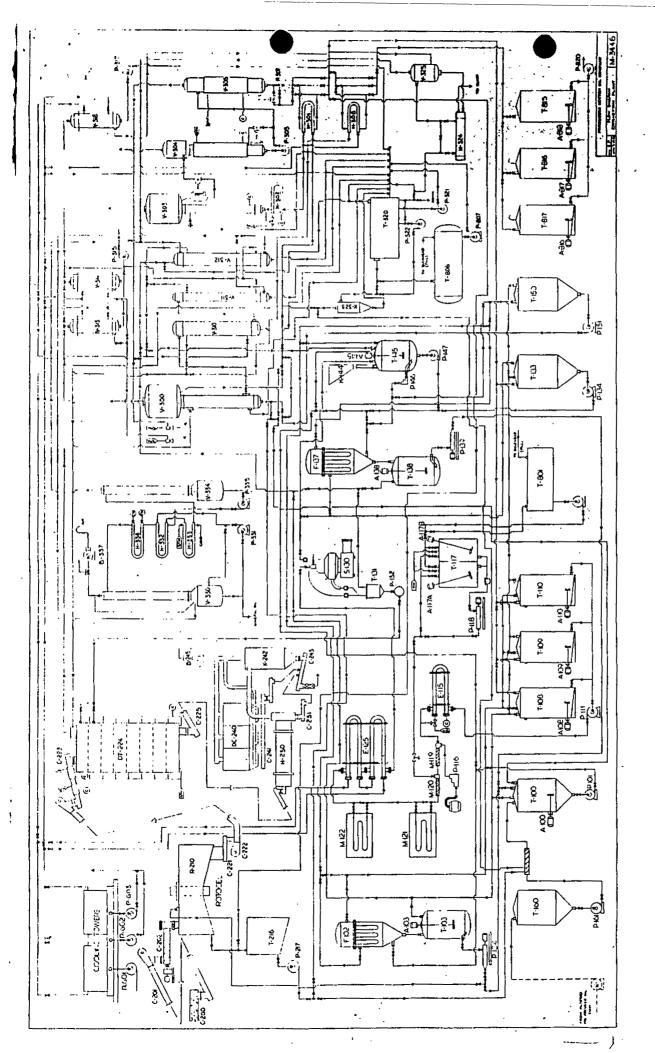


POH 1030040103 - PRESSCAKE ROOM



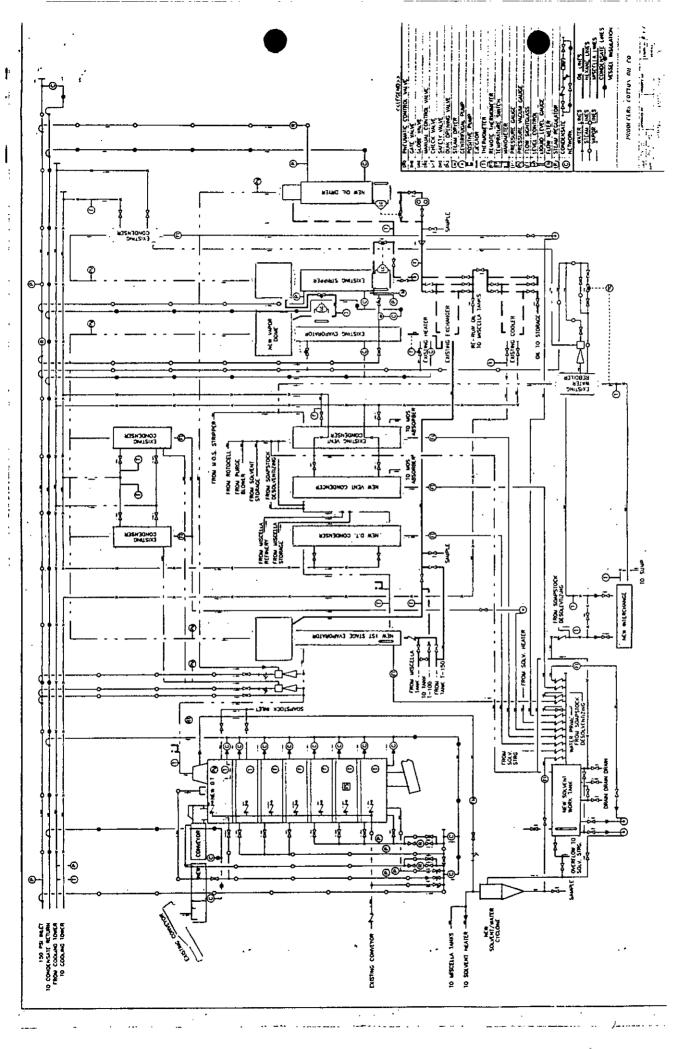


P/0 # 1030040103 - EXPELLER ROOM



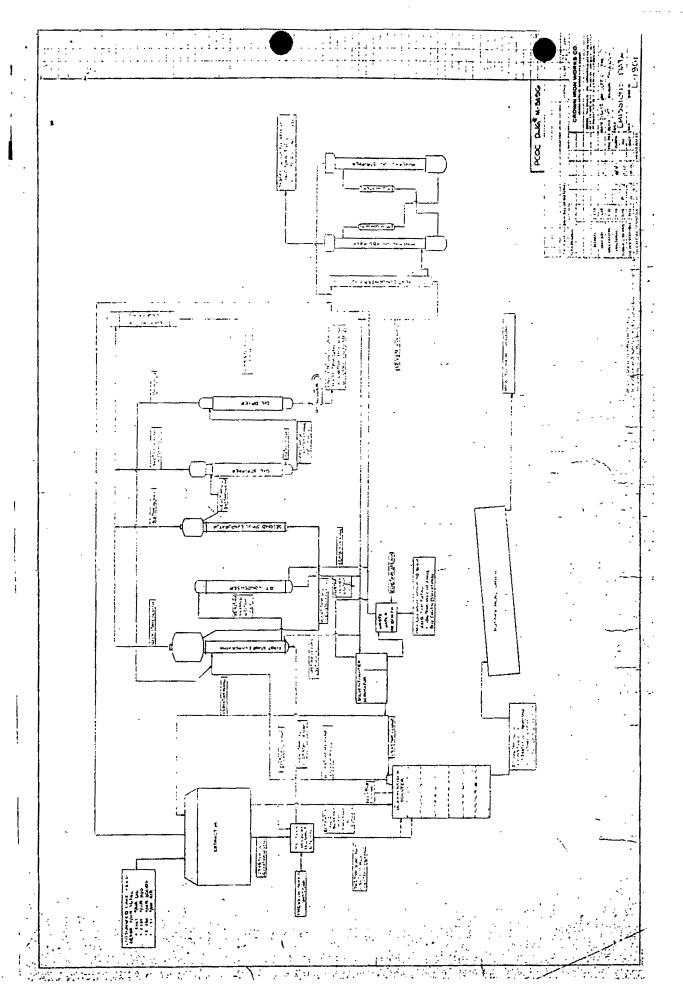
P/O # 10300 40104 - SOLVENT EXTRACTION

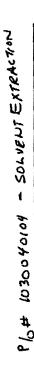




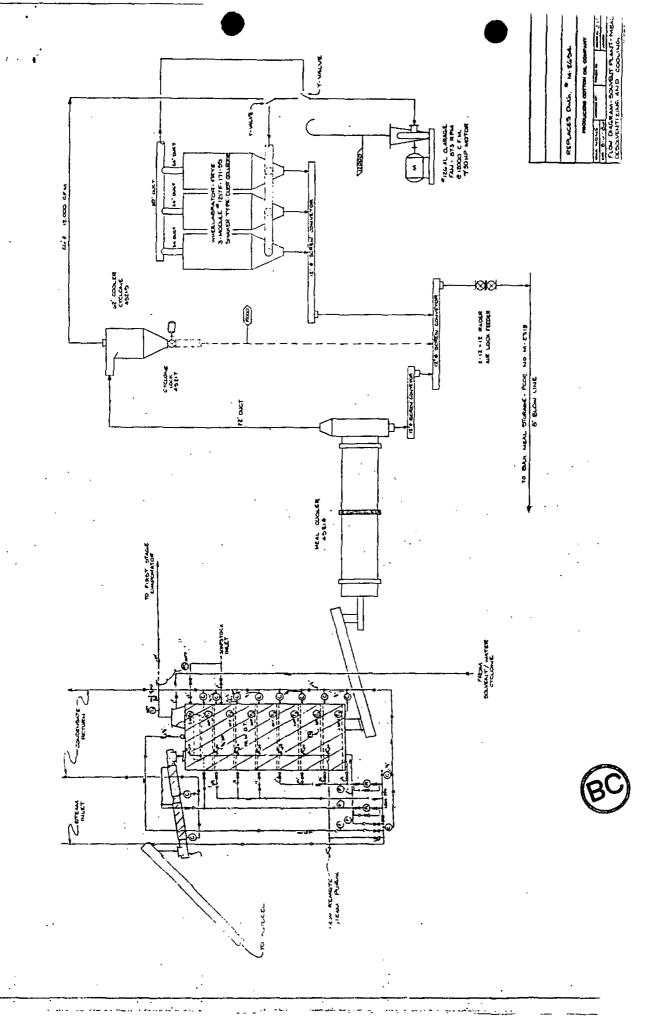




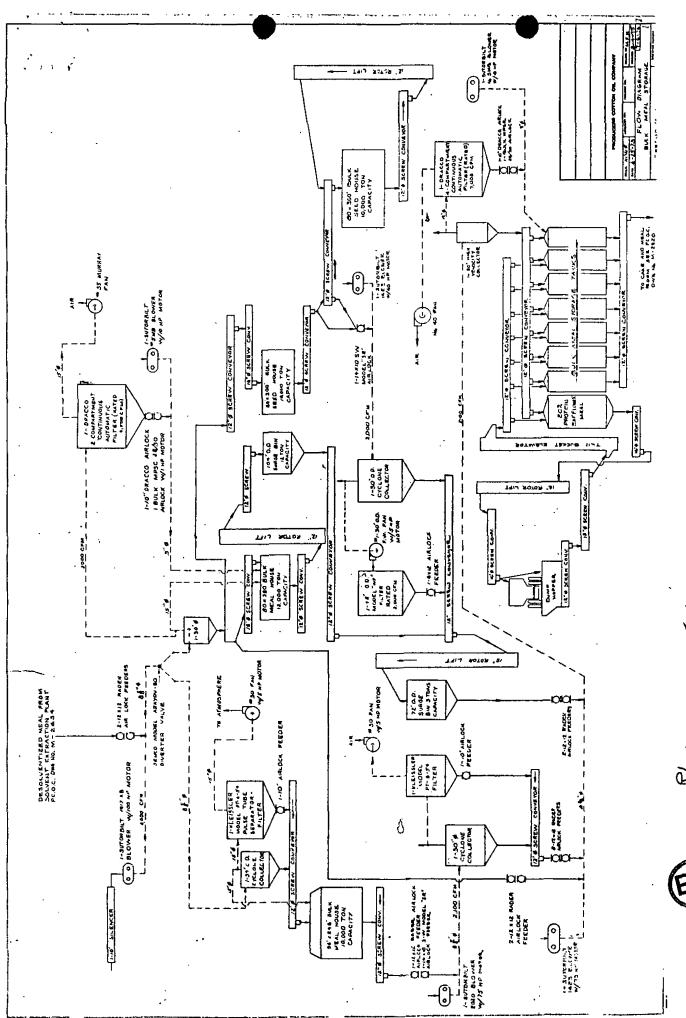






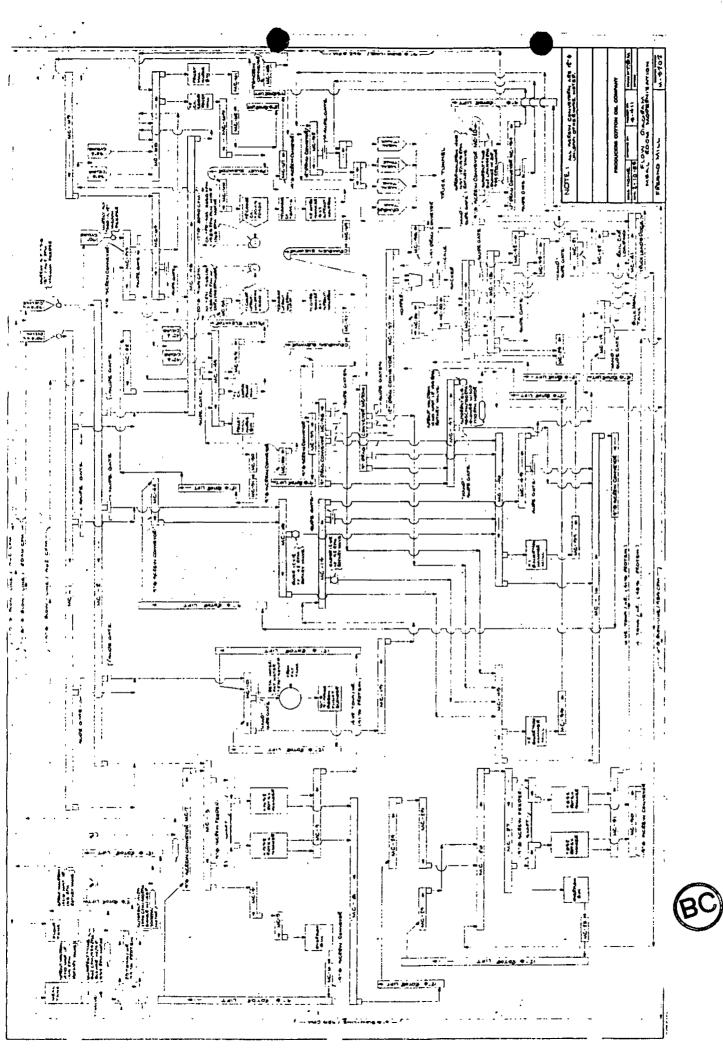


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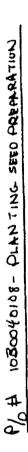
PAR 1030040105 - COTTONSEED MEAL PROCESSING



16 # 10300 +0106 - COTONSEED MENL PROCESSIAN













February 9, 1994

Steven White PRODUCERS COTTON OIL COMPANY P. O. Box 12506 Fresno, CA 93778-2506

Re: Permit # C-969-1-1

Project # 940081

Project Description: Transfer of ERC, Mill to El Dorado Gin

2365 E. North Ave, Fresno, CA 93725

Dear Mr. White:

Your application for transfer of Emission Reduction Credits from your Mill Plant in Fresno to your El Dorado Cotton Gin in Madera has been received by the Air Pollution Control District, and has been reviewed for completeness.

Based on this preliminary review, the application appears to be complete. However, during processing, the District may request additional information to clarify, correct or otherwise supplement the information on file.

Per District's estimate, the ERC required to be transferred from Fresno Mill is 6129.6 pounds PM10 and not 5297.1 pounds as shown on your application.

Thank you for your cooperation. Should you have any questions, please telephone Mr. David Warner of Permit Services at (209) 497-1100.

Sincerely,

Seyed Sadredin

Director of Permit Services

David Warner

Permit Services Manager - Central Region

TA

David L. Crow

Executive Director/Air Pollution Control Officer





September 28, 1993

Mr. Steven White Producers Cotton Oil Company P.O. Box 12506 Fresno, CA 93778-2506

Re: <u>Issuance of New Emissions Reduction Credits Certificate</u> #C-0046-2 (Old ERC Certificate # C-0026-2)

Dear Mr. White:

This letter is to notify you that Emissions Reduction Credits Certificate #C-0026-2 is being re-issued to Producers Cotton Oil Company as certificate #C-0046-2 after ERCs were partially consumed by Authority to Construct S-1354-2-0 for a new gin in Mettler Station, CA. Enclosed is the ERC certificate.

Thank you for your cooperation in this matter. Should you have any questions, please contact Mr. Jovencio Refuerzo of the Permit Services Division at (209) 497-1100.

Sincerely,

Seved Sadredin

Director of Permit Services

Enclosure

c: Dave Warner

jr

David L. Crow *Executive Director/Air Pollution Control Officer



Central Regional Office * 1999 Tuolumne St., Suite 200 * Fresno, CA 93721

Emission Reduction Credit Certificate C-0046-2

Issued To:

PRODUCERS COTTON OIL COMPANY

P.O. Box 1832

Fresno, CA 93717

Location of Reduction:

2907 S. Maple Ave.

Fresno, CA

For NOx Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
4702 lbs	6728 lbs	3983 lbs	1831 lbs

Method Of Reduction

- 1 Shutdown of Entire Stationary Source
-] Shutdown of Emissions Unit
- [X] Other: Revised Old ERC Certificate C-0026-2, partially consumed by Authority to

Construct S-1354-2.

David L. Crow, APCO

Seyed Sadredin

Director of Permit Services





Central Regional Office * 1999 Tuolumne St., Suite 200 • Fresno, CA 93715

Emission Reduction Credit Certificate C-0046-2

Issued To:

PRODUCERS COTTON OIL COMPANY

P.O. Box 1832

Fresno, CA 93717

Location of Reduction:

2907 S. Maple Ave.

Fresno, CA

Joven, for file.

For NOx Reduction In/The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
4702 lbs	6728 lbs	3983 lbs	1831 lbs

•
ed by Authority to

Issue Date

Seyed Sadredin

Director of Permit Services



SEP 2 1 1992

San Joaquin Valley Unified Air Pollution Control District

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT - SOUTHERN REGION

OFFICE MEMORANDUM

TO:

Dave Warner

DATE: September 21, 1993

Manager of Permit Services - Central Region

FROM:

Tom Goff/Leonard Scandura

PHONE: 805-861-3682

Manager of Permit Services - So. Region

SUBJECT:

Partial consumption of Producers Cotton Oil ERC C-0026-2

Producers Cotton Oil partially consumed ERC C-0026-2 by implementing ATC S-1354-2 for a new cotton gin in Mettler Station, CA. This ATC required NOx offsets for the various gas dryers at the cotton gin.

Enclosed is the original ERC C-0026-2 and a copy of Producers request. Please process their request to reissue the ERC for the balance of offsets remaining.

Thank You.

Enclosures

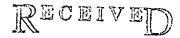
process.

David L. Crow

Executive Director/Air Pollution Control Officer

Producers Cotton Oil Company

A Dunavant Enterprises, Inc. Company



SEP 17 1993

16 September 1993

SAN JOAQUIN VALLEY UNIFIED APOD—SOUTHERN REGION

Mr. Tom Goff
San Joaquin Valley Unified APCD
2700 M Street, Suite 275
Bakersfield, CA 93301

Re: Project S-1354 Authority to Construct S-1354-2-0 Maricopa Roller Gin

Dear Mr. Goff:

Producers is in accordance with condition #27 of the Authority to Construct #S-1354-2-0 forfeits the following emission offset credits to operate the new Maricopa Roller Cotton Gin. Banked Emission Reduction Credit Certificates #3001002/102 and #C-0026-2 for PM; and NOx, respectively. As per condition #27 these certificates are being offered prior to start up of this facility. Certificate #3001002/102 is for PM; for a total of 9414.7 lb/season. Certificate #C-0026-3 is for NOx (NO 2) provided from Producers former Oil Milling facility in Fresno. As certificate #C-0026-3 is provided from an off site source, the applicable transfer ratio of 3:1 to 1 requires the following quantity be deducted from this ERC certificate: Q1:351#, Q3:351# and Q4:4041# from certificate #C-0026-2. Re-issuance of certificate #C-0026-2 less the required ERC for quarter 1, quarter 3 and quarter 4 will be provided by your staff.

Regrettably the NSR rules raising the NOx trigger offset requirement from O to 10 tons/year was not adopted by the District prior to the start up of this facility, hence NOx offsets were required and provided from Producers Milling facility under certificate #C-0026-2. The projected start up for this facility is 09/23/93. The conditions, machinery and equipment outlined in the A to C for this project have been met and/or equipment installed. Please issue the corresponding Permit to Operate as soon as possible.

If any questions arise, please contact me at (209) 487-7932.

Sincerely,

Steven E. White Corporate Engineer

SW:el

tgoff916



Central Regional Office * 1999 Tuolumne St., Suite 200 • Fresno, CA 93715

Emission Reduction Credit Certificate C-0026-2

Issued To:

PRODUCERS COTTÓN OIL COMPANY

P.O. Box 1832

Fresno, CA 93712

Location of Reduction:

2907 S. Maple/Ave.

Fresno, CA

For NOx Reduction In The Amount Of:

3 983 6728 4702 1831 Quarter/2 Quarter 1 Quarter 3 Quarter 4 6728/lbs 5872 lbs 5053 lbs 4334 lbs

Conditions Attached

Partially consumed by ATC S-1354-2 by following anants:

Method Of Reduction

Q1: 351 16

[] Shutdown of Entire Stationary Source

Q3: 351 1b

[X] Shutdown of Emissions Unit

Q4: 4041 16

[] Other:

David L. Crow, APCO

Seved Sadredin

Director of Permit Services



Producers Cotton Oil Company

July 15, 1992

Mr. Roger Isolm
SAN JOAQUIN VALLEY UNIFIED
AIR POLLUTION CONTROL DISTRICT
Fresno Zone
P.O. Box 1312
Fresno, CA 93775

Re: Producers' Fresno Mill ERC Application - Resubmittal

Dear Mr. Isolm:

Enclosed please find an application for Emission Reduction Credits (ERC) for Producers' Fresno Vegetable Oil Milling operations, along with a check for \$650.00, for the seven permit units proposed to bank ERC. These permit units are as follows:

Permit #	Description	Amount
1030040102 1030040103 1030040104 1060040105 1030040406 1030040107 1030040110 & 111	Cleaning & Delineating Hulling & Separating Solvent Extraction Bulk Meal Storage Meal Processing Meal Loading Boilers	\$ 650
		ο ουυ

Producers proposes to forfeit the Permit to Operate for these units so that ERS Certificates can be issued.

(M/0708.8)

Mr. Roger Isolm July 9, 1992 Page -2-

If I can answer any questions please let me know.

Sincer

Steven E. White Corporate Engineer

SEW:djm Enclosure

cc: Bob Lange

...

PUBLIC NOTICE

PUBLIC COMMENT REQUEST OF THE SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT FOR THE PROPOSED ISSUANCE OF AN EMISSION REDUCTION CREDIT CERTIFICATE.

NOTICE IS HEREBY GIVEN that the Son Josquin Valley NOTICE IS MEREBY GIVEN that the San Jacquim Valley Unified Air Pathaton Control District issued an emission reduction profit certificate to fractucins Cotton Oil Company for the control of emissions located at 2709 S. Maple Ave., Fresho, CA in the procurs of 61.0 tons of VOC. 11.0 tons of NOX, 2.7 tens of CO, 112.7 tens of FM-10 and 0.05 tons of SQs per year.

The analysis of the regulatory basis for this certificate, and of the resulting effect on anxient air quality, is certificate, and of the resulting effect on anxient air quality, is certificate.

SAN JOAQUIN VALLEY UNIFIED

AIR POLLUTION CONTROL DISTRICT

CENTRAL REGION

1999 Tuolumne St., Suite 200, Freena, CA 93721

DAVID L CROW
AIR POLLUTION CONTROL OFFICER
(September 16, 1993)

_ SJVUAPCD - CENTRAL	RE	GION	
ATTN: DAVE WARNER			
_ 1999_TUOLUMNE_ST.,_	ន្ទប្	ITE_	200
FRESNO	,	CA	93721

PROOF OF PUBLICATION

COUNTY OF FRESNO STATE OF CALIFORNIA

EXHIBIT A.

PUBLIC NOTICE

#9002 PUBLIC COMMENT REQUEST OF THE SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

FOR THE PROPOSED ISSUANCE OF AN EMISSION REDUCTION CREDIT CERTIFICATE

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District issued an emission reduction credit certificate to Producers Cotton Oil Company for the control of emissions located at 2709 S. Maple Ave., Fresno, CA in the amount of 61.0 tons of VOC, 11.0 tons of NOx, 2.7 tons of CO, 112.7 tons of PM-10 and 0.05 tons of SOx per year.

The analysis of the regulatory basis for this certificate, and of

the resulting effect on ambient air quality, is available for public inspection at the District office at the address below:

SAN JOAQUIN VALLEY UNIFIED

AIR POLLUTION CONTROL DISTRICT

CENTRAL REGION 1999 Tuolumne St., Suite 200, Fresno, CA 93721

DAVID L. CROW AIR POLLUTION CONTROL OFFICER (September 16, 1993)

The undersigned states:

McClatchy Newspapers is and on all dates herein stated was a corporation, and the owner and publisher of The Fresno Bee.

The Fresno Bee is a daily newspaper of general circulation now published, and on all-the-dates herein stated was published, in the City of Fresno, County of Fresno, and has been adjudged a newspaper of general circulation by the Superior Court of the County of Fresno, State of California under the date of October 29, 1923, No. 32711.

The undersigned is and on all the dates herein mentioned was a citizen of the United States, over the age of twenty-one years, and is the principal clerk of the printer and publisher of said newspaper; and that the notice, a copy of which is hereto annexed, marked Exhibit A, hereby made a part hereof, was published in The Fresno Bee in each issue thereof (in type not smaller than nonpareil), on the following dates:

<u>§</u> EPTEMBEI	R 16, 1993		-	
Beginning to the		day of	19	19 , inclusive.
I certify (or declare) oregoing is	under pena true and co	ity of porrect.	erjury
Dated SE	PTEMBER	, 16,199 <u>:</u>	3. Ilera	PROOFAD



September 13, 1993

Mr. Steven White Corporate Engineer Producers Cotton Oil Co. P.O. Box 1832 Fresno, CA 93706

Re: Final Public Notice - Emissions Reduction Credits Certificate #C-0026-

(1 through 5)

Dear Mr. White:

Enclosed for your review are the final emission reduction credit (ERC) certificates issued to Producers Cotton Oil Company. The preliminary public notice for this project was recently completed. No substantive comments were received by the District. The quanities specified on the ERCs are 61.0 tons of VOC, 11.0 tons of NOx, 2.7 tons of CO, 112.7 tons of PM_{10} , and 0.05 tons of SOx per year.

Thank you for your cooperation in this matter. Should you have any questions, please contact Mr. Rick McVaigh of the Permit Services Division at (209) 497-1040.

Sincerely,

Seved Sadredin

Director of Permit Services

Enclosure

c: Dave Warner

mk

David L. Crow

Executive Director/Air Pollution Control Officer



September 13, 1993

Mr. Ray Menebroker, Chief Project Review Branch California Air Resources Board 2020 L Street Sacramento, CA 95814

Re: Final Public Notice - Emission Reduction Credit Certificate #C-0026-

(1 through 5)

Dear Mr. Menebroker:

The San Joaquin Valley Unified Air Pollution Control District has issued emission reduction credit (ERC) certificates to Producers Cotton Oil Company. The preliminary public notice for this project was recently completed. No substantive comments were received by the District. The quanities specified on the ERCs are 61.0 tons of VOC, 11.0 tons of NOx, 2.7 tons of CO, 112.7 tons of PM $_{10}$, and 0.05 tons of SOx per year.

Thank you for your cooperation in this matter. Should you have any questions, please contact Mr. Rick McVaigh of the Permit Services Division at (209) 497-1040.

Sincerely.

Seved Sadredin

Director of Permit Services

Enclosure

c:

Dave Warner

mk

David L. Crow

Executive Director/Air Pollution Control Officer



September 13, 1993

Mr. Matt Haber, Chief New Source Section EPA Region IX 75 Hawthorne Street San Francisco, CA 94105

Re: Final Public Notice - Emission Reduction Credit Certificate #C-0026-

(1 through 5)

Dear Mr. Haber:

The San Joaquin Valley Unified Air Pollution Control District has issued emission reduction credit (ERC) certificates to Producers Cotton Oil Company. The preliminary public notice for this project was recently completed. No substantive comments were received by the District. The quantities specified on the ERCs are 61.0 tons of VOC, 11.0 tons of NOx, 2.7 tons of CO, 112.7 tons of PM_{10} , and 0.05 tons of SOx per year.

Thank you for your cooperation in this matter. Should you have any questions, please contact Mr. Rick McVaigh of the Permit Services Division at (209) 497-1040.

Sincerely,

Seved Sadredin

Director of Permit Services

Enclosure

c:

Dave Warner

mk

David L. Crow

Executive Director/Air Pollution Control Officer



Central Regional Office * 1999 Tuolumne St., Suite 200 * Fresno, CA 93715

Emission Reduction Credit Certificate C-0026-2

Issued To:

PRODUCERS COTTON OIL COMPANY

P.O. Box 1832

Fresno, CA 93717

Location of Reduction:

2907 S. Maple Ave.

Fresno, CA

For NOx Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
5053 lbs	6728 lbs	4334 lbs	5872 lbs

[] Condit	tions Atta	ched					
[-	wn of Ent own of En	ire Stationa nissions Unid	-		·		
	,						-	

Seyed Sadredin

Director of Permit Services

David L. Crow, APCO

9/13/93

COPY



Central Regional Office * 1999 Tuolumne St., Suite 200 * Fresno, CA 93715

Emission Reduction Credit Certificate C-0026-3

Issued To:

PRODUCERS COTTON OIL COMPANY

P.O. Box 1832

Fresno, CA 93717

Location of Reduction:

2907 S. Maple Ave.

Fresno, CA

For CO Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
1264 lbs	1682 lbs	1084 lbs	1468 lbs

[] Condition	ons Attached		·
	eduction on of Entire Station wn of Emissions U		
,			

David L. Crow, APCO

Seyed Sadredin

Director of Permit Services

9/13/93 Issue Date





Central Regional Office * 1999 Tuolumne St., Suite 200 * Fresno, CA 93715

Emission Reduction Credit Certificate C-0026-4

Issued To:

PRODUCERS COTTON OIL COMPANY

P.O. Box 1832

Fresno, CA 93717

Location of Reduction:

2907 S. Maple Ave.

Fresno, CA

For PM₁₀ Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
51845 lbs	68976 lbs	44408 lbs	60186 lbs

[] Condit	ions Attached			
[X] Shutdo	eduction vn of Entire Station wn of Emissions U	nit		

David L. Crow, APCO

Seyed Sadredin

Director of Permit Services

9/13/93

COPY



Central Regional Office * 1999 Tuolumne St., Suite 200 * Fresno, CA 93715

Emission Reduction Credit Certificate C-0026-5

Issued To:

PRODUCERS COTTON OIL COMPANY

P.O. Box 1832

Fresno, CA 93717

Location of Reduction:

2907 S. Maple Ave.

Fresno, CA

For SOx Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
22 lbs	29 lbs	19 lbs	25 lbs

[] Condit	tions Attached		
	wn of Entire Stationary So own of Emissions Unit	ource	

David L. Crow, APCO

Seved Sadredin

Director of Permit Services



Central Regional Office • 1999 Tuolumne St., Suite 200 • Fresno, CA 93715

Emission Reduction Credit Certificate C-0026-1

Issued To:

PRODUCERS COTTON OIL COMPANY

P.O. Box 1832

Fresno, CA 93717

Location of Reduction:

2907 S. Maple Ave.

Fresno, CA

For VOC Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
30485 lbs	30519 lbs	30470 lbs	30501 lbs

[] Condition	ons Attached		
	eduction vn of Entire Stationary Source wn of Emissions Unit	·	

David L. Crow, APCO

Seyed Sadredin

Director of Permit Services

9/13/93 Issue Date COPY



PUBLIC COMMENT REQUEST OF THE SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT FOR THE PROPOSED ISSUANCE OF AN EMISSION REDUCTION CREDIT CERTIFICATE

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District issued an emission reduction credit certificate to Producers Cotton Oil Company for the control of emissions located at 2709 S. Maple Ave., Fresno, CA in the amount of 61.0 tons of VOC, 11.0 tons of NOx, 2.7 tons of CO, 112.7 tons of PM₁₀, and 0.05 tons of SOx per year.

The analysis of the regulatory basis for this certificate, and of the resulting effect on ambient air quality, is available for public inspection at the District office at the address below:

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT CENTRAL REGION 1999 Tuolumne St., Suite 200, Fresno, CA 93271

DAVID L. CROW AIR POLLUTION CONTROL OFFICER

o ,

Got a minute? We'll BEE right there! FAX # 209/441-6291



The Fresno Bee 1626 E. Street Fresno, CA 93786 208/441- 15

To: Dave Warner

From: Brandy Swisher

Date: 9/15/93

Number of pages: 3 Including Cover Sheet

Notes: Copy of Legal Notice attached. Please call (or fax)

Thank you.





July 21, 1993

Mr. Steven White Producer's Cotton Oil Co. P.O. Box 1832 Fresno, CA 93706

Re: ERC credits for Fresno Oil Mill

Dear Mr. White:

This letter is in response to your comments on the District's evaluation of your application for emission reduction credits for the shutdown of the Fresno oil mill. The comments that you submitted included a proposed method for determining the historical actual emissions from the oil mill's hulling and separating operations. The proposed method involved determining the emissions from grain loadings and exhaust flow rates.

The District has determined that the emissions calculated using the method that you have proposed do not meet the definition of historical actual emissions in District Rule 2201. According to section 6.2.1 of Rule 2201:

Historical Actual Emissions are emissions having actually occurred based on source tests or calculated using actual fuel consumption or process weight, recognized emissions factors or other data approved by the APCO which most accurately represent the emissions during the baseline period.

The emissions that you proposed were not based on source tests of the operation, process weight, or recognized emission factors. The "mass balance" calculation method using the exhaust flow rate and the grain loading expected is not the most representative method of estimating emissions.

The data which most accurately represents the historical actual emissions, in accordance with this definition in Rule 2201, is the emission factor based on the process rate that you submitted and the source test from a similar operation at Rancher's Cotton Oil Co. This emission factor is the same as was used in the 1991 Fresno Co. evaluation of your application.

David L. Crow

Executive Director/Air Pollution Control Officer

1999 Tuolumne Street | Suite 200 • Fresno, CA 93721 • (209) 497-1000 • FAX (209) 233-2057



Mr. Steven White July 21, 1993 Page 2

Thank you for your comments, and we hope we have adequately addressed your concerns. The District plans to issue the emission reduction credits for the quantities specified in the most recent version of the evaluation. Should you have any questions, please telephone Mr. Richard McVaigh of Permit Services at (209) 497-1100.

Sincerely,

Seyed Sadredin Director of Permit Services

David Warner

Permit Services Manager - Central Region



June 8, 1993

Mr. Matt Haber New Source Section U.S. Environmental Protection Agency 75 Hawthorne Street San Francisco, CA 94105

Re: <u>Preliminary Public Notice - Emissions Reduction Credits</u>
<u>Certificate C-0026-(1 through 5)</u>

Dear Mr. Haber:

Enclosed for your review and comment is the District's revised analysis of Producer's request for emission reduction credits (ERC's) resulting from the shutdown of a Vegetable Oil Mill located at 2365 E. North Avenue in Fresno, California. The original analysis, mailed under a January 4, 1993 cover letter, has been revised in response to comments by the applicant.

The preliminary public notice for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. Should you have any questions, please contact Mr. Richard McVaigh of the Permit Services Division at (209) 497-1000.

Sincerely,

Seyed Sadredin

Director of Permit Services

Enclosure

SS/RM/rm

David L. Crow

Executive Director/Air Pollution Control Officer

1999 Tuolumne Street, Suite 200 • Fresno, CA 93721 • (209) 497-1000 • FAX (209) 233-2057



June 8, 1993

Mr. Steven White Producers Cotton Oil Co. P.O. Box 1832 Fresno, CA 93717

Re: <u>Preliminary Public Notice - Emissions Reduction Credits</u>
<u>Certificate C-0026-(1 through 5)</u>

Dear Mr. White:

Enclosed for your review and comment is the District's revised analysis of Producer's request for emission reduction credits (ERC's) resulting from the shutdown of a Vegetable Oil Mill located at 2365 E. North Avenue in Fresno, California. The original analysis, mailed under a January 4, 1993 cover letter, has been revised in response to comments by the applicant

The preliminary public notice for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. Should you have any questions, please contact Mr. Richard McVaigh of the Permit Services Division at (209) 497-1000.

Sincerely,

Seyed Sadredin

Director of Permit Services

Enclosure

SS/RM/rm

David L. Crow

Executive Director/Air Pollution Control Officer

1999 Tuolumne Street, Suite 200 • Fresno, CA 93721 • (209) 497-1000 • FAX (209) 233-2057



June 8, 1993

Mr. Raymond Menebroker Stationary Source Division California Air Resources Board P.O. Box 2815 Sacramento, CA 95815

Re: <u>Preliminary Public Notice - Emissions Reduction Credits</u>
Certificate C-0026-(1 through 5)

Dear Mr. Menebroker:

Enclosed for your review and comment is the District's revised analysis of Producer's request for emission reduction credits (ERC's) resulting from the shutdown of a Vegetable Oil Mill located at 2365 E. North Avenue in Fresno, California. The original analysis, mailed under a January 4, 1993 cover letter, has been revised in response to comments by the applicant.

The preliminary public notice for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. Should you have any questions, please contact Mr. Richard McVaigh of the Permit Services Division at (209) 497-1000.

Sincerely,

Seved Sadrédin

Director of Permit Services

Enclosure

SS/RM/rm

David L. Crow

Executive Director/Air Pollution Control Officer

1999 Tuolumne Street, Suite 200 * Fresno, CA 93721 * (209) 497-1000 * FAX (209) 233-2057

PROJCERS COTTON OIL COMPANY

JAN 15 1993

1371 Stanislaus Presno, CA 93706 P.O. Box 1832 Presno, CA 93717

San Joaquin Valley Unified Air Pollution Control District

STEVEN B. VHITE Corporate Engineer 1

(209) 442-4400 PAI (209) 487-7942

January 12, 1993

Mr. David Warner
San Joaquin Valley Unified
Air Pollution Control District
1999 Tuolumne Street, Suite 200
Fresno, CA 93775

RE: Producers Fresno Mill Emission Reduction Credit Certificate

Dear Mr. Warner:

I have spoken to Mr. McVaigh of the Districts staff, regarding the recent processing of Producers application for Emission Reduction Credits from the shutdown of the former Vegetable Oil Mill Facility at 2365 E. North Ave. in Fresno. After review of Mr. McVaigh's engineering analysis, several questions were raised specific to the time frame used by the District to established the Historical Actual Emissions (HAE) for the facility. At the time of submittal of the application, detailed records were submitted. Refer to Appendix 1 of Producers submittal document.

review of this information establishes the production rates for this facility on a annual basis. District's review after speaking with Mr. McVaigh, was for the 1988, 1989 and 1990 operating seasons. The 1988 and 1989 seasons were typical production runs for this facility. The 1990 season was not, this can very easily be verified after review of the information in Appendix 1. Producers request the review of the information of the bankable emissions from this facility be evaluated for the 1988 and 1989 operating season. Section 8 and 9 of the District's review of Producers ERC submittal for this facility indicates the District's recommended that this ERC application be approved. The re-evaluation I am requesting will not affect that approval other than the actual quantities generated from the facility.

If I can answer any questions, please let me know.

Sincereiy

Steven E. White Corporate Engineer



January 4, 1993

Mr. Steven White Producers Cotton Oil Co. P.O. Box 1832 Fresno, CA 93717

Re: <u>Preliminary Public Notice - Emissions Reduction Credits</u>
Certificate

Dear Mr. White:

Enclosed for your review and comment is the District's analysis of Producer's request for emission reduction credits (ERC's) resulting from the shutdown of a Vegetable Oil Mill located at 2365 E. North Avenue in Fresno, California.

The preliminary public notice for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. Should you have any questions, please contact Mr. Richard McVaigh of the Permit Services Division at (209) 497-1000.

Sincerely,

Seyed Sadredin

Director of Permit Services

Enclosure

SS/RM/rm

David L. Crow

Executive Director/Air Pollution Control Officer

1999 Tuolumne Street, Suite 200 • Fresno, CA 93721 • (209) 497-1000 • FAX (209) 233-2057



January 4, 1993

Mr. Raymond Menebroker Stationary Source Division California Air Resources Board P.O. Box 2815 Sacramento, CA 95815

Re: <u>Preliminary Public Notice - Emissions Reduction Credits</u>
Certificate

Dear Mr. Menebroker:

Enclosed for your review and comment is the District's analysis of Producer's request for emission reduction credits (ERC's) resulting from the shutdown of a Vegetable Oil Mill located at 2365 E. North Avenue in Fresno, California.

The preliminary public notice for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. Should you have any questions, please contact Mr. Richard McVaigh of the Permit Services Division at (209) 497-1000.

Sincerely,

Seyed Sadredin

Director of Permit Services

Enclosure

SS/RM/rm

David L. Crow

Executive Director/Air Pollution Control Officer

1999 Tuolumine Street, Suite 200 • Fresho, CA 93721 • (209) 497-1000 • FAX (209) 233 2057



January 4, 1993

Mr. Matt Haber New Source Section U.S. Environmental Protection Agency 75 Hawthorne Street San Francisco, CA 94105

Re: <u>Preliminary Public Notice - Emissions Reduction Credits</u>
Certificate

Dear Mr. Haber:

Enclosed for your review and comment is the District's analysis of Producer's request for emission reduction credits (ERC's) resulting from the shutdown of a Vegetable Oil Mill located at 2365 E. North Avenue in Fresno, California.

The preliminary public notice for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. Should you have any questions, please contact Mr. Richard McVaigh of the Permit Services Division at (209) 497-1000.

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1999 Tuolumne Street, Suite 200 • Fresno, CA 93721 • (209) 497 1000 • FAX (209) 233 2057

PUBLIC COMMENT REQUEST OF THE SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT FOR THE PROPOSED ISSUANCE OF AN EMISSION REDUCTION CREDIT CERTIFICATE

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District solicits public comment on the proposed issuance of an emission reduction credit certificate to Producers Cotton Oil Co. for the shutdown of a Vegetable Oil Mill located at 2365 E. North Avenue in Fresno, in the following amounts:

	NOx (lb/qtr)	SOx (lb/qtr)	Voc (lb/qtr)	PM10 (lb/qtr)	CO (lb/qtr)
FIRST QUARTER	4,523	20	30,475	98,140	1,131
SECOND QUARTER	4,485	19	20,346	97,199	1,121
THIRD QUARTER	2,885	13	20,314	62,509	722
FOURTH QUARTER	3,560	17	20,335	85,176	980

The analysis of the regulatory basis for this certificate, and of the resulting effect on ambient air quality, is available for public inspection at the District office at the address below. Written comments on this proposal must be submitted within 30 days of the publication date of this notice to:

SAN JOAQUIN VALLEY UNIFIED
AIR POLLUTION CONTROL DISTRICT
CENTRAL REGION
1999 Tuolumne St., Suite 200, Fresno, CA 93271

DAVID L. CROW EXECUTIVE OFFICER/APCO

Application Review

Project # 920318 Deemed Complete: October 2, 1992

Engineer: Richard McVaigh

Date: October 6, 1992

Reviewed by:

Date:

Facility Name:

Producer's Cotton Oil Co.

Mailing Address:

P.O. Box 1832 Fresno, CA 93717

Contact Name:

Steve White

Phone:

(209) 487-7935

Application: Emission Reduction Credits for Fresno Oil Mill

Section 1 - Proposal

Producers Cotton Oil Co. operated a vegetable oil mill in Fresno, California. The facility cleaned, crushed, and extracted vegetable oil from up to 600 tons per day of cottonseed and safflower. The facility operated year round. The emissions at the facility included PM10 from processing seed, Volatile Organic Compounds from extraction processes, and combustion exhaust from two natural gas-fired boilers. Oil production was discontinued at the facility in January of 1991. The processing equipment has been removed and sold.

Producers has requested that a San Joaquin Valley Unified Air Pollution Control District Emission Reduction Credit Certificate be issued for the actual emissions reductions that occurred due to the shutdown of the oil mill. An application was submitted to the Fresno County APCD for emission reduction credits for the shutdown on April 3, 1991.

The Unified District resumed evaluation of this application upon full merger of the Fresno Co. APCD, subject to Rule 230.1 of the Unified District.

Annual production and fuel usage data for the baseline period from the facility were supplied with the 1991 banking The production and fuel usage data from the application. original application will be used for this evaluation also. Some of the calculation procedures and emission factors were revised.

Current District Rules require that historical actual emissions be calculated on a quarterly basis. The quarterly production records for this facility are no longer available. Quarterly fuel use data will used to determine the portion of the each year's production occurring during each quarter of the year.

Section 2 - Applicable Rules

District Rule 220.1 - New and Modified Stationary Source Review Rule. (Adopted September 19, 1991)

District Rule 230.1 - Emission Reduction Credit Banking. (Adopted September 19, 1991)

Fresno County APCD Rule 409.1 - Vegetable Oil Processing Operations (Adopted March 1, 1988)

Section 3 - Project Location

Producers Cottonseed Oil Mill was located at 2365 E. North Avenue in Fresno, California.

Section 4 - Process Description

The plant was capable of processing up to 600 tons of seed per day. The plant operated for up to 24 hours a day year round. Equipment lists for the facility are on the attached Fresno County APCD permits.

Cottonseed Unloading and Storage (Fresno Co. APCD Permit No. 1030040101)

Cottonseed and Safflower were received at the mill by truck. Belt conveyers, screw conveyors, and elevators were used to transport the seed to four seed houses and six seed piles. The seed houses and seed piles were cooled with forced air.

Two cyclone collectors were used to control particulate emissions from the unloading process.

Cottonseed Cleaning

(Fresno Co. APCD Permit No. 1030040102)

Elevators were used to transport the seed to the seed cleaning operation. Twelve seed cleaners were used to remove sticks, leaf trash, cracked seed, and underdeveloped seed. The air exhausted from the aspirators in the seed cleaners contained particulate matter. Emissions of particulate matter were controlled with twelve high-efficiency cyclone collectors.

Delinting

(Fresno Co. APCD Permit No. 1030040102)

Cottonseed was transported into the delinting room by screw conveyor. Delinting was accomplished by five first-cut linters and eight second-cut linters. The linters used gin saws and doffing brushes to remove the remaining cotton lint from the seed. Twelve beaters were used to remove fine particulate matter from the lint. Lint was pneumatically conveyed out of the delinting room to the bale presses. Delinted seeds were cleaned in two scalping shakers and screw-conveyed to the hulling and separating room. Control equipment for the delinting process is described in table I of this review.

Hulling and Separating

(Fresno Co. APCD Permit No. 1030040103)

The hulling and separating machines included hullers, shaker separators, beaters, and pneumatic conveyors. The hullers were used to crack delinted cottonseed and safflower seed. The shakers separated the seed meats and hulls. The hulls were pneumatically conveyed to beaters that further separated meats and hulls. Cottonseed meats were flaked in three rolling mills. Safflower was not flaked. Emissions from the hulling and separating processes were controlled by thirteen high-efficiency 2D-2D cyclones.

Oil was removed from the meat in the expelling room. The oil was separated from the seed in screw presses called expellers. The products of the expelling room were filtered oil and seed cake. The seed cake was then granulated in the presscake room. The expeller and presscake rooms did not have significant emissions of air contaminants.

Solvent Extraction

(Fresno Co. Permit No. 1030040104)

Oil was separated from the granulated presscake by solvent extraction with normal hexane in a rotary extractor called a rotocell. The mixture of oil and solvent leaving the rotocell, called miscella, contained approximately 25% oil by weight. A portion of the solvent remained in the seedcake.

The cake was conveyed to a desolventizer-toaster vessel. The cake was showered with sparge steam, which was used to volatilize the remaining solvent. A solvent condenser was used to reclaim the solvent volatized by the steam. The desolventized cake was cooled by a stream of forced air. Particulate emissions from the stream were controlled by a cyclone collector and a fabric filter baghouse.

The miscella from the extraction process was refined by centrifugation, filtration, and soapstock desolventization. The solvent and vegetable oil were separated by distillation. Solvent emissions from the distillation process were controlled by a mineral oil scrubber as required by Fresno Co. APCD Rule 409.1.

Bulk Meal Storage

(Fresno Co. APCD Permit No. 1030040105)

Cottonseed and safflower meal were loaded into bulk storage pneumatically. The emissions from the operation were controlled by fabric filter baghouses with cyclone collectors as precleaners.

Cottonseed Meal Processing and Loading

(Fresno Co. APCD Permit No. 1030040106 and 1030040107)

Cottonseed meal processing operations included blending, hammermilling, pelletizing, and loading. Emissions from the operations were controlled with cyclone collectors and fabric filter baghouses.

Planting Seed and Acid Delinting

(Fresno Co. APCD Permit No. 1030040108 and 1030040109)

Planting seed and acid delinting operations were not shut down. The applicant is not proposing to obtain emission reduction credits for these operations.

Boilers

(Fresno Co. APCD Permit No. 1030040110 and No. 1030040111)

Two 400 B.O.H.P. boilers were used to provide process steam to the operation. The boilers were natural gas fired.

Section 5 - Equipment Listing

The equipment lists for the facility are on the Fresno Co. APCD Permits attached to this evaluation.

<u>Section 6 - Control Equipment Evaluation</u>

The control equipment for the unloading operation included two 84" 2D2D cyclone collectors. The cyclones were approximately 70% efficient for controlling the emissions of PM10. The emissions control equipment for the delinting and pressing operations was as follows:

Table I Control Equipment

OPERATION	CONTROLS	EMISSIO	NS TSP	REFERENCE
		LB HR	GR DSCF	
Seed Cleaners	12 - 44" 2D2D cyclones	0.25 each	0.0080	1-4-77 Source test
1st Cut Linters	16 - 36" 2D2D cyclones	0.21 each	0.0069	1-4-77 Source test
2nd Cut Linters	32 - 36" 1D3D cyclones	0.67 each	0.023	1-4-77 Source test
1st Cut Beaters	4 - 30" 2D2D cyclones	0.38 each	0.021	1-4-77 Source test
2nd Cut Beaters	8 - 26" 1D3D cyclones	1.26 each	0.065	1-4-77 Source test
Bale Press Room	10 Asst. Cyclones	14.4 Total	0.072	7-11-75 Source Test

The emissions control equipment for hulling and separating room was twenty-seven 2D2D cyclones. Source tests for these units are not available. The emission factor will be used from a source test on a similar hulling and separating operation at Rancher's Cotton oil Mill in Fresno Co.

Particulate emissions from meal handling in the plant were controlled by cyclone collectors and fabric filter baghouses. No source tests were performed on these devices.

The mineral oil scrubber was tested on 3/19/87 by Ecoserve, Inc. The scrubber was found to be 99.4% efficient for the control of VOC emissions.

Section 7 - Calculations

A. Assumptions

The emissions from the unloading of cottonseed and safflower are assumed to have been equal to the emissions for the

unloading of grain at country elevators as described in section 6.4 of AP-42.

The emissions per ton of seed processed from the hulling and separating operations are assumed to have been equal to the emissions at Ranchers Cotton Oil Mill in Fresno Co.

The emissions per ton from the cooling of the seed meal will be assumed to be the same as the emissions from the cooling of soybean meal as described in section 6.4 of AP-42.

The emissions from loading the meal into bulk meal storage and processing operations and the loading of meal for shipment are assumed to be the same as the emissions from the loading of soybean meal in Section 6.4 of AP-42.

50% of the TSP from the unloading and cleaning operations, in the absence of other data, are assumed to have been PM10.

100% of the TSP from the combustion of natural gas are assumed to have been PM10.

77.7% of the TSP from the lint room is PM10 , based on the average of the four mills described in table IV of reference 1.

67.6% of the TSP from the meal handling is PM10 , based on the average of the two mills described in table IV of reference 1.

87.2% of the TSP from hulling and separating is PM10 , based on the average of the four mills described in table IV of reference 1.

The fabric filter baghouses in the facility are assumed to be 99.7% efficient for the control of PM10. This is an estimate based on the data in Figure 2 of page 115 of the 1992 AP-40.

The cyclone collectors the facility are assumed to be 70% efficient for the control of PM10. This is an estimate based on the data in Figure 12 of page 77 of the 1992 AP-40.

Some of the cyclone collector emissions could be diverted to baghouses or to the atmosphere. All emissions from cyclone collectors that were ducted to baghouses were assumed to be fabric-filtered.

Reference 1 - Curry, J.H., <u>Proceedings of the Control Technology</u> <u>for Agricultural Air Pollutants Specialty Conference</u>, APCA, Pittsburgh, 1974

The throughput of meal shall be assumed to be 47% of the throughput of whole seed. This estimate was submitted as part of an application for Kings County APCD permit No. 7803 for the J.G. Boswell Oil Mill.

The emissions from the baghouses in the meal processing are will be assumed to be negligible compared to the emissions from the cyclones because approximately 30% of the PM10 entering the cyclones is emitted and only 0.3% of the PM10 from the baghouses is emitted.

The percentage of the production during the baseline period occurring in each calendar quarter will be calculated from the percentage of the natural gas usage occurring in each calendar quarter. The seed throughput and solvent usage will be assumed to be directly proportional to the natural gas usage.

B. Emission Factors

The uncontrolled TSP emission factor from AP-42 Table 6.4-1 for the unloading of grain is 0.6 lb/ton. This factor shall be used for the seed receiving operation.

The TSP emission factors for the operations in the delinting room are given in the table below. The emission factors from the delinting room were determined from source tests performed at the facility on 1-4-77.

The total emission rate for the baling room was 14.4 lb TSP per hour according to a 7-11-75 source test of the facility. The process rate during the source test was 20.1 tons per hour. The emission factor was:

$$\frac{14.4 \ lb \ TSP/Hr.}{20.1 \ tons/Hr.} = 0.716 \ lb \ TSP/Hr.$$

There are no source test data available for the Producers hulling and separating operation. Source test data from Ranchers Cotton Oil Mill in Fresno Co. will be used for this application. The emission factor from the 8-24-76 source test was 1.47 lb TSP/Ton. Emission summary sheets for these tests are attached to this report.

The uncontrolled emission factor for the cooling of soybean meal is 1.8 lb/ton of meal processed from table 6.4-1 of AP-42. This factor shall be used for the cottonseed meal cooler.

There were no source test data available for the five cyclone collectors controlling emissions from meal that was

pneumatically conveyed into the meal processing room and pelletized. The AP-42, table 6.4-6, emission factor for soybean meal loading will be used. The AP-42 emission factor is 0.27 lb TSP/ton of meal processed. The AP-42 emission factor for pelletizing meal is 1.8 lb/ton.

The TSP emission factors are summarized in table II. Emission factors for uncontrolled operations are identified as "unc.".

Table II
Emission Factors

OPERATION	CONTROLS AT POINT	EMISSIO	N FACTOR	REFERENCE
	OF EMISSION	LB HR	LB TSP TON	
Seed Cleaners	12 - 44" 2D2D cyclones	0.249 each	0.146	1-4-77 Source test
1st Cut Linters	16 - 36" 2D2D cyclones	0.207 each	0.162	1-4-77 Source test
2nd Cut Linters	32 - 36" 1D3D cyclones	0.666 each	1.04	1-4-77 Source test
1st Cut Beaters	4 - 30" 2D2D cyclones	0.380 each	0.074	1-4-77 Source test
2nd Cut Beaters	8 - 26" 1D3D cyclones	1.26 each	0.494	1-4-77 Source test
Unloading	2 2D2D cyclones	u-	0.6 (unc.)	AP-42 Section 6.4
Bale Presses	10 Asst. Cyclones	14.4 total	0.72	7-11-75 Source Test
Hulling and Separating	27 cyclones	_	1.47	8-24-76 Source Test
Solvent Extraction	1 baghouse	_	1.8 (unc.)	AP-42, Table 6.4-1
Pellet cooler	2 cyclones		1.8 (unc.)	AP-42, Table 6.4-1
Meal Processing	3 cyclones	_	0.27 (unc)	AP-42, Table 6.4-1
Meal Loading	3 baghouses	_	0.27 (unc)	AP-42, Table 6.4-1

The emission rates in pounds per hour are from the source tests. (See attached source test emissions summaries.) Emission factors were calculated by dividing the emission rate in pounds per hour for each cyclone by the process rate in tons per hour and multiplying by the number of cyclones. For the seed cleaners, for example,:

$$\frac{0.249 \; lbTSP/Hr.}{20.4 \; tons/Hr.} \times 12 \; cyclones = 0.146 \; lb \; TSP/ton.$$

The VOC emissions from the solvent extraction process were calculated from the quantity of solvent used. Emission factors were not used.

Emission factors for the combustion of natural gas in industrial boilers are from table 1.4-1 of AP-42. The emission factors in lb/MMSCF are:

<u>PM10</u>	<u>SOx</u>	NOx	<u>CO</u>	<u>voc</u>
3.0	0.6	140	35	2.8

C. Calculations

Baseline Period

The production records for the facility were submitted to the Fresno Co. District with the application on April 4, 1991. The production records were for the three calendar years immediately prior to the submission of the application as required by the New Source Review Rule (Rule 210.1) in effect at that time. These annual production records are still available and will be used to determine the Historical Actual Emissions. Quarterly production rates will be estimated by multiplying the annual production rate by the fraction of the baseline natural gas usage that occurred in each quarter.

The fraction of the baseline natural gas usage occurring in each calendar quarter is calculated by dividing the quarterly natural gas usage by the baseline gas usage in the table below.

Table III
Quarterly Gas Usage

Quarter	Quarter Usage (Therms)	Baseline Usage (Therms)	Fraction of Total Usage
First 1988	439,269	3,765,124	0.117
Second 1988	543,208	3,765,124	0.144
Third 1988	284,148	3,765,124	0.075
Fourth 1988	489,541	3,765,124	0.130
First 1989	363,283	3,765,124	0.096
Second 1989	524,421	3,765,124	0.139
Third 1989	403,941	3,765,124	0.107
Fourth 1989	443,059	3,765,124	0.118
First 1990	273,773	3,765,124	0.073
Second 1990	207	3,765,124	0.000
Third 1990	94	3,765,124	0.000
Fourth 1990	186	3,765,124	0.000

The cottonseed and safflower throughput, in tons, for the three baseline years was:

Table IV

<u>Year</u>	Cotton	<u>Safflower</u>	Total
1988	108,420	42,108	150,528
1989	103,869	53,874	157,583
1990	56,943	53,714	110,657
Total	269,232	149,696	418,768

The quarterly oilseed throughputs were calculated in spreadsheet SS 1. The throughput of meal is 47% of the throughput of whole seed above.

The cottonseed, safflower, and total oilseed throughputs were calculated in spreadsheet SS 1 by multiplying the fraction of the baseline natural gas usage in the given quarter by the baseline oilseed throughput from table IV above.

The results of these calcualtions are as follows:

Table V Quarterly Throughputs

	Average Cottonseed Throughput (tons)	Average Safflower Throughput (tons)	Average Total Throughput (tons)
1st Qtr.	25667	14266	39933
2nd Qtr.	25398	14117	39514
3rd Qtr.	16333	9079	25412
4th Qtr.	22257	12371	34627

The use of natural gas in the boilers during the baseline period was also submitted by the applicant:

Table VI Natural Gas Consumption

<u>Quarter</u>	Average MMSCF
First	35.9
Second	35.6
Third	22.9
Fourth	31.1

The hexane usage for solvent extraction during the baseline period was submitted by the applicant. The hexane usage for each calendar quarter was determined in spreadsheet SS 2 by multiplying the hexane usage during the baseline period by the fraction of the baseline natural gas usage that occurred in the given quarter.

The quantity of hexane used by the applicant was far in excess of the 370 lb VOC/day limit in the applicant's Permit to Operate (No. 1030040104). The VOC emissions in excess of the 370 lb/day limit do not meet the definition of Actual Emission Reductions in Section II.B.3.a of District Rule 220.1 and are not creditable. The actual quarterly usages that were used to calculate the average usage for each quarter in spreadsheet SS were reduced to a maximum of 33,760 lb/qtr, which is 370 lb/day.

The results of the calculations are as follows:

Table VII
Creditable Hexane Usage

	Quarterly Average Hexane Usage (lb)	Creditable Avg. Hexane Usage (lb)
1st Qtr.	310,012	33,760
2nd Qtr.	306,760	22,507
3rd Qtr.	197,280	22,507
4th Qtr.	268,822	22,507

Actual Emissions Reductions

Actual Emissions Reductions (AER) for the shutdown of an emissions unit, in accordance with section V.E.2 of District Rule 220.1, is calculated from the Historical Actual Emissions (HAE) as follows:

AER = HAE (for the emissions unit prior to shutdown)

The Historical Actual Emissions of PM10 from the seed processing operations were calculated for each quarter in spreadsheets SS 3, SS 4, SS 5, and SS 6 by using the following equation:

$$E = Q \times E.F. \times (1 - \frac{C.E.}{100\%}) \times \frac{\%PM10}{100\%}$$

where,

E = the PM10 emissions for the baseline period.

Q = the process throughput during the baseline period in tons.

E.F. = the emission factor in lb PM10/ton.

C.E. = the control efficiency in percent if applicable. This factor is not used when a controlled emission factor is available.

The total Historical Actual PM10 Emissions from the processing operations for each quarter (calculated in spreadsheets SS 3, SS 4, SS 5, SS 6) is as follows:

Table VIII
Historical Actual PM10 Emissions
Processing Operations

Quarter	PM10 Emissions <u>(lb/qtr)</u>
First	109,036
Second	107,892
Third	69,386
Fourth	94,548

The quantity of VOC creditable from the shutdown of the hexane solvent extraction operation was calculated in Table VII above.

The HAE from the combustion of natural gas in the boilers is calculated for each quarter in spreadsheet SS 7. The emissions were calculated by multiplying the quarterly natural gas usage in MMSCF by the emissions factor in lb/MMSCF. The results of the calculations are:

Table IX
Gas Combustion Emissions

	NOx (LB)	SOx (LB)	VOC (LB)	PM10 (LB)	CO (LB)
FIRST QUARTER	5,026	22	101	108	1,257
SECOND QUARTER	4,984	21	100	107	1,246
THIRD QUARTER	3,206	14	64	69	802
FOURTH QUARTER	4,354	19	87	93	1,089

The total Historical Actual Emissions are determined by summing the PM10 emissions from processing operations in Table

VIII, the creditable VOC emissions from hexane usage from Table VII, and emissions from the combustion of natural gas in Table IX.

Table X
Historical Actual Emissions

	NOX (LB)	SOX (LB)	VOC (LB)	PM10 (LB)	CO (LB)
FIRST QUARTER	5,026	22	33,861	109,044	1,257
SECOND QUARTER	4,984	21	22,607	107,999	1,246
THIRD QUARTER	3,206	14	22,571	69,455	802
FOURTH QUARTER	4,354	19	22,594	94,641	1,089

The net quantity of bankable actual emission reductions is 90% of the quarterly Historical Actual Emissions:

Table XI
Bankable Actual Emissions Reductions

	NOX (LB)	SOx (LB)	VOC (LB)	PM10 (LB)	CO (LB)
FIRST QUARTER	4,523	20	30,475	98,140	1,131
SECOND QUARTER	4,485	19	20,346	97,199	1,121
THIRD QUARTER	2,885	13	20,314	62,509	722
FOURTH QUARTER	3,560	17	20,335	85,176	980

The community bank contribution is 10% of the Historical Actual Emissions. The contribution, in pounds per day, was calculated by taking 10% of the quarterly creditable Historical Actual Emissions and dividing by 91 days per quarter.

Table XII

	NOX (LB/DAY)	SOx (LB/DAY)	VOC (LB/DAY)	PM10 (LB/DAY)	CO (LB/DAY)
FIRST QUARTER	5.5	0.0	37.2	119.8	1.4
SECOND QUARTER	5.5	0.0	24.8	118.7	1.4
THIRD QUARTER	3.8	0.0	24.8	76.3	0.9
FOURTH QUARTER	4.8	0.0	24.8	104.0	1.2

Section 8 - Compliance

The conditions for banking emissions reductions occurring prior to September 19, 1991 are discussed in Section IV.A.1 of District Rule 230.1. Emissions reductions that were previously formally recognized in writing as being available for use as offsets are eligible for banking providing:

- A. The Control Officer determines that the emissions reductions comply with the definition of actual emissions reductions.
- B. The reductions are Real, Surplus, Permanent, Quantifiable, and Enforceable.
- C. The reductions have not been used for the approval of an Authority to Construct or used as offsets.

The emisison reduction credits were recognized in an evaluation dated April 10, 1991 by the Fresno Co. District.

The reductions must comply with the definition of Actual Emissions Reductions. The definition of Actual Emissions Reductions in District Rule 230.1 is "as defined in the District's New Source Review Rule". This refers to the current New Source Review Rule, which is District Rule 220.1.

In accordance with the definition of Actual Emissions Reductions in District Rule 220.1, the reductions must be:

<u>Real</u> - The emissions reductions were calculated from actual production and inventory data and recognized emission factors. The reductions are real.

<u>Surplus</u> - The shutdown of the stationary source was voluntary and not required by any law, rule, agreement, or regulation. The reductions could not be attributed to a control measure noticed for public workshop, or proposed or contained in a State Implementation Plan at the time that the shutdown occurred or at the time when the application for emission reduction credits was originally submitted. In addition, those emissions that occurred in excess of those allowed by permit conditions were not banked. The reductions are surplus.

<u>Permanent</u> - The source has been dismantled and the permit has been surrendered. The reductions are permanent.

<u>Quantifiable</u> - The reductions were calculated using the procedures described in the U.S. EPA AP-42 and by using emission factors from actual source tests. The emissions are quantifiable.

<u>Enforceable</u> - The stationary source has been dismantled and is no longer permitted. The reductions are enforceable.

Not used for the approval of an Authority to Construct or as offsets. The emission reduction credits for the shutdown were not used for the approval of an Authority to Construct or as offsets.

V.E. of District Rule 230.1 requires applications for ERC certificates for emission reductions occurring prior to the adoption of District Rule 230.1 be submitted to the District within 180 days of the date of the adoption of the rule, which was September 19, 1991. case, the application for an ERC certificate had already been declared complete on 7/9/91 and was being evaluated by the Fresno Co. APCD at the time of rule adoption. A San Joaquin Valley Unified APCD ERC certificate was drafted on December 27, 1991, but was not issued. The certificate was not issued because of a dispute between the applicant and the Fresno Co. APCD over the calculation procedures used.

The \$650 application fee required by District Rule 230.1 for the ERC certificate application was paid on 7/23/92 in response to a request by the District.

Section 9 - Recommendation

I recommend, based on the analysis above, that an emission reduction credit certificate be issued for the following quantities:

	NOX (LB)	SOx (LB)	VOC	PM10 (LB)	CO (LB)
FIRST QUARTER	4,523	20	30,475	98,140	1,131
SECOND QUARTER	4,485	19	20,346	97,199	1,121
THIRD QUARTER	2,885	13	20,314	62,509	722
FOURTH QUARTER	3,560	17	20,335	85,176	980

SS 1 QUARTERLY OILSEED THROUGHPUTS

QUARTER	FRACTION OF	BASELINE E	Baseline	QUARTER	Quarter	QUARTER
	Baseline	(TONS)	(tons)	(TONS)	(tons)	(TONS)
	Throughput	Cottonseed	Safflower	Cottonseed	Safflower	Total
1st '88	0.117	269232	149646	31500	17509	49009
2nd '88	0.144	269232	149646	38769	21549	60318
3rd '88	0.075	269232	149646	20192	11223	31416
4th '88	0.13	269232	149646	35000	19454	54454
1st '89	0.096	269232	149646	25846	14366	40212
2nd '89	0.139	269232	149646	37423	20801	58224
3rd '89	0.107	269232	149646	28808	16012	44820
4th '89	0.118	269232	149646	31769	17658	49428
1st '90	0.073	269232	149646	19654	10924	30578
2nd '90	0	269232	149646	0	0	0
3rd '90	0	269232	149646	0	0	0
4th '90	0	269232	149646	0	0	0
			LST AVG. 2nd AVG. 3rd AVG. 4TH AVG.	25667 25398 16333 22257	14266 14117 9079 12371	39933 39514 25412 34627

SS 2
QUARTERLY HEXANE USAGES

QUARTER	FRACTION OF	Baseline	QUARTERLY	QUARTERLY	CREDITABLE
	Baseline	Usage	Usage	USAGE	USAGE
	Throughput	Gallons	Gallons	Pounds	Pounds
1st '88	0.117	591250	69176	380469	33760
2nd '88	0.144	591250	85140	468270	33760
3rd '88	0.075	591250	44344	243891	33760
4th '88	0.13	591250	76863	422744	33760
1st '89	0.096	591250	56760	312180	33760
2nd '89	0.139	591250	82184	452011	33760
3rd '89	0.107	591250	63264	347951	33760
4th '89	0.118	591250	69768	383721	33760
1st '90	0.073	591250	43161	237387	33760
2nd '90	0	591250	0	0	0
3rd '90	0	591250	0	0	0
4th '90	0	591250	0	0	0
			1st Avg. 2nd Avg. 3rd Avg. 4th Avg.	310012 306760 197280 268822	33760 22507 22507 22507

SS 3 HISTORICAL ACTUAL PM10 EMISSIONS FIRST QTR. AVG.

OPERATION	EMISSION FACTOR (LB TSP/TON)	%PM10	CONTROL EFF. %	THROUGHPUT TONS	EMISSIONS (LB/QTR)
SEED CLEANERS 1ST LINTERS 2ND LINTERS 1ST BEATERS 2ND BEATERS UNLOADING BALE PRESSES HULL & SEP. SOLVENT EXTR. PELLET COOLER MEAL PROCESSING MEAL LOADING	0.146 0.162 1.04 0.074 0.494 0.6 0.72 1.47 1.8 1.8 0.27 0.27	50 77.7 77.7 77.7 50 50 87 67.6 67.6 67.6	0 0 0 70 70 99.7 70 70	25667 25667 25667 25667 39933 25667 39933 18769 18769 18769	1874 3231 20741 1476 9852 3594 9240 51070 69 6851 1028 10

SS 4 HISTORICAL ACTUAL PM10 EMISSIONS SECOND AVG.

OPERATION	EMISSION FACTOR (LB TSP/TON)	%PM10	CONTROL EFF. %	THROUGHPUT TONS	EMISSIONS (LB/QTR)
SEED CLEANERS 1ST LINTERS 2ND LINTERS 1ST BEATERS 2ND BEATERS UNLOADING BALE PRESSES HULL & SEP. SOLVENT EXTR. PELLET COOLER MEAL PROCESSING MEAL LOADING	0.146 0.162 1.04 0.074 0.494 0.6 0.72 1.47 1.8 1.8 0.27 0.27	50 77.7 77.7 77.7 50 50 87 67.6 67.6 67.6	0 0 0 70 70 99.7 70 70 99.7	25398 25398 25398 25398 25398 39514 25398 39514 18572 18572 18572	1854 3197 20524 1460 9749 3556 9143 50535 68 6780 1017
TOTAL	-				107892

SS 5 HISTORICAL ACTUAL PM10 EMISSIONS THIRD QTR AVG.

OPERATION	EMISSION FACTOR (LB TSP/TON)	%PM10	CONTROL EFF. %	THROUGHPUT TONS	EMISSIONS (LB/QTR)
SEED CLEANERS 1ST LINTERS 2ND LINTERS 1ST BEATERS 2ND BEATERS UNLOADING BALE PRESSES HULL & SEP. SOLVENT EXTR. PELLET COOLER MEAL PROCESSING MEAL LOADING	0.146 0.162 1.04 0.074 0.494 0.6 0.72 1.47 1.8 1.8 0.27	50 77.7 77.7 77.7 50 50 87 67.6 67.6	0 0 0 70 70 99.7 70 99.7	16333 16333 16333 16333 25412 16333 25412 11944 11944 11944	1192 2056 13198 939 6269 2287 5880 32499 44 4360 654
TOTAL					69386

SS 6 HISTORICAL ACTUAL PM10 EMISSIONS FOURTH QTR AVG.

OPERATION	EMISSION FACTOR (LB TSP/TON)	%PM10	CONTROL EFF. %	THROUGHPUT TONS	EMISSIONS (LB/QTR)
SEED CLEANERS 1ST LINTERS 2ND LINTERS 1ST BEATERS 2ND BEATERS UNLOADING BALE PRESSES HULL & SEP. SOLVENT EXTR. PELLET COOLER MEAL PROCESSING MEAL LOADING	0.146 0.162 1.04 0.074 0.494 0.6 0.72 1.47 1.8 1.8 0.27	50 77.7 77.7 77.7 50 50 87 67.6 67.6	0 0 0 70 70 99.7 70 99.7	22257 22257 22257 22257 22257 34627 22257 34627 16274 16274 16274	1625 2802 17985 1280 8543 3116 8013 44285 59 5941 891
TOTAL					94548

SS 7

NATURAL GAS EMISSIONS

QUARTER	POLLUTANT	EMISSION FACTOR (LB/MMCF)	GAS USAGE (MMSCF)	EMISSIONS (LB/QTR)
FIRST	NOX VOC CO PM10 SOX	140 2.8 35 3 0.6	35.9 35.9 35.9 35.9 35.9	5026 101 1257 108 22
SECOND	NOX VOC CO PM10 SOX	140 2.8 35 0.6	35.6 35.6 35.6 35.6	4984 100 1246 107 21
THIRD	NOX VOC CO PM10 SOX	140 2.8 35 3 0.6	22.9 22.9 22.9 22.9 22.9	3206 64 802 69 14
FOURTH	NOX VOC CO PM10 SOX	140 2.8 35 3.6	31.1 31.1 31.1 31.1 31.1	4354 87 1089 93 19



Producers Cotton Oil 2365 E. North Ave. - Fresno P/O No. 1030040103

EXPELLER ROOM

- 1 Steel Surge Bin
- 1 Buck Flow Shain Convertor
- 2 85" French Oil Cookers
- 8 Expellers w/36" Cookers
- 2 Plate Filter Units (36" x 32")
- 1 Sparkler Plate Filter
- 2 Heat Exchanger Oil Cooler Units
- 1 Oil Screening Tank
- 2 6" Vertical Sump Pumps
- 2 2" Oil Recirculation Pumps
- 1 4" Oil Pump
- 1 3" Oil Pump
- 1 2" Oil Pump
- 1 5" Centrifugal Pump
- 2 2" Filter Pumps
- 1 2" Pre-Press Oil Pump
- 3 9" Screw Conveyors
- 9 12" Screw Conveyors
- 2 16" Screw Conveyors
- 1 9" Roto Lift
- 1 12" Roto Lift
- 1 16" Roto Lift
- 2 9' Dia. Steel Tanks
- .1 3" Oil Pump
 - 1 2" Oil Pump 1 9'3 Surge Cake Bin
 - 3 Vent Fans

CAKE PREPARATION ROOM

- 1 16" Screw Conveyor
- 2 Granulator Crusher
- 1 10" x 42" Roller Hill
- 1 12" Screw Conveyor
- 1 18" x 30" Memco Roller Mill
- 1 Bulk-Flo Conveyor

HULL HOUSE

- 1 14" Belt Floor Conveyor
- 1 Bucket Elevator
- 1 12" Roof Screw Conveyor
- 1 9" Screw Conveyor (Floor)
- 1 Chain Drag Conveyor (Outside Bldg)
- 1 54" Chain Drag Conveyor

Producers Cotton Oil 2365 E. North Ave. - Fresno P/O No. 1030040103

Rating: 303 h.p.

Conditions:

- 1) Maintain premises and equipment to prevent excessive dusting.
- 2) Each year report process weights and operating schedule to FCAPCD.

Simeon T. Bugay Air Quality Engineer

Simeon T. Bugay
Air Quality Engineer



FRESNO COUNTY AIR POLLUTION CONTROL DISTRICT 1221 Fulton Mall, Fresno, California 93721 Telephone: (209) 445-3239

PERMIT TO OPERATE

A Permit to Operate is hereby granted to:

Producers Cotton Oil

For equipment located at:

2365 East North Avenue, Fresno, California

Description: cottonseed unloading and storage facilities to include:

SEED HOUSE NO.1

- 1 60' x 20' x 10'6 Unloading Pit w/16" Screw Conveyors w/24" Screw Conveyors
- 1 5" x 3" Double Bucket Elevator
- 2 84" Cyclone Collectors
- 1 24" Roof Screw Conveyor
- 1 14" Floor Belt Conveyor
- 2 4'-10 x 20' Seed Feeders
- 1 16" x 8" Bucket Elevator
- 1 24" Belt Conveyor (Truss Frame to Mill Bldg.)
- 2 Cooling Fan's

SEED HOUSE NO.3

- 1 16" Screw Conveyor
- 1 16" Roof Screw Conveyor
- 1 14" x 7" Bucket Elevator

Issue Date January 5, 1988

Number: 1030040101

This Permit becomes void upon any change of ownership or location.

George Bleth Air Pollution Control Officer

Equipment modification requires a new Permit to By: Simeon T. Bugay

Operate.

Simeon T. Bugay

Air Quality Engineer

Producers Cotton Oil 2365 E. North Ave., Fresno P/O No. 1030040101

- 1 12" Floor Screw Conveyor
- 1 12" Floor Screw Conveyor
- 1 12" Pit Unloading Screw Conveyor
- 1 16" Screw Conveyor (Truss Frame to No. 4)
- 1 16" Screw Conveyor (Truss Frame to Planting Seed)
- 2 Cooling Fans

SEED HOUSE NO. 4

- 1 16" Belt Conveyor
- 1 16" Screw Conveyor
- 1 16 Pit Unloading Screw Conveyor
- 1 14" x 7" Bucket Elevator
- 1 12" Floor Screw Conveyor
- 1 12" Roto Lift
- 1 12" Screw Conveyor (to Seed House No. 3)
- 2 Cooling Fans

SEED HOUSE NO.5

- 1 16" Screw Conveyor (Truss Frame From No. 4)
- 1 16" Screw Conveyor (Truss Frame)
- 1 Cooling Fan

SEED HOUSE NO. 3

- 1 24" Screw Conveyor (Truss Frame From No. 1)
- 1 24" Rood Screw Conveyor
- 1 24' Screw Conveyor
- 1 24" Screw Conveyor (To Seed Pile No. 7) 1 4' Inclined Chain Drag Conveyor
- 2 Cooling Fan's

SEED PILE NO.3

- 1 24" Screw Conveyor
- 2 Cooling Fan's

SEED PILE NO.7

- 1 24" Screw Conveyor
- 6 Cooling Fan's

Producers Cotton Oil 2365 E. North Ave., Fresno P/O No. 1030040101

SEED PILE No.6 & 10

- 3 Portable Inclined Drag Conveyors
- 1 Portable Inclined Belt Conveyor
- 8 Cooling Fans

Rating 1300 h.p.

Conditions: 1) Maintain premises and equipment to prevent excessive dusting.

2) Each year report process weights and operating schedule to FCAPCD.

Simeon T. Bugay Air Quality Engineer

Simeon T. Bugay Air Quality Engineer

FRESNO COUNTY AIR POLLUTION CONTROL DISTRICT 1221 Fulton Mall, Fresno, California 93721 Telephone: (209) 445-3239

PERMIT TO OPERATE

A Permit to Operate is hereby granted to:

Producers Cotton Oil

For equipment located at:

2365 East North Avenue, Fresno, California

Description: Cottonseed cleaning and delinting process to include the following equipment:

Mill Building

A-Lint Room

- 2 Rock Trap Units
- 3 16" Screw Convertor
- 2 70" Fans
- 4 44" Dia. Cyclones
- 13 16" Screw Conveyors
- 14 12" Screw Conveyors
- 23 9" Screw Conveyors
- 4 16" Roto Lifts
- 3 9" Roto Lifts
- 12 Bauer Seed Cleaners
- 1 Seed Cleaners Trash Belt Conveyor
- 38 Cotton Seed Linter (1st cut)

Issue Date January 5, 1988

Number: 1030040102

This Permit becomes void upon any change of ownership or location.

George Bleth Air Pollution Control Officer

Equipment modification requires a new Permit to Operate.

Simeon T. Bugay

Air Quality Engineer

DOH 4810-26 (12-86)



Producers Cotton Oil 2365 E. North Avenue, Fresno P/O No. 1030040102

80 - Cotton Seed Linters (2nd cut)

2 - Mote Beaters (1st cut)

8 - Mote Beaters (2nd cut)

5 - Saw Gummers

4 - Lint Cleaners

2 - Safety Shakers

34 - Transfer Fans w/Cyclone Colectors

1 - 16' x 8" Bucket Elevator

6 - Black Seed Storage Tanks

3 - Steel Trash Bins (10' x 8' x 28' 7 High)

1 - 5" x 9" Bucket Elevator

Multiple banks of 2D-2D and 1D-3D cyclones for PM control

Bale Press Building

- 1 PPSD First Cut Bale Press
- 1 PCX 1 2nd Cut Bale Press
- 2 HYD Press Pump Units
- 1 36" Lint Condenser
- 1 Electric Boiler (10 HP Steam King)
- 1 Motor Press
- 1 Hyd Pump Unit
- 1 60" Battery Condenser
- 1 ~ 72" Lummus Condeser
- 4 12" Screw Conveyors
- 3 12" Roto Lift
- 6 Transfer Fans w/Cyclone Collectors
- 1 Wheelabrator-Frye Dual Dust Filter

Rating: 768.5 h.p.

Conditions:

- 1) Maintain premises and equipment to prevent excessive dusting.
- 2) Each year report process weights and operating schedule to FCAPCD.

FRESNO COUNTY AIR POLLUTION CONTROL DISTRICT 1221 Fulton Mall, Fresno, California 93721 Telephone: (209) 445-3239

PERMIT TO OPERATE

A Permit to Operate is hereby granted to:

Producers Cotton Oil

For equipment located at:

2365 East North Avenue, Fresno, California

Cottonseed hulling and separating facilities to include the Description:

following equipment:

SEPERATOR ROOM

- 16" x 8" Bucket Elevator

- Steel Surge Bin (10' x 6' x 18' High)

- Steel Surge Bin (Over Safety Shaker)

- 12" Roto Lifts 5

- 16" Roto Lift 1

9" Screw Conveyors 10

- 12" Screw Conveyors 20

3 - 60" Crushing Rolls

- Conditioning Cased Cookers 2

- Feeder Dizopper Surge Bins 13

8 - Separator Hullers

6 - 54" Huller Shakers

- 48" Safety Shaker 1

- Hi-Speed Shaker 6

- Vibrating Feeders

- IMPCO Hull & Trilings Beater

- IMPCO Decorticators

1 - Sutobuilt 14" x 23" Blower

15 - Transfer Fans w/Cyclone Collectors

Issue Date January 5, 1988

Number: 1030040103

This Permit becomes void upon any change of ownership or location.

George Bleth Air Pollution Control Officer

Equipment modification requires a new Permit to By: Survey 7. Bus Operate. Simeon T. Bugay

Air Quality Engineer

DOH 4810-26 (12-86)

Producers Cotton Oil 2365 E. North Ave. - Fresno P/O No. 1030040103

EXPELLER ROOM

- 1 Steel Surge Bin
- 1 Buck Flow Shain Convertor
- 2 85" French Oil Cookers
- 8 Expellers w/36" Cookers
- 2 Plate Filter Units (36" x 32")
- 1 Sparkler Plate Filter
- 2 Heat Exchanger Oil Cooler Units
- 1 Oil Screening Tank
- 2 6" Vertical Sump Pumps
- 2 2" Oil Recirculation Pumps
- 1 4" Oil Pump
- 1 3" Oil Pump
- 1 2" Oil Pump
- 1 5" Centrifugal Pump
- 2 2" Filter Pumps
- 1 2" Pre-Press Oil Pump
- 3 9" Screw Conveyors
- 9 12" Screw Conveyors
- 2 16" Screw Conveyors
- 1 9" Roto Lift
- 1 12" Roto Lift
- 1 16" Roto Lift
- 2 9' Dia. Steel Tanks
- .1 3" Oil Pump
- 1 2" Oil Pump 1 9'3 Surge Cake Bin
- 3 Vent Fans

CAKE PREPARATION ROOM

- 1 16" Screw Conveyor
- 2 Granulator Crusher
- 1 10" x 42" Roller Hill
- 1 12" Screw Conveyor
- 1 18" x 30" Memco Roller Mill
- 1 Bulk-Flo Conveyor

HULL HOUSE

- 1 14" Belt Floor Conveyor
- 1 Bucket Elevator
- 1 12" Roof Screw Conveyor
- 1 9" Screw Conveyor (Floor)
- 1 Chain Drag Conveyor (Outside Bldg)
- 1 54" Chain Drag Conveyor

Producers Cotton Oil 2365 E. North Ave. - Fresno P/O No. 1030040103

Rating: 303 h.p.

Conditions:

- 1) Maintain premises and equipment to prevent excessive dusting.
- 2) Each year report process weights and operating schedule to FCAPCD.

Simeon T. Bugay Air Quality Engineer

Simeon T. Bugay Air Quality Engineer A Permit to Operate is hereby granted to:

PRODUCERS COTTON OIL

For equipment located at:

2365 E. North Avenue, Fresno, California

DESCRIPTION:

Oilseed Solvent Extraction plant designed to process 600 plus tons of cotton seed and safflower seed on a daily basis. The plant is equipped with one (1) Mineral Oil Scrubber (MOS), controlling the emissions of volatile organics (Hexane) from the extraction process. The oilseed extraction process include the following:

- 1. A 12,000 lb/hr oil basis Miscella Retinery
- 2. One (1) Rotocel Extractor
- 3. One (1) Desolventizer Toaster
- Solvent Storage Tank 4.
- One (1) Solvent Work Tank 5.
- One (1) Oil Skimmer Sump (10' x 20') 6.
- Two (2) Evaporator Solvent Condenser 7.
- 8. Soapstock Desolventizing Facility
- One (1) DRAVO, Model "C", 75-CFM Mineral Oil Rec. System 9.
- One (1) Meal Cooler 10.
- One (1) WHEELABRATOR FRYE 3-Module, Number 1217F-171055 Fabric 11. Collector
- One (1) 62" diameter "1D-3D" Cyclone Collector 12.

Rating: 595.87 HP

CONDITIONS:

- 1. On a yearly basis, the Producers Cotton Oil Company shall report to the Fresno County Air Pollution Control District (FCAPCD) the total solvent usage (Hexane) and the total annual tonnage of the materials used for oil extraction.
- The Mineral Oil Scrubber shall be maintained at all times. Flushing the system once a year to remove the accumulation of dirt and other residue shall be performed.
- The Wheelabrator Frye, 3 Module Baghouse shall be maintained at all times.

(Conditions are continued on Page 2)

Issue Date: January 5, 1989

This Permit becomes void upon any change of ownership or location.

Equipment modification requires a new Permit to Operate.

P/O # 1030040104R1

GEORGE BLETH Air Pollution Control Officer

et By: Sime Simeon T. Bugay

Supervising Air Quality Engineer

DOH 4810-25 (6/86)

PO5/pg33

Producers Cotton Oil 4465 E. North Avenue P/O # 1030040104R1 Page 2

CONDITIONS: (Cont'd.)

- 4. Source testing for Volatile Organic Compounds to meet the District Rule 409.10 performed by an independent source testing firm shall be upon the discretion of the FCAPCD. Producers Cotton Oil Company will be notified in advance by the FCAPCD staff if source testing is required.
- 5. In accordance with Rule 409.10, Producers Cotton Oil must possess and maintain a Portable Hydrocarbon Detector approved by the District Air Pollution Control Officer.
- 6. Any modification of the solvent extraction or Miscella refining processes, equipment, hours of operation, throughput, control equipment, motors and handling equipment requires prior written District approval.
- 7. Daily Emission Limits (Total facility):

PM = 1,272.6 lb/day

 $SOx \approx 0.61 \text{ lb/day}$

NOx = 137.7 lb/day

0(- CO = 34.3 lb/day)

MC = 375.6 lb/day

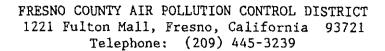
8. Daily Emission Limits (Solvent Extraction):

ROG = 370 lb/day (as Hexane)

QY By:

Simeon T. Bugay Supervising Air Quality Engineer

permit5/pg34



PERMIT TO OPERATE

A Permit to Operate is hereby granted to:

Producers Cotton Oil

For equipment located at:

2365 East North Avenue, Fresno, California

Description: Cottonseed Bulk meal storage facility to include:

MEAL LOADING

1 - Dump Pit Screw Conveyor

1 - Bucket Elevator

1 - Telescope Loading Spout

1 - 128 Ton - 19'2' Dia. Storage Tank

1 - 9'6' Dia. Storage Tanks

1 - 9'-0 Dia. Fats Tank

7 - F33 Syntron Virba-Flow Feeders (one each/silo)

1 - Fats Pump 1.5" 2 hp

1 - 7MB Sutorbuilt Blower

1 - 5MC Pump Blower

1 - 10" x 12" Airlock Feeder

1 - Dracco Model 2535 Dust Collector Baghouse with automatic shakers and 2-2D-2D cyclones

1 - Transfer Fan

Issue Date: January 5, 1988

This Permit becomes void upon any change of ownership or location.

Equipment modification requires a new Permit to Operate.

DOH 4810-26 (12-86)

Number: 1030040105

George Bleth
Air Pollution Control Officer

By: Simeon T. Bugay

Air Quality Engineer

Producers Cotton Oil 2365 E. North Ave .- Fresno P/O 1030040105

SEED_HOUSE_NO. 2

- 1 16" Roof Screw Conveyor
- 1 30" Cyclone Collector (at roof)
- 1 Kleissler Filter w/Transfer Fan
- 1 30" Cyclone Collector w/Transfer Fan
- 1 Dracco Two Compartment Dust Collector
- 1 Transfer Fan
- 1 14" x 23" Sutorbuilt Blower 2 12" Screw Conveyor

NEW BULK MEAL STORAGE HOUSE

- 1 12" Roof Screw Conveyor
- 1 12" Floor Screw Conveyor
- 1 Kleissler Collector
- 2 Transfer Fans & Cyclone Collector
- 1 Sutorbilt Blower No. 2020

Rating: 350 h.p.

Conditions: 1. Maintain premises and equipment to prevent excessive dusting.

Page 1 of 2

FRESNO COUNTY AIR POLLUTION CONTROL DISTRICT 1221 Fulton Mall, Fresno, California 93721 Telephone: (209) 445-3239

PERMIT TO OPERATE

A Permit to Operate is hereby granted to:

Producers Cotton Oil

For equipment located at:

2365 East North Avenue, Fresno, California

Description:

Cottonseed meal processing facility to include the following equipment:

Meal Warehouse (Meal Processing)

- 1 Century California Pellet Mill
- 1 Richardson Bag Scale
- 1 Sack Sewer
- 1 14" X 23"Sutorbuilt Bloser
- 1 Stack Blinders
- 1 No. 1 Rotez Shaker No. 532
- 1 No. 2 Rotex Shaker No. 532
- 1 Model 7N-8 Sutorbuilt Blower
- 1 Model 8L-B Sutorbuilt Blower
- 1 Safflower overflow Bin
- 2 Safflower Rotex Shakers
- 2 Baver Meal Grinders
- 2 Steel Surge Bins (7'x 10' x 11')
- 1 Gyro Pellet Shaker
- 1 Grumber Model 960
- 1 Sprout-Waldron Crumble Cooler
- 4 8" x 5" Bucket Elevators
- 1 Dixon SK-7 12- HP Boiler
- 1 Burks 3 HP Boiler Feed Pump
- 1 12" x 20" Sutorbuilt Blower
- 1 Beta Dual Ration Simplitrol
- 1 25,000 CFM Wheelabrator-Frye Dust Filter
- 3 Transfer Fans w/Cyclone Collectors

Rating: 914.25

Issue Date: January 5, 1988

Number: 1030040106

This Permit becomes void upon any change of ownership or location.

George Bleth
Air Pollution Control Officer

Equipment modification requires a new Permit to Operate.

Simeon T. Bugay

Air Quality Engineer

DOH 4810-26 (12-86)

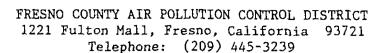
Producers Cotton Oil 2365 E. North Ave. - Fresno P/O# 1030040106

Conditions:

- 1. Maintain premises and equipment to prevent excessive dusting.
- 2. Each year report process weights and operating schedule to Fresno County Air Polluton Control District.

Simeon T. Bugay Air Quality Engineer

Simeon T. Bugay Air Quality Engineer



PERMIT TO OPERATE

A Permit to Operate is hereby granted to:

Producers Cotton Oil

For equipment located at:

2365 East North Avenue, Fresno, California

Description:

Cottonseed meal loading facility consisting of the following equipment:

- 2 Truck Loading Tunnels
- 4 50 Ton Capacity Storage Bins
- 1 Buhler #MPSE 28/30 Rotary Airlock Feeder
- 1 3" Pneumatic Conveyor Blow Line
- 1 Sutorbilt #6MB Rotary Positive Blower
- 2 Wheelabrator-Frye
- 2 Module Type 1218 Ultra Jet Fabric Filters with 200 H.P. fan

Rating: 300 h.p.

Conditions:

1. Maintain premises and equipment to prevent exceesive dusting.

Issue Date January 5, 1988

This Permit becomes void upon any change of ownership or location.

Equipment modification requires a new Permit to Operate.

Number: 1030040107

George Bleth Air Pollution Control Officer

Simeon T. Bugay

Air Quality Engineer

DOH 4810-26 (12-86)

 D^{\pm}



FRESNO COUNTY AIR POLLUTION CONTROL DISTRICT 1221 Fulton Mall, Fresno, California 93721 Telephone: (209) 445-3239

PERMIT'TO OPERATE

A Permit to Operate is hereby granted to:

Producers Cotton Oil

For equipment located at:

2365 East North Avenue, Fresno, California

Description:

Cottonseed planting seed preparation facility to include the following equipment:

- 1 Surge bin 7' x 7'
- 1 Bauer Bros. Model #299 Cottonseed Cleaner
- 1 80' x 300' planting seed bulk storage house
- 1 Fortworth Model BC-4 Lint Beater
- 1 Murray Bale Press
- 10 Carver Model #176 Saw Delinting Machines
- 1 48" x 72" Shaker
- 1 Carver 54" x 120" Scalping Shaker
- 2 Clipper Super 298-D Cleaners
- 1 Gustafson Model #5-600 SS Liquid Type Seed Treater
- 1 36" dia. x 6' Long Polishing Drum
- 1 16' O.D. x 16' Surge Bin

550 h.p.

Issue Date: January 5, 1988

Number: 1030040108

This Permit becomes void upon any change of ownership or location.

George Bleth Air Pollution Control Officer

Equipment modification requires a new Permit to Operate.

Air Quality Engineer

DOH 4810-26 (12-86)



Producers Cotton Oil 2365 E. North Ave. -Fresno P/O#1030040108

4 - 72" O.D. "2D-2d" cyclone collectors

2 - 30" O.D. "2D-2D" cyclone collectors

2 - 26" O.D. "2D-2D" cyclone collectors

2 - 62" O.D. "2D-2D" cyclone collectors

1 - 16" O.D. "2D-2D" cyclone collectors

1 - 44" O.D. "2D-2D" cyclone collectors

1 - 28" O.D. "2D-2D" cyclone collectors

1 - 60" O.D. "2D-2D" cyclone collectors

1 - 34" O.D. "2D-2D" cyclone collectors

1 - #3 Storage warehouse

Associated screw conveyors and bucket elevators

Conditions:

- 1. Maintain premises and equipment to prevent excessive dusting.
- 2. Each year report process weights and operating schedule to FCAPCD.

FRES COUNTY AIR POLLUTION CONTROL IN RICT 1221 Fulton Mall, Fresno, CA 93721 Telephone: (209) 445-3239

PERMIT TO OPERATE

A Permit to Operate is hereby granted to:

PRODUCERS COTTON OIL

For equipment located at:

2365 E. North Avenue, Fresno, California

DESCRIPTION:

One (1) Dixon Boiler, 400 Bhp, equipped with one (1) Johnson Model 400 Burner to be fired with Natural Gas. Boiler provides steam to the solvent extraction processes.

OPERATIONAL CONDITIONS:

- 1) Maintain and operate boiler in accordance with manufacturer's specifications.
- 2) Natural Gas Consumption not to exceed 20,000 cubic feet per hour.
- 3) Boiler is to be fired with Natural Gas only.
- 4) Total facility emissions not to exceed those limits as set forth in P/O #1030040104.
- 5) Operating Schedule not to exceed the following:

24 hrs/day, 7 days/wk, 46 wks/yr.

- 6) Any modification of process, operating schedule, fuel, or equipment requires prior written consent from the District.
- 7) Report annual natural gas consumption to the District 30 days prior to the annual renewal date.
- 8) Boiler Emission Limits:

Pollutant	Emission	(lb/day)
PM	2.4	
SO _v	0.3	
SO _x NO _x CO	67.2	
coî	16.8	
ROG	2.8	

Rating: 21 x 10⁶ Btu/hr

Issue Date: January 5, 1990

P/O # 1030040110

This Permit becomes void upon any change of ownership or location.

Equipment modification requires a new Permit to Operate.

GEORGE BLETH

Air Pollution Control Officer

Simeon T. Bugay

Supervising Air Quality Engineer

FRÍ O COUNTY AIR POLLUTION CONTROL¹ STRICT 1221 Fulton Mall, Fresno, CA 93721 Telephone: (209) 445-3239

PERMIT TO OPERATE

A Permit to Operate is hereby granted to:

PRODUCERS COTTON OIL

For equipment located at:

2365 E. North Avenue, Fresno, California

DESCRIPTION:

One (1) Kewanee Boiler, 400 Bhp, equipped with one (1) Johnson Model 400 Burner to be fired with Natural Gas. Boiler provides steam to the solvent extraction processes.

OPERATIONAL CONDITIONS:

- Maintain and operate boiler in accordance with manufacturer's specifications.
- 2) Natural Gas Consumption not to exceed 20,000 cubic feet per hour.
- 3) Boiler is to be fired with Natural Gas only.
- 4) Total facility emissions not to exceed those limits as set forth in P/O #1030040104.
- 5) Operating Schedule not to exceed the following:

24 hrs/day, 7 days/wk, 46 wks/yr.

- 6) Any modification of process, operating schedule, fuel, or equipment requires prior written consent from the District.
- 7) Report annual natural gas consumption to the District 30 days prior to the annual renewal date.
- 8) Boiler Emission Limits:

Pollutant	<u>Emission (lb/day)</u>
PM	2.4
so _x	0.3
NO _x	67.2
co	16.8
ROG	2.8

Rating: 21 x 10⁶ Btu/hr

Issue Date: January 5, 1990

This Permit becomes void upon any change of ownership or location.

Equipment modification requires a new Permit to Operate.

P/O # __1030040111

GEORGE BLETH

Air Pollution Control Officer

pt

Simeon T. Bugay

Supervising Air Quality Engineer

PERMIT TO OPERATE

A Permit to Operate is hereby granted to:

PRODUCERS COTTON OIL

For equipment located at:

2365 E. North Avenue, Fresno, California

DESCRIPTION:

Oilseed Solvent Extraction plant designed to process 600 plus tons of cotton seed and safflower seed on a daily basis. The plant is equipped with one (1) Mineral Oil Scrubber (MOS), controlling the emissions of volatile organics (Hexane) from the extraction process. The oilseed extraction process include the following:

- 1. A 12,000 lb/hr oil basis Miscella Retinery
- 2. One (1) Rotocel Extractor
- One (1) Desolventizer Toaster
- 4. Solvent Storage Tank
- 5. One (1) Solvent Work Tank
- 6. One (1) Oil Skimmer Sump (10' x 20')
- 7. Two (2) Evaporator Solvent Condenser
- 8. Soapstock Desolventizing Facility
- 9. One (1) DRAVO, Model "C", 75-CFM Mineral Oil Rec. System
- 10. One (1) Meal Cooler
- 11. One (1) WHEELABRATOR FRYE 3-Module, Number 1217F-171055 Fabric Collector
- 12. One (1) 62" diameter "1D-3D" Cyclone Collector

Rating: 595.87 HP

CONDITIONS:

- 1. On a yearly basis, the Producers Cotton Oil Company shall report to the Fresno County Air Pollution Control District (FCAPCD) the total solvent usage (Hexane) and the total annual tonnage of the materials used for oil extraction.
- The Mineral Oil Scrubber shall be maintained at all times. Flushing the system once a year to remove the accumulation of dirt and other residue shall be performed.
- 3. The Wheelabrator Frye, 3 Module Baghouse shall be maintained at all times.

(Conditions are continued on Page 2)

Issue Date: January 5, 1989

P/O # 1030040104R1

This Permit becomes void upon any change of ownership or location.

GEORGE BLETH
Air Pollution Control Officer

Equipment modification requires a new Permit to Operate.

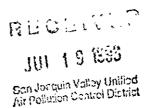
Simeon T. Bugay

Supervising Air Quality

Engineer

DOH 4810-25 (6/86) PO5/pg33 16 July 1993

Mr. Richard McVaigh San Joaquin Valley Unified APCD 1999 Tuolumne Street, Suite 200 Fresno, Ca 93721



RE: Emission Reduction Credits - Producers Fresno Mill

Dear Mr. McVaigh:

I appreciate the opportunity to submit additional information to support Producers position regarding the emissions generated from our Hulling & Separating operations from our former Oil Mill facility. As part of the original application engineering analysis submitted to Fresno County to bank the ERC's from this facility a detailed Mass Balance was submitted for all emissions point at the Mill. I have recapped the emission points from the Hulling & Separating operations in the enclosed table. The emissions, in PM, per ton of product processed is 2.04 lbs.. This is significantly different from the information which you are proposing to use from a Source Test performed at Ranchers Cotton Oil. The Ranchers Source Test results were submitted as a basis to develop the grain loadings used to confirm the grain loading used in Producers Mass Balance calculations.

The process rate which was submitted with the application was 22.5 tons/hour. This is greater than the Ranchers throughput of 15 tons/hour. As no specific Source Test Data was available, submittal of the Mass Balance engineering calculations was done. The Ranchers Source Test only considered 17600 cfm of Air Movement. The Producers Mass Balance approach considered the complete Process Air Flow not just a portion thereof. Producers Air Flow was calculated at 87000 cfm. Producers and Ranchers Hull & Separation processes wer not identical.

Detailed Process Flow Diagrams, Equipment Descriptions and Engineeri calculations were submitted with the original application to provide the bas for Producers request for banking ERC's from the former operations permit through Fresno County APCD. This information is again submitted for y reference.

MAIN OFFICE: 1371 STANISLAUS FRESNO, CA 93706/P.O. BOX 1832 FRESNO, CA 9371

Mr. McVaigh Mill ERC's Page 2

Producers requests this information specific to the Hulling & Separating operation be considered in the quantity of ERC's banked from the former Mill operation. The reference specific to the PM₁₀ percentage generated from the Hulling & Separation operations is cited in an article provided to Producers from the District. Though the information is limited it does indicate the PM₁₀ percentage is grater than the assumed 50%. The Ranchers Source Test does not qualify the PM₁₀ fraction, hence the percentages cited by the District is acceptable at 87%. The Hulling & Separation operation does process previously processed materials and a considerable amount of trash which would be very fine is generated, hence this PM₁₀ percentage is reasonable.

If I can provide any additional information, please let me know.

incerely.

Steven E. White Corporate Engineer

SW:

ncvai712

EMISSIONS AT MILL BUILDING

PERMIT TO	FAN			RPM		RPM	С	YCLONE	S		GRAIN		
OPERATE#	NO.	SIZE	MANUFACTURER	FAN	HP	MOTOR	NO.	SIZE	DIA.	CFM	LOAD	#/HR	#/TON/HR
FCAP-1030040103	38	35	FORT WORTH	1800	15	1745	2	2D – 2D	32"	5600	0.060	2.880	0.1280
FCAP-1030040103	45	45	NATIONAL	1042	20	1760	4	2D - 2D	28"	8000	0.075	5.143	0.2286
FCAP-1030040103	39	45	NATIONAL	1042	20	1760	1	2D – 2D	56"	8000	0.060	4.114	0.1829
FCAP-1030040103	46	30	N.Y. BLOWER	1760	5	1735	1	2D – 2D	36"	1275	0.075	0.820	0.0364
FCAP-1030040103	41	35	MURRAY	1770	10	1760	2	2D - 2D	30"	4700	0.060	2.417	0.1074
FCAP-1030040103	47	45	NATIONAL	1042	20	1760	4	2D - 2D	28"	8000	0.075	5.143	0.2286
FCAP-1030040103	43	35	MURRAY	1745	10	1760	2	2D - 2D	30"	4700	0.060	2.417	0.1074
FCAP-1030040103	48	35	FORT WORTH	1832	15	1760	2	2D - 2D	36"	6500	0.075	4.179	0.1857
FCAP-1030040103	40	45	IMPCO	1042	50	1760	2	2D - 2D	54"	16000	0.060	8.229	0.3657
FCAP-1030040103	44	40	FORT WORTH	1375	20	1760	2	1D - 3D	42"	9000	0.030	2.314	0.1029
FCAP-1030040103	42	35	MURRAY	1745	10	1760	2	2D - 2D	30"	4700	0.060	2.417	0.1074
FCAP-1030040103	37	3552	FORT WORTH	1785	15	1730	2	2D - 2D	32"	5600	0.060	2.880	0.1280
FCAP-1030040103	36	60	IMPCO	1100	40	1745	2	1D - 3D	48"	11200	0.030	2.880	0.1280

SUBTOTAL 93275 45.8325 2.037

TABLE IV

YEAR	COTTON	SAFFLOWER	TOTAL	
1988	108420	42108	150528	
1989	103869	53874	157743	
TOTAL	212289	95982	308271	

TABLE V

	AVERAGE	AVERAGE	AVERAGE
	COTTONSEED	SAFFLOWER	TOTAL
	THROUGHPUT	THROUGHPUT	THROUGHPUT
	(TONS)	(TONS)	(TONS)
1st Qtr.	24413	11038	35451
2nd Qtr.	32480	14685	47165
3rd Qtr.	20911	9454	30365
4th Qtr.	28341	12814	41155

PRODUCERS COTTON OIL COMPANY FRESNO, CALIFORNIA

Description of Process Cottonseed Hulling and Separating Facilities (7/30/81)

The cottonseed hulling and separating facilities were designed for an average operation of 550 tons and a surge capacity of 600 tons per 24-hour day when producing 41% protein meal. It is equipped with one (1) 48" x 120" Safety Shaker, six (6) Carver 48" Perfection Hullers with 54" x 120" Shaker Separators, three (3) IMPCO Decorticators, six (6) IMPCO High Speed Shakers, six (6) Carver Hull and Seed Separators, four (4) Double Drum Beaters, one (1) Single Drum Beater, two (2) Tailings Beaters, two (2) Purifiers, three (3) 5-high Crushing Rolls and various pneumatic conveying systems as required to facilitate the movement of seed, hulls, and trash through the plant.

It is now proposed to convert the facility from the production of 41% protein meal to 44% protein meal with the addition of the following equipment and modifications to the process:

- 1. Replace the #2 IMPCO Safflower Huller (rated at 150 tons/day) with two (2) Carver 48" Perfection Hullers (rated at 75 tons/day).
- 2. Purchase and install two (2) new Carver Model J-10 H & S Machines (#7 & #8).
- 3. Replace the #35 fan discharging 5,600 cfm into 2 32" O.D. 2D-2D cyclone collectors with one (1) #60 fan discharging 11,200 cfm into 2 48" 1D-3D cyclone collectors on System 36 to pneumatically transfer hulls from the #5, 6, 7, & 8 H & S Machines to the #1 Double Drum Beater.
- 4. Reconnect System 39 with the existing #45 fan discharging 8,000 cfm into one (1) 56" O.D. 2D-2D cyclone collector transferring hulls from the top and bottom trays of the #1 and #2 IMPCO Shakers to the IMPCO Hull and Tailings Beater.

- 5. Replace the #45 fan discharging 8,000 cfm into 4 28" O.D. 2D-2D cyclone collectors with one (1) new #70 fan discharging 16,000 cfm into 2 54" O.D. 1D-3D cyclone collectors on System #40 to transfer hulls from the top trays of IMPCO Shakers #3 & 4 and Huller Shakers #3 & 4 to the H & S Machines.
- 6. Replace the #40 fan discharging 7,000 cfm into 4 26" 0.D. 2D-2D cyclone collectors with one (1) new #45 fan discharging 9,000 cfm into 2 42" 0.D. 1D-3D cyclone collectors on System 44 to transfer hull pepper from the bottom tray of IMPCO Shakers #3 & 4 and OSHA dust from the lint room black seed scalping shakers to the purifier.

The revised process flow is outlined on PCOC Material Flow Diagram #M-850 (7/30/81) in accordance with the following schedule:

Hulling and Separating

by use of a syntron electromechanical vibratory feeder to a 12" screw conveyor to a 48" x 120" safety shaker to remove foreign materials such as tramp iron, bolts, and compacted lint before the seed is conveyed to the dehuiling machines. The hull, which surrounds the kernel or meat of the seed, is stiff, tough, and usually dark brown in color. Hulling is accomplished by a machine that employs a series of knives which cut the hull and thereby loosen it from the seed. The seed is cut coarsely to avoid oil absorption by the hulls, and the free meats are shaken out by passing the mixture over a 54" x 120" shaker separator. The hulls and uncut seed are passed through a hull and seed separator to remove the uncut seed which is returned to the original huller for further processing. The hulls are conveyed to a hull beater, to remove fine floury meats, and are then conveyed to finished hull storage for future shipment in bulk.

The free meats from the 54" huller shaker are scalped with adjustable

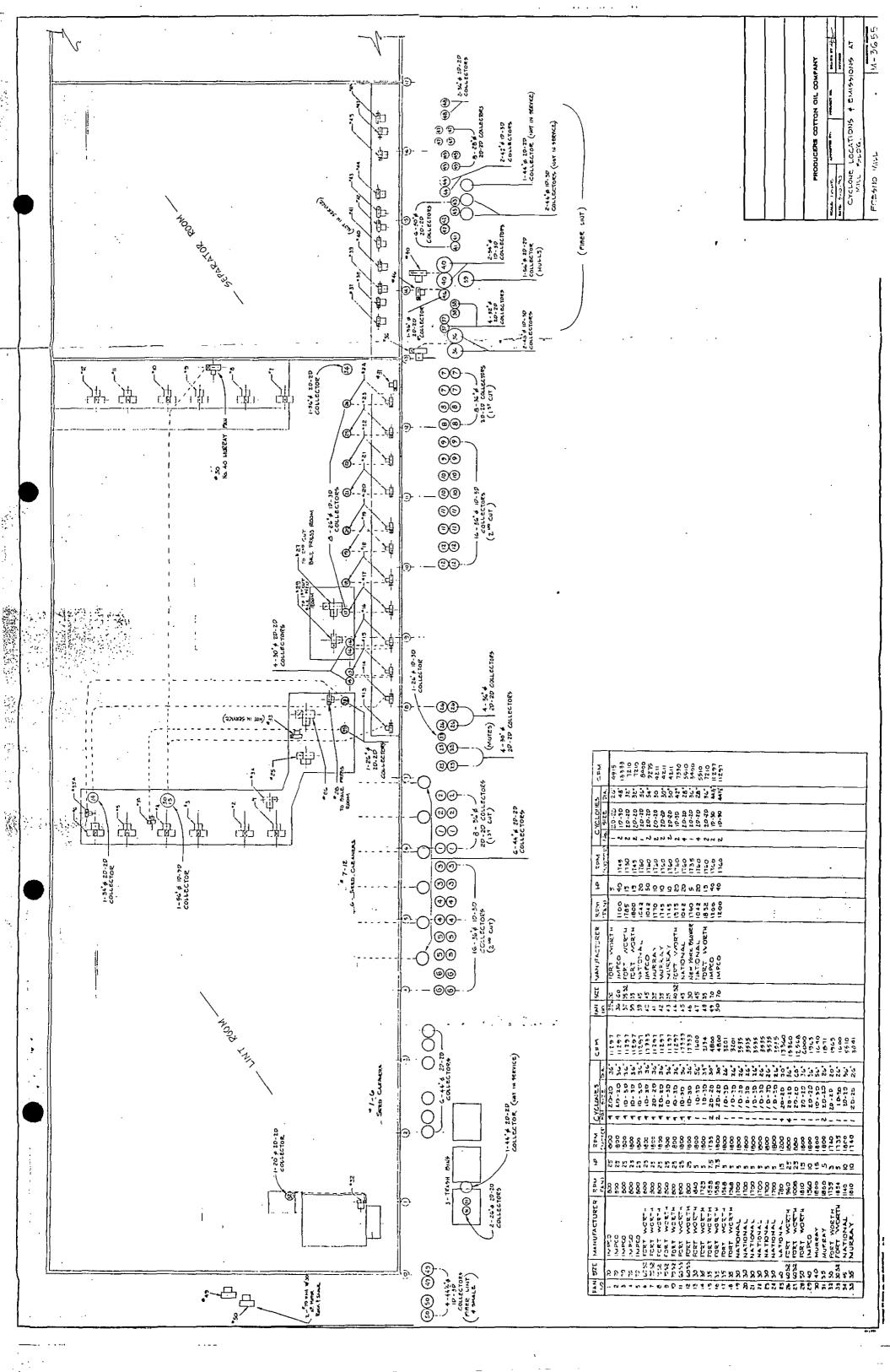
suction nozzles to remove floating hull particles which are conveyed to a meats purifier to separate the hull particles from the fine floury meats.

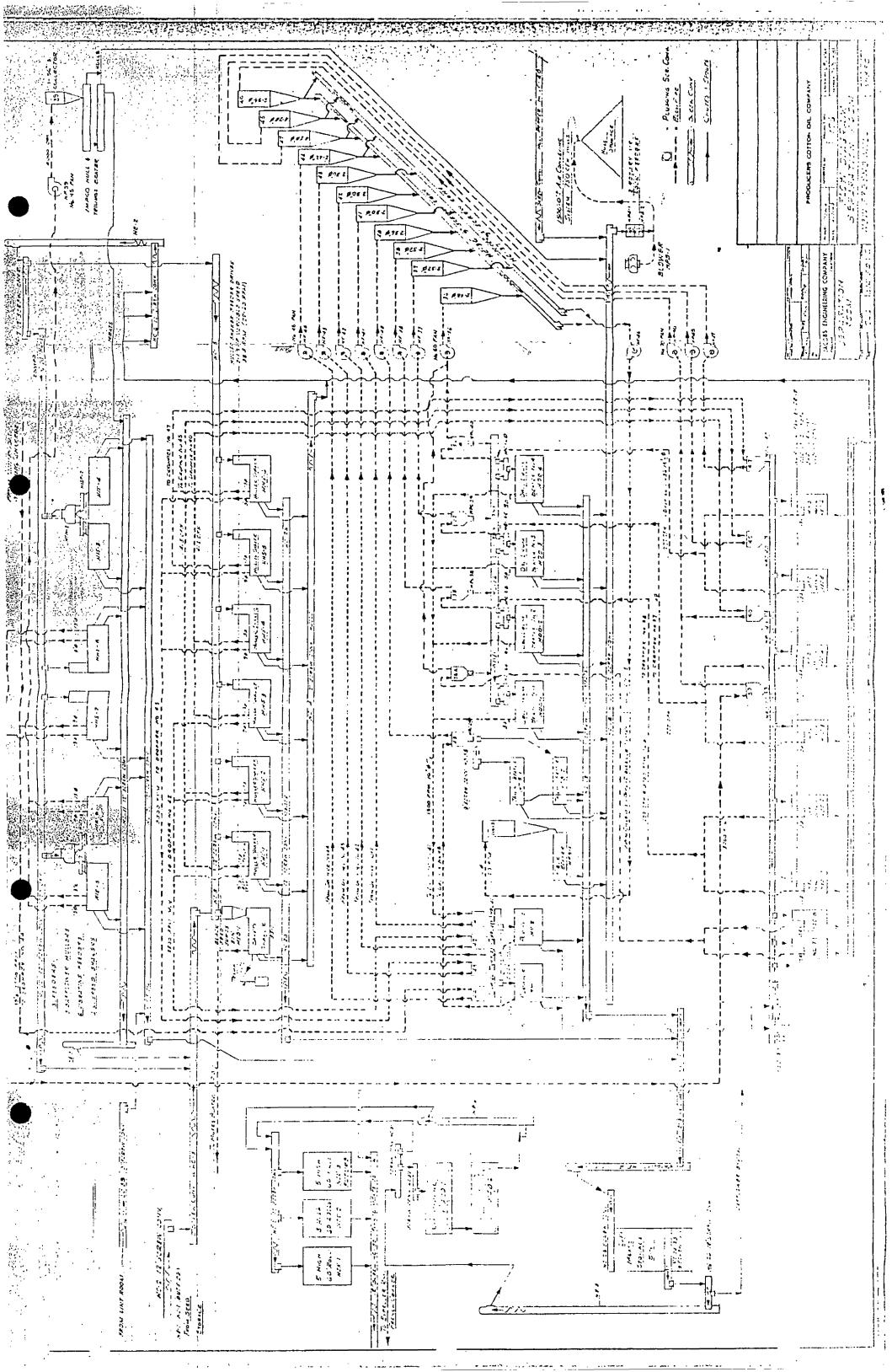
The meats from all of the machines are then collected in a bulk meats storage bin and are ready for extraction of the oil.

SEPARATION ROOM PNEUMATIC CONVEYING SYSTEMS (7/30/81)

	•	•			
Jem No.	Description	CFM	Fan	Motor	Collector
36	H & S Machines Hulls 5, 6, 7, & 8 to DD Beater	11,200	#60	40	2 - 48" 1D-3D
37	H & S Machines Hulls 3 & 4 to DD Beater	5,600	#35	15	2 - 32"
38	H & S Machines Hulls 1 & 2 to DD Beater	5,600	#35	15	2 - 32"
39	IMPCO Shakers 1 & 2 top and bottom trays hull pick-up to IMPCO Hull & Tailings Beater	8,000	#45	20	1 - 54"
40 -	IMPCO Shakers 3 & 4 and Huller Shakers #3 & #4 Top Tray to H & S Machines	16,000	#70	40	2 - 54" 1D-3D
41	DD Beaters #1, 2, 3 & 4 Hulls to Purifier	4,700	#35	10	2 - 30"
· 2	Huller Shakers #1, 2, &3 BTM Tray Hulls to Purifier	4,700	# 35 ·	10	2 - 30"
43	Huller Shakers #4, 5, & 6 BTM Tray Hulls to Purifier	4,700	#35	10	2 - 30"
44	IMPCO Shakers #3 & 4 BTM Tray Hulls and Safety Shaker Dust Pick-up to Purifier	9,000	#45	25	2 - 42" 1D-3D
45	Huller Shakers #1 & 2 Top Tray Hulls to H & S Machines	8,000	#45	20	4 - 28"
46	Cyclone Collector Screw Conveyor to Fiber Beater	1,275	# 30	3	1 22"
47	Huller Shakers #5 & 6 Top Tray Hulls to H & S Machines	8,000	#45	20	4 - 28"
48	Purifier to Tailings Beater	6,500	#35	15	2 - 36"
49	Hull Blower	2,000	1423 Sutorbilt	60	1 - 30"

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PRODUCERS COTTON OIL BTK N6 40001

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USAGE CUMULATIVE
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                  TO
             3/ 1/91
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                                          0
  1/30/91
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                                         21
             1/30/91
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                             62
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                       103,742
                                 1,121,322
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                       177,840
                                 1,299,162
                       186,600
                                 1,485,762
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                                 1,645,743
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                                 1.788,521
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                                              284148
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                       126,932
                                 2,771,346
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                       179,416
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                                 3,765,192
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  12/
      3/87
                                 4,093,606
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                       163,114
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San Joaquin Valley Unified Air Pollution Control District

DISTRICT BOARD MEMBERS

Rick Jensen Chair Supervisor Madera County Pauline Larwood Vice Chair Supervisor Kern County Blair Bradley Councilmember City of Ceres Doug Vagim Supervisor Fresno County Tom Bohigian Councilmember City of Fresno Joe Hammond Supervisor Kings County Mike Bogna Supervisor Merced County Bill Sousa Supervisor San Joaquin County Nick Blom Supervisor Stanislaus County Clyde Gould Supervisor Tulare County Mel McLaughlin Councilmember City of Wasco

October 2, 1992

Steve White Producer's Cotton Oil Co. P.O. Box 1832 Fresno, CA 93717

Re: Application #'s 920304 and 920308

Project Description: ERC for Shutdowns

Dear Mr. White:

Your applications for Emission Reduction Credits have been received by the Air Pollution Control District, and have been reviewed for completeness.

Based on this preliminary review, the applications appear to be complete. However, during processing, the District may request additional information to clarify, correct or otherwise supplement the information on file.

Thank you for your cooperation. Should you have any questions, please telephone Mr. Richard McVaigh of Permit Services at (209) 497-1000.

Sincerely,

Seyed Sadredin

Director of Permit Services

David Warner

Permit Services Manager - Central Region

DW/RM/rm

COMPOL DISHRICT/FRESHO ZONE,

Falling Address: P.O. Pox 11867, Freeno California 93775

Dusiness Address: 1221 Fulton Fall, Fresho, California Talephone: 445-3239

APPLICATION FOR EMISSION REDUCTION CREDIT

Filing Fee [X] \$ 650.00 Per Facility

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San Joaquin Valley Unified Air Pollution Control District

FAX TRANSMITTAL

DATE 12/4/92 Freeze Bee - atta Vickie TO angie Dudontingo

Public Comme SUBJECT: Megetable Oil mil

Number of pages (including this one)

David L. Hrow - Emecative Director/Arco 93715 - 1999 Twolumne Street, Duite 200 - (209) 497-1000 - FAK (209) 233-2057

lend pring of

STUURPED Permit Section 1999 Tuolumne ST - Suite 200 CA 93705 Fres170,

TRANSMISSION REPORT

THIS DOCUMENT WAS CONFIRMED (REDUCED SAMPLE ABOVE - SEE DETAILS BELOW)

** COUNT **

TOTAL PAGES SCANNED TOTAL PAGES CONFIRMED:

*** SEND ***

No.	REMOTE STATION	START TIME	DURATION	#PAGES	MODE	RESULTS	
1	FRESNO BEE	1- 4-93 2:45	1 '44"	2/ 2		TERMINAL FAULT 9600	0P78 0234

0:01 44" TOTAL

NOTE:

No.: OPERATION NUMBER 48: 4800BPS SELECTED EC: ERROR CORRECT G2: G2 COMMUNICATION PD: POLLED BY REMOTE SF: STORE & FORWARD RI: RELAY INITIATE RS: RELAY STATION RB: SEND TO MAILBOX PG: POLLING A REMOTE MP: MULTI-POLLING RM: RECEIVE TO MEMORY



San Joaquin Valley Unified Air Pollution Control District

FAX TRANSMITTAL

DATE: 12/4/92 TO: Fresno Bee- attn: Vickie	
TO: Fresno Bee - attn.	
SUBJECT: Public Comment Request. Uegetable Oil mill 2365 & north avenue.	
Begetable Oil mill	
2365 & north avenue.	
Works of the last the same of	
Number of pages (including this one)	
Please sublish for I day only	
Please publish for 1 day only. Please publish by 1-6-93	
Send proof of publish to	
DAVE WARNER	
STUMPED-Permit section	
ct 5 1/200	
1999 Tuolumne ST. Suite 200	
Trans CA 6271	

San Joaquin Valley Unified APCD Permit Services Division

то:	Seyed Sadredin District Manager of Permit Services
FROM:	Laure Clan
DATE:	12/16/92 12/29/92 after
RE:	Intent to Deny ATC/PTO I Deny ATC/PTO Preliminary Public Notice (NSR) Final Public Notice (NSR) Other <u>Relim.</u> ERC notice
The followin	ng supporting documents are attached: letters, legal ad,
Remarks/Re	commendations: letters have 12/23/92 dato.
то:	Dare Warrey Rich MeVersh
FROM:	Seyed Sadredin District Manager of Permit Services
DATE:	12/23/42
<u>See</u>	Notes - Place rense. Asso notes from W. review are still sporting on the ETS.
	The x
	Riche Stand now of the course I in ect M

Producers Cotton 0il 4465 E. North Avenue P/O # 1030040104R1 Page 2

CONDITIONS: (Cont'd.)

- 4. Source testing for Volatile Organic Compounds to meet the District Rule 409.10 performed by an independent source testing firm shall be upon the discretion of the FCAPCD. Producers Cotton Oil Company will be notified in advance by the FCAPCD staff if source testing is required.
- 5. In accordance with Rule 409.10, Producers Cotton Oil must possess and maintain a Portable Hydrocarbon Detector approved by the District Air Pollution Control Officer.
- 6. Any modification of the solvent extraction or Miscella refining processes, equipment, hours of operation, throughput, control equipment, motors and handling equipment requires prior written District approval.
- 7. Daily Emission Limits (Total facility):

PM = 1,272.6 lb/day

SOx = 0.61 lb/day

NOx = 137.7 1b/day

0 - 0 = 34.3 lb/day

 $MC = 375.6 \, lb/day$

8. Daily Emission Limits (Solvent Extraction):

ROG = 370 lb/day (as Hexane)

2 ⁄γ _{Ву:}

Simeon T. Bugay Supervising Air Quality Engineer

permit5/pg34

FRESNO COUNTY AIR POLLUTION CONTROL DISTRICT 1221 Fulton Mall, Fresno, California 93721 Telephone: (209) 445-3239

PERMIT TO OPERATE

A Permit to Operate is hereby granted to:

Producers Cotton Oil

For equipment located at:

2365 East North Avenue, Fresno, California

Description: Cottonseed Bulk meal storage facility to include:

MEAL LOADING

1 - Dump Pit Screw Conveyor

1 - Bucket Elevator

1 - Telescope Loading Spout

1 - 128 Ton - 19'2' Dia. Storage Tank 1 - 9'6' Dia. Storage Tanks

1 - 9'-0 Dia. Fats Tank

7 - F33 Syntron Virba-Flow Feeders (one each/silo)

1 - Fats Pump 1.5" 2 hp

1 - 7MB Sutorbuilt Blower

1 - 5MC Pump Blower

1 - 10" x 12" Airlock Feeder

1 - Dracco Model 2535 Dust Collector Baghouse with automatic

. shakers and 2-2D-2D cyclones

1 - Transfer Fan

Issue Date: January 5, 1988

This Permit becomes void upon any change of ownership or location.

Equipment modification requires a new Permit to Operate.

DOH 4810-26 (12-86)

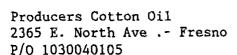
Number: 1030040105

George Bleth

Air Pollution Control Officer

Simeon T. Bugay

Air Quality Engineer



SEED HOUSE NO. 2

- 1 16" Roof Screw Conveyor
- 1 30" Cyclone Collector (at roof)
- 1 Kleissler Filter w/Transfer Fan
- 1 30" Cyclone Collector w/Transfer Fan
- 1 Dracco Two Compartment Dust Collector
- 1 Transfer Fan
- 1 14" x 23" Sutorbuilt Blower
- 2 12" Screw Conveyor

NEW BULK MEAL STORAGE HOUSE

- 1 12" Roof Screw Conveyor
- 1 12" Floor Screw Conveyor
- 1 Kleissler Collector
- 2 Transfer Fans & Cyclone Collector
- 1 Sutorbilt Blower No. 2020

Rating: 350 h.p.

Conditions: 1. Maintain premises and equipment to prevent excessive dusting.

Page 1 of 2

FRESNO COUNTY AIR POLLUTION CONTROL DISTRICT 1221 Fulton Mall, Fresno, California 93721 Telephone: (209) 445-3239

PERMIT TO OPERATE

A Permit to Operate is hereby granted to:

Producers Cotton Oil

For equipment located at:

2365 East North Avenue, Fresno, California

Description:

Cottonseed meal processing facility to include the following equipment:

Meal Warehouse (Meal Processing)

- 1 Century California Pellet Mill
- 1 ~ Richardson Bag Scale
- 1 Sack Sewer
- 1 14" X 23"Sutorbuilt Bloser
- 1 Stack Blinders
- 1 ~ No. 1 Rotez Shaker No. 532
- 1 No. 2 Rotex Shaker No. 532
- 1 ~ Model 7N-8 Sutorbuilt Blower
- 1 Model 8L-B Sutorbuilt Blower
- 1 Safflower overflow Bin
- 2 Safflower Rotex Shakers
- 2 Baver Meal Grinders
- 2 Steel Surge Bins (7'x 10' x 11')
- 1 Gyro Pellet Shaker
- 1 Grumber Model 960
- 1 Sprout-Waldron Crumble Cooler
- 4 8" x 5" Bucket Elevators
- 1 Dixon SK-7 12- HP Boiler
- 1 Burks 3 HP Boiler Feed Pump
- 1 ~ 12" x 20" Sutorbuilt Blower
- 1 Beta Dual Ration Simplitrol
- 1 25,000 CFM Wheelabrator-Frye Dust Filter
- 3 Transfer Fans w/Cyclone Collectors

Rating: 914.25

Number: 1030040106

Issue Date: January 5, 1988

This Permit becomes void upon any change of ownership or location.

George Bleth Air Pollution Control Officer

Equipment modification requires a new Permit to Operate.

Simeon T. Bugay Air Quality Engineer

DOH 4810-26 (12-86)

Producers Cotton Oil 2365 E. North Ave. - Fresno P/O# 1030040106

Conditions:

- 1. Maintain premises and equipment to prevent excessive dusting.
- 2. Each year report process weights and operating schedule to Fresno County Air Polluton Control District.

Simeon T. Bugay Air Quality Engineer

Simeon T. Bugay Air Quality Engineer



FRESNO COUNTY AIR POLLUTION CONTROL DISTRICT 1221 Fulton Mall, Fresno, California 93721 Telephone: (209) 445-3239

PERMIT TO OPERATE

A Permit to Operate is hereby granted to:

Producers Cotton Oil

For equipment located at:

2365 East North Avenue, Fresno, California

Description:

Cottonseed meal loading facility consisting of the following equipment:

- 2 Truck Loading Tunnels
- 4 50 Ton Capacity Storage Bins
- 1 Buhler #MPSE 28/30 Rotary Airlock Feeder
- 1 3" Pneumatic Conveyor Blow Line
- 1 Sutorbilt #6MB Rotary Positive Blower
- 2 Wheelabrator-Frye
- 2 Module Type 1218 Ultra Jet Fabric Filters with 200 H.P. fan

Rating: 300 h.p.

Conditions:

1. Maintain premises and equipment to prevent exceesive dusting.

Issue Date January 5, 1988

This Permit becomes void upon any change of ownership or location.

Equipment modification requires a new Permit to Operate.

Number: 1030040107

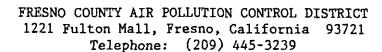
George Bleth Air Pollution Control Officer

By: Simeon T. Bugay J

Air Quality Engineer

DOH 4810-26 (12-86)

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PERMIT TO OPERATE

A Permit to Operate is hereby granted to:

Producers Cotton Oil

For equipment located at:

2365 East North Avenue, Fresno, California

Description:

Cottonseed planting seed preparation facility to include the following equipment:

- 1 Surge bin 7' x 7'
- 1 Bauer Bros. Model #299 Cottonseed Cleaner
- 1 80' x 300' planting seed bulk storage house
- 1 Fortworth Model BC-4 Lint Beater
- 1 Murray Bale Press
- 10 Carver Model #176 Saw Delinting Machines
- 1 48" x 72" Shaker
- 1 Carver 54" x 120" Scalping Shaker
- 2 Clipper Super 298-D Cleaners
- 1 Gustafson Model #5-600 SS Liquid Type Seed Treater
- 1 36" dia. x 6' Long Polishing Drum
- 1 16' O.D. x 16' Surge Bin

550 h.p.

Issue Date: January 5, 1988

This Permit becomes void upon any change of ownership or location.

Equipment modification requires a new Permit to Operate.

DOH 4810-26 (12-86)

Number: 1030040108

George Bleth Air Pollution Control Officer

By: Simeon T. Bugay (
Air Quality Engineer

FRES COUNTY AIR POLLUTION CONTROL IN IRICA 1221 Fulton Mall, Fresno, CA 93721 Telephone: (209) 445-3239

PERMIT TO OPERATE

A Permit to Operate is hereby granted to:

PRODUCERS COTTON OIL

For equipment located at:

2365 E. North Avenue, Fresno, California

DESCRIPTION:

One (1) Dixon Boiler, 400 Bhp, equipped with one (1) Johnson Model 400 Burner to be fired with Natural Gas. Boiler provides steam to the solvent extraction processes.

OPERATIONAL CONDITIONS:

- Maintain and operate boiler in accordance with manufacturer's specifications.
- 2) Natural Gas Consumption not to exceed 20,000 cubic feet per hour.
- 3) Boiler is to be fired with Natural Gas only.
- 4) Total facility emissions not to exceed those limits as set forth in P/O #1030040104.
- 5) Operating Schedule not to exceed the following:

24 hrs/day, 7 days/wk, 46 wks/yr.

- 6) Any modification of process, operating schedule, fuel, or equipment requires prior written consent from the District.
- 7) Report annual natural gas consumption to the District 30 days prior to the annual renewal date.
- 8) Boiler Emission Limits:

Pollutant	Emission	(1b/day)
PM	2.4	
SO _v	0.3	
SO _x NO _x	67.2	
co	16.8	
ROG	2.8	

Rating: 21 x 10⁶ Btu/hr

Issue Date: January 5, 1990

P/O # 1030040110

This Permit becomes void upon any change of ownership or location.

Equipment modification requires a new Permit to Operate.

By: Some V. Buggery

GEORGE BLETH

Simeon T. Bugay / /
Supervising Air Quality Engineer

Air Pollution Control Officer



Producers Cotton Oil 2365 E. North Ave. -Fresno P/O#1030040108

- 4 72" O.D. "2D-2d" cyclone collectors
- 2 30" O.D. "2D-2D" cyclone collectors
- 2 26" O.D. "2D-2D" cyclone collectors
- 2 62" O.D. "2D-2D" cyclone collectors
- 1 16" O.D. "2D-2D" cyclone collectors
- 1 44" O.D. "2D-2D" cyclone collectors
- 1 28" O.D. "2D-2D" cyclone collectors
- 1 60" O.D. "2D-2D" cyclone collectors
- 1 34" O.D. "2D-2D" cyclone collectors
- 1 #3 Storage warehouse

Associated screw conveyors and bucket elevators

Conditions:

- 1. Maintain premises and equipment to prevent excessive dusting.
- 2. Each year report process weights and operating schedule to FCAPCD.

FRI O COUNTY AIR POLLUTION CONTROL STRICT 1221 Fulton Mall, Fresno, CA 93721 Telephone: (209) 445-3239

PERMIT TO OPERATE

A Permit to Operate is hereby granted to:

PRODUCERS COTTON OIL

For equipment located at:

2365 E. North Avenue, Fresno, California

DESCRIPTION:

One (1) Kewanee Boiler, 400 Bhp, equipped with one (1) Johnson Model 400 Burner to be fired with Natural Gas. Boiler provides steam to the solvent extraction processes.

OPERATIONAL CONDITIONS:

- 1) Maintain and operate boiler in accordance with manufacturer's specifications.
- 2) Natural Gas Consumption not to exceed 20,000 cubic feet per hour.
- 3) Boiler is to be fired with Natural Gas only.
- 4) Total facility emissions not to exceed those limits as set forth in P/O #1030040104.
- 5) Operating Schedule not to exceed the following:

24 hrs/day, 7 days/wk, 46 wks/yr.

- 6) Any modification of process, operating schedule, fuel, or equipment requires prior written consent from the District.
- 7) Report annual natural gas consumption to the District 30 days prior to the annual renewal date.
- 8) Boiler Emission Limits:

Pollutant	Emission (1b/day)
PM	2.4
SO.	0.3
SO _x NO _x	67.2
coî	16.8
ROG	2.8

Rating: 21 x 10⁶ Btu/hr

Issue Date: January 5, 1990

This Permit becomes void upon any change of ownership or location.

Equipment modification requires a new Permit to Operate.

P/O # 1030040111

GEORGE BLETH

Air Pollution Control Officer

By: Simeon T. Bugay

Supervising Air Quality Engineer

MEMORANDUM SJVUAPCD

Southern Region

To:

Seved Sadredin

Date: 5/14/93

Director of Permit Services

From:

Thomas Goff

Thomas Goff John Manager of Permit Services - So. Region

Subject: Title V Major Stationary Sources Potential to Emit

The attached report provides the potential to emit for major stationary sources in the southern region. The report is organized by inventory facility number. Oil production sources have only one inventory number but may have up to four stationary sources. Each oil production source is listed and the total is shown for the inventory facility number. Please contact Ted Fox or Lance Ericksen if you have any questions or require further information.

Approximately 300 person hours were expended to compile this list. At the current time assessment for permit services staff of \$48 per hour the cost is:

 $300 \times 48 = $14,400$

1-4-77 Source Test Producer's Fresno Oil Mill Test by Chemecology Corp. EMISSION RATE SUMMARY

0.1

Allowed

C489 tons/day

PROCESS	GR/SCF	SCFM	LB/IIR	#UNITS	TOTAL LBS/HR	TOTAL SCFM
, id Out Lint Beater	10638 20655	2270	1.24	8	9.9 10.2 10.1	18,160
st Out Lint Beater	10218 2. 0.0210	2070	0.388 0.372	4	1.6 1.5	8,280
eed Cleaner	1. 0.0081 2. 0.0078	3670	0.254 0.244	12	3.05 2.93 2.99	44,040
s Out Linter	1. 0.0068 2. 0.0070	3490	0.203 0.210	16	3.25 3.36 3.31	55,840
nd Cut Linter	1. 0.0222 2. 0.0230	3440	0.655 0.676	32	21.0 21.6 21.3	110,080
ote Cyclone	1. 0.0111 2. 0.0111	2410	0.230 0.230	8 _	1.84 1.84 1.84	19,280
Total				· 80 **	41.0	**
	•	-				

^{**} This is not the total number of units in this process weight system, therefore, this is not the total lbs/hr emission in this system.

Producer's Fresno Oil Mill
Test by Chemecology Corp.

EMISSION RATE SUMMARY							
PROCESS		GR/SCF	SCFM	LB/HR	#UNITS	TOTAL LBS/HR	TOTAL SEFM
Seed Cleaner Cyclone:	1. 2.	0.0071 0.0062					
	Λvg.	0.0066	3830	0.22	12	2.6	45,960
1st Cut Cyclones:	1. 2.	0.0050 0.0060				•	
	Avg.	0.0055	4880	0.23	20	4.6	97,600
2nd Cut Cyclones:	1. 2. Avg.	0.0065* 0.012 0.012	3960	0.40	40	16.0	158,400
lst Cut Lint Beater:	NOT	TESTED		-	- '	~	-
and Cut Lint Beater:		0.029 0.027 0.028	2280	0.55	14	7.7	31,920
bale Press Room:		0.069 0.074 0.072	7800	4.E	**	14.4	23,920
TOTALS:					<u> </u>	45.3	357, 400
Process & Allewed e	t., T missi	/hr: <u>2</u> on rate,	0.1 lbs/hr:			23.0	•

^{**}Tested just after fire and water cleaning.

² Large units and several small.

^{1.} Flow rates reported are 0-20% low as a result of tangential vector(see profite data).

^{2.} Grainloadings reported are possibly low, depending on the dust particle size of emissions

Cotton Oil Co. H. Source Test 8-24-976

G AND SEPARATING SYSTEM

Cyclone	ACFM	Emission Rate (15/hr)
71 H&3 #2 H&5 #3 H&S #4 H&S	2150 2150 2150 2150* 8600	0.18 0.13 0.18 0.18* 0.72
#6 Purifer Euller	3400 5600 9000	

Hulling and Separating System Emission Rate

Process weight:
Allowed emission rate

est. 15 Tons/hour 19.25 lb/hour

$$\frac{2}{600}$$
 = 1.47 lc/hr

* Unit tested

Comments:

1. Cyclones not included in the survey:

a. Cyclones with enclosed systems and no emissions:

2nd Cut Robber 1400 cfm 3rd " west 1300 " " east 1000 3700

b. Cyclones which are not in use:

#1 Boll Reel 6000 cfm #2 " " 5200 #3 " " 5000 Rock and shale~ Boll Reel 3000

2. Process division between the Cleaning and Delinting system and the Hulling and separating system was determined by Hobert Bashian of Fresho Jounty APUD on 8-25-76. Process weights were also estimated from prior information and agreen to by Mr. Bashian.

7-11-75 Source Test Producer's Fresno Oil Mill Test by Chemecology Corp.

EMISSION RATE SUMMARY

PROCESS	GR/SCF	SCFM	LB/HR	#UNITS	TOTAL LBS/HR	TUTAL SCFM
Seed Cleaner Cyclone:	1. 0.0071 2. 0.0062					
	Avg. 0.0066	3830	0.22	12	2.6	45,960
lst Cut Cyclones:	1. 0.0050 2. 0.0060				J	
	Avg. 0.0055	4880	0.23	20	4.6	97,600
3nd Cul Cyclones:	1. 0.8065* 2. 0.012 Avg. 0.012	3960	0,40	40	16.0	158,400
lst Cut Lint Beater:	NOT TESTED	- -	_	- (-	-
and Cut Lint Bester:	1. 0.029 2. 0.027 Avg. 0.028	2280	0.55	14	7.7	31,920
bale Press Room:	1. 0.069 2. 0.074 Avg. 0.072	7849	4.E	3 **	14.4	23,520
TOTALS:				99	45.3	357,400
Process t	ut., T/hr: 2	20.1				

Allowed emission rate, 1bs/hr:

23.0

^{**}Tropted just after fire and water cleaning.
2 Large units and several small.

^{1.} Flow rates reported are 0-20% low as a result of tangential vector (see profite data).

^{2.} Grainloadings reported are possibly low, depending on the dust particle size of emissions.

Cyclone		 ACFM	Emission Rate (15/hr)
71 H&S #2 H&S #3 H&S #4 H&S		2150 2150 2150 2150* 8600	0.18 0.13 0.13 0.18** 0.72
#6 Purifer Kuller	7	3400 5600 9000	

Hulling and Separating System Emission Rate

Process weight:
Allowed emission rate

est. 15 Tons/hour 19.25 lb/hour

 $\frac{2000}{3600}$ = 1.47 lb/hr

* Unit tested

Comments:

- 1. Cyclones not included in the survey:
 - a. Cyclones with enclosed systems and no emissions:

		Robber		1400	cſ
3 ^r	q 11	11	west	1300	
11	11	11	east	1000	
				<u> 3700</u>	

b. Cyclones which are not in use:

2. Process division between the Cleaning and Delinting system and the Hulling and separating system was determined by Hobert Bashian of Fresho Jounty AFUD on 3-25-76. Process weights were also estimated from prior information and agreed to by Mr. Bashian.

7-11-75 Source Test Producer's Fresno Oil Mill Test by Chemecology Corp.

•			EMISSI	ON RATE S	UMMARY		
PROCESS		GR/SCF	SCFM	LB/HR	#UNITS	TOTAL LBS/HR	TOTAL SCFM
Séed Cleaner Cyclone:	1.	0.0071 0.0062					
	Avg.	0.0066	3830	0.22	12	2.6	45,960
lst Cut Cyclones:	1. 2.	0.0050 0.0060				,	
	Avg.	0.0055	4880	0.23	20	4.6	97,600
2nd Cut Cyclones:	1. 2. Avg.	0.0065 [*] 0.012 0.012	3960	0.40	40	16.0	158,400
lst Cut Lint Seater:	NOT	TESTED	-	-	- 1	-	-
and Cut Lint Beater:	1. 2. Avg.	0.029 0.027 0.028	2280	0.55	14	7.7	31,920
Sale Press Room:	1. 2. hvg.	0.069 0.074 0.072	7849	8,4	3 **	14.4	00,920
TOTALS:	,				89	45.3	357,4(u·
Process t Allowed o		/hr: <u>2</u> on rate,	0.1 lbs/hr:			23.0	

^{**}Tested just after fire and water cleaning.

² Large units and several small.

^{1.} Flow rates reported are 0-20% low as a result of tangential vector(see profile data).

^{2.} Grainloadings reported are possibly low, depending on the dust particle size of emissions.

1-4-77 Source Test Producer's Fresno Oil Mill Test by Chemecology Corp. EMISSION RATE SUMMARY

PROCESS	<u>(</u>	GR/SCF	SCFM	LB/IIR	#UNITS	TOTAL LBS/HR	TOTAL SCFM
2nd Cut Lint Beater	1.	.0638 .0655	2270	1.21; 1.28	8	9.9 10.2 10.1	18,160
1st Cut Lint Beater	1.	.0218 0.0210	2070	0.388 0.372	4	1.6 1.5	8,280
Seed Cleaner	1.	0.0081 0.0078	3670	0.254 0.244	12	3.05 2.93 2.99	44,040
1s Cut Linter	1. 2.	0.0068	3490	0.203 0.210	16	3.25 3.36 3.31	55,840
2nd Cut Linter	1.	0.0222	3440°	0.655 0.676	32	21.0 21.6 21.3	110,080
Mote Cyclone	1. 2.	0.0111	2410	0.230 0.230	8 _	$\frac{1.84}{1.84}$ 1.84	19,280
Total					80 **	41.0	**
Allowed @489 tons/day		0.1				23.3	

^{**} This is not the total number of units in this process weight system, therefore, this is not the total lbs/hr emission in this system.

Ranchers Cotton Oil Co. H LNG AND SEPARATING SYSTEM · Source Test 8-24-96

Cyclone	ACFM	Emission Rate (lb/hr)
#1 H&S #2 E&S #3 H&S #4 H&S	2150 2150 2150 2150* 8600	0.18 0.13 0.13 0.18* 0.72
#6 Purifer Kuller	3400 <u>5600</u> 9000	

Hulling and Separating System Emission Rate

Process weight: Allowed emission rate est. 15 Tons/hour 19.25 lb/hour

mission rate=
$$\frac{(0.72)(8600+9000)}{8600}$$
 = 1.47 lc/hr

* Unit tested

Comments:

- 1. Cyclones not included in the survey:
 - a. Cyclones with enclosed systems and no emissions:

2nd Cut Robber 1400 cfm 3rd " 1300 east 1000

b. Cyclones which are not in use:

#1 Boll Reel 6000 cfm #2 ¹¹ 5200 5000 3000 Rock and shale- Boll Reel

2. Process division between the Cleaning and Delinting system and the Hulling and reparating system was determined by Robert Bashian of Fresno County APOD on 3-25-76. Process weights were also estimated from prior information and agreed to by Mr. Bashian.