

San Joaquin Valley Air Pollution Control District

January 25, 2001

Duncan McCook Anderson Clayton Corp./Oil Mill P.O. Box 12506 Fresno, CA 93778-2506

Re: Notice of Preliminary Decision - Emission Reduction Credits

Project Number: C-1010009

Dear Mr. McCook:

Enclosed for your review and comment is the District's analysis of Anderson Clayton Corp./Oil Mill's application for Emission Reduction Credits (ERCs) resulting from for emission reductions generated by the shutdown of equipment at the Chowchilla Oil Mill (Facility ID C-41) represented by Permit Unit Requirements (PURs) C-41-5-0, C-41-6-1, C-41-7-0, C-41-8-1, C-41-9-1, C-41-12-1, C-41-15-0, C-41-16-0, and C-41-19-2, at 25184 Road 16 in Chowchilla, CA.. The quantity of ERCs proposed for banking is 327,870 lb-VOC/yr, 3,047 lb-NOx/yr, 2,792 lb-CO/yr, 79,078 lb-PM10/yr, and 49 lb-SOx/yr.

The notice of preliminary decision 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. If you have any questions regarding this matter, please contact Mr. Samir Sheikh of Permit Services at (559) 230-5897.

Sincerely.

Seved Sadredin

Director of Permit Services

SS:sqs Enclosures

c: David Warner, Permit Services Manager

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



San Joaquin Valley Air Pollution Control District

January 25, 2001

Mike Tollstrup
Project Assessment Branch
Stationary Source Division
California Air Resources Board
PO Box 2815
Sacramento, CA 95812-2815

Re: Notice of Preliminary Decision - Emission Reduction Credits

Project Number: C-1010009

Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of Anderson Clayton Corp./Oil Mill's application for Emission Reduction Credits (ERCs) resulting from for emission reductions generated by the shutdown of equipment at the Chowchilla Oil Mill (Facility ID C-41) represented by Permit Unit Requirements (PURs) C-41-5-0, C-41-6-1, C-41-7-0, C-41-8-1, C-41-9-1, C-41-12-1, C-41-15-0, C-41-16-0, and C-41-19-2, at 25184 Road 16 in Chowchilla, CA.. The quantity of ERCs proposed for banking is 327,870 lb-VOC/yr, 3,047 lb-NOx/yr, 2,792 lb-CO/yr, 79,078 lb-PM10/yr, and 49 lb-SOx/yr.

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Director of Permit Services

SS:sqs Enclosure

c: David Warner, Permit Services Manager

David L. Crow

Executive Director/Air Pollution Control Officer



San Joaquin Valley Air Pollution Control District

January 25, 2001

Gerardo C. Rios (AIR 3)
Acting Chief, Permits Office
Air Division
U.S. E.P.A. - Region IX
75 Hawthorne Street
San Francisco, CA 94105

Re: Notice of Preliminary Decision - Emission Reduction Credits

Project Number: C-1010009

Dear Mr. Rios:

Enclosed for your review and comment is the District's analysis of Anderson Clayton Corp./Oil Mill's application for Emission Reduction Credits (ERCs) resulting from for emission reductions generated by the shutdown of equipment at the Chowchilla Oil Mill (Facility ID C-41) represented by Permit Unit Requirements (PURs) C-41-5-0, C-41-6-1, C-41-7-0, C-41-8-1, C-41-9-1, C-41-12-1, C-41-15-0, C-41-16-0, and C-41-19-2, at 25184 Road 16 in Chowchilla, CA.. The quantity of ERCs proposed for banking is 327,870 lb-VOC/yr, 3,047 lb-NOx/yr, 2,792 lb-CO/yr, 79,078 lb-PM10/yr, and 49 lb-SOx/yr.

The notice of preliminary decision 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. If you have any questions regarding this matter, please contact Mr. Samir Sheikh of Permit Services at (559) 230-5897.

Sincerely.

Seyed Sadredin

Director of Permit Services

SS:sqs Enclosure

c: David Warner, Permit Services Manager

David L. Crow

Executive Director/Air Pollution Control Officer

NOTICE OF PRELIMINARY DECISION FOR THE PROPOSED ISSUANCE OF EMISSION REDUCTION CREDITS

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District solicits public comment on the proposed issuance of Emission Reduction Credits (ERCs) to Anderson Clayton Corp./Oil Mill for for emission reductions generated by the shutdown of equipment at the Chowchilla Oil Mill (Facility ID C-41) represented by Permit Unit Requirements (PURs) C-41-5-0, C-41-6-1, C-41-7-0, C-41-8-1, C-41-9-1, C-41-12-1, C-41-15-0, C-41-16-0, and C-41-19-2, at 25184 Road 16 in Chowchilla, CA.. The quantity of ERCs proposed for banking is 327,870 lb-VOC/yr, 3,047 lb-NOx/yr, 2,792 lb-CO/yr, 79,078 lb-PM10/yr, and 49 lb-SOx/yr.

The analysis of the regulatory basis for these proposed actions, Project #C-1010009, is available for public inspection at the District office at the address below. Written comments on this project must be submitted within 30 days of the publication date of this notice to SEYED SADREDIN, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 1990 EAST GETTYSBURG AVENUE, FRESNO, CA 93726.

ERC APPLICATION REVIEW Project #: C-1010009

Facility Name:

Anderson Clayton Corporation

Mailing Address:

P.O. Box 12506

Fresno, CA 93778-2506

Contact Name:

Duncan McCook, Manager - Technical Services

Telephone:

(559) 446-6415

Fax:

(559) 447-4425

Engineer:

Samir Sheikh

Date:

January 24, 2001

Reviewed By:

Joven Refuerzo

Date:

Certificate #(s):

C-398-1, C-398-2, C-398-3, C-398-4, C-398-5

Submitted:

January 3, 2000

Deemed Complete:

I. SUMMARY:

Anderson Clayton Corp. requests emission reduction credit (ERC) banking certificates for emission reductions generated by the shutdown of equipment at the Chowchilla Oil Mill (Facility ID C-41) represented by Permit Unit Requirements (PURs) C-41-5-0, C-41-6-1, C-41-7-0, C-41-8-1, C-41-9-1, C-41-12-1, C-41-15-0, C-41-16-0, and C-41-19-2. Copies of the cancelled PURs for the shutdown equipment are presented in Attachment A. The facility will continue to operate exclusively as a cotton seed receiving and storage facility. Copies of PURs for the remaining operations at the facility are presented in Attachment I.

The applicant amended their proposal so that the most recent available emission factors were used in evaluating the emission reductions from the shutdown equipment. The following emission reductions have been found to qualify for ERC banking C-398-1, C-398-2, C-398-3, C-398-4, and C-398-5:

	VOC (pounds)	NOx (pounds)	CO (pounds)	PM10 (pounds)	SOx (pounds)
ERC No.	C-398-1	C-398-2	C-398-3	C-398-4	C-398-5
1 st Quarter	112,929	968	887	27,222	16
2 nd Quarter	104,976	811	743	25,285	13
3 rd Quarter	40,935	338	310	9,864	5
4 th Quarter	69,030	930	852	16,707	15

II. APPLICABLE RULES:

Rule 2201: New and Modified Stationary Source Review Rule (June 15, 1995)
Rule 2301: Emission Reduction Credit Banking (December 17, 1992)

III. PROJECT LOCATION:

Physical Location of Equipment: 25184 Road 16

Chowchilla, CA,

IV. METHOD OF GENERATING REDUCTIONS:

The Actual Emissions Reductions (AER) have been generated by the voluntary shutdown of equipment at the Chowchilla Oil Mill. Anderson Clayton Corp. has forfeited the Permit Unit Requirements for the following equipment in order to validate the emission reduction credits:

- C-41-5-0: 300 Hp First Cut Delinting Operation Including 14 Linters with Associated Conveyors Served by 4 42" 2D-2D Cyclones, 1-30", 1-36", and 1-18" 1D-3D Cyclone.
- C-41-6-1: 183 Hp Seed Cleaning Operation Including 6 Seed Cleaners, with Associated Conveyors, Served by 12 28", 2 36", and 1- 32" 2D-2D Cyclones; A Lint Collection System Including a 30 Hp Fan, A Feeder, And a Baler Served by One 46" 1D-3D Cyclone.
- C-41-7-0: 888.5 Hp Second Cut Delinting Operation Including 40 Linters with Associated Conveyors Served by a Total of 17 Cyclones 4 48", 4 54", 3 32", and 1 34" 2D-2D Cyclones; 3 28" and 1 18" 1D-3D Cyclones; and 1 Kice Cyclone.
- C-41-8-1: 216 Hp Dehulling Operation Including Three Decorticators, 3 Hull Beaters, and a Tailings Beater Served by Three 44" and Three 34" 1D-3D Cyclones.
- C-41-9-1: 400 Hp Hexane Recovery and Oil Extraction Unit Including a Mineral Oil Packed Tower Scrubber.
- C-41-12-1: 32.0 MMBtu/hr Murray Natural Gas-Fired Boiler, with Diesel Oil Standby Capacity.
- C-41-15-0: (4) 125 Ton Meal Tanks with Hoppers Served by One 20" 1D-3D Cyclone, 1 Saunco Pulsejet Model SFSB6-16-159 Baghouse with 14 Bags, 2 Rotolifts, 2 Reclaim Conveyors, 1 Bucket Elevator, 1 Tank Distribution Conveyor, and 1 Collection Conveyor. Rating: 96 Hp.

C-41-16-0: 71 Hp Truck Loadout of Meal Including (1) 20 Hp Incline Conveyor, (1) 15 Hp Distribution Conveyor, and (1) 3 Hp Baghouse Conveyor. The Exhaust System Consists of Fan with 40 Hp Motor and (1) 3 Hp Micro PULSEAIR 1F1 Baghouse with 80 Bags.

C-41-19-2: 903 Hp Cotton Seed Preparation Room: Consisting of a Flaking Mill Served by One 22" 1D-3D Cyclone, A Steam Cooker, Two Expanders, and a Collet Cooler/Dryer Served by One 60" 1D-3D Cyclone.

As required by Rules 2201 & 2301, creditable emission reductions are to be based upon historical actual emissions (HAE) quantified using process/throughput rates for the facility over the appropriate baseline period, and the use of acceptable emission factors including source test derived emission factors. The following table briefly describes the source and type of pollutants for each process including the method(s) for quantifying historical actual emissions (HAE):

Permit Unit	Pollutant(s)	Emissions Source(s)	Method of Quantifying HAE
C-41-5-0	PM-10	1D-3D and 2D-2D cyclones	Actual Seed Process Rate and District Approved Emission Factors
C-41-6-1	PM-10	1D-3D and 2D-2D cyclones	Actual Seed Process Rate and District Approved Emission Factors
C-41-7-0	PM-10	1D-3D and 2D-2D cyclones	Actual Seed Process Rate and District Approved Emission Factors
C-41-8-0	PM-10	1D-3D cyclones	Actual Seed Process Rate and District Approved Emission Factors
C-41-9-1	VOC (as Hexane)	Mineral oil scrubber used to reclaim solvent (hexane)	Actual Seed Process Rate and District Approved Emission Factor
C-41-12-1	NOx, VOC, PM10, SOx, and CO	Combustion of natural gas in 32.0 MMBtu/hr boiler	Actual Fuel Usage, Permitted Emission Factors, and Rule 4305 Emission Limit.
C-41-15-0	PM10	1D-3D cyclone and baghouse exhaust	Actual Meal Production Rate and District Approved Emission Factors
C-41-16-0	PM10	Baghouse exhaust	Actual Meal Production Rate and District Approved Emission Factors
C-41-19-2	PM10	1D-3D cyclones	Actual Seed Process Rate and District Approved Emission Factors

V. CALCULATIONS:

A. Assumptions

Calculation of HAE and the corresponding Actual Emission Reductions (AERs) is dependent on both the actual production data submitted by an applicant, and appropriate emission factors. The assumptions used to quantify the HAE for the affected permit units are described below:

- Emissions from the first cut delinting operation (permit C-41-5-0) and second cut delinting operation (permit C-41-7-0) will be calculated based on actual historical seed processing rates, the number of emissions points (cyclones), and emission factors used to calculate the potentials to emit for the permit units in Project #930468. These emission factors are based on source test results for similar cottonseed oil mills in Fresno County (see Attachment E). Actual source test data and records of measured airflow rates do not exist for the cyclones serving these operations.
- Emissions from the seed cleaning operation (permit C-41-6-1) and dehulling operation (permit C-41-8-1) will be calculated based on actual historical seed processing rates, the number of emissions points (cyclones), and AP-42 based emission factors used to calculate the current daily emissions limitations (DELs) for the permit units. These emission factors are based on source test results for similar cottonseed oil mills in Fresno County (see Attachment E). Actual source test data and records of measured airflow rates do not exist for the cyclones serving these operations.
- As discussed in Project #940442, VOC emissions from the hexane recovery and oil extraction unit, permit C-41-9-1, is dependent on the quantity of seed processed and not on the quantity of oil produced. All hexane losses from the solvent extraction unit are VOC emitted to the atmosphere, and the VOC retained in the meal are eventually emitted to the atmosphere. Therefore, the 3.67 lb-VOC/ton (seed processed) emission factor used to calculate the current DEL will be used to quantify the HAE for the operation.
- Emissions from the 32.0 MMBtu/hr natural gas-fired boiler, permit C-41-12-1, equipped with standard burners will be based on actual fuel use records and either permitted emission factors or the latest emission factors provided in AP-42, Tables 1.4-1 and 1.4-2, whichever is lower. The HAE for CO and VOC will be quantified using current permitted emission factors, whereas, the HAE for PM10 and SOx will be quantified using emission factors from AP-42. The CO emission factor on the current permit is lower than the Rule 4305 limit of 400 ppmv @ 3%O2 and will therefore be used. The HAE for NOx will be calculated using the Rule 4305 limit of 0.036 lb/MMBtu as this unit was required to be in compliance with this rule by December 16, 1999. Source test results do not exist for this unit.
- Emissions from the cotton seed preparation room, permit C-41-19-2, will be quantified by developing lb-PM10/ton emission factors based on the 600 tons/day process limit and grain loading concentrations and air flow rates for the two cyclones serving the operation. In Project #970202, a 1.23 lb-PM10/day potential to emit was calculated for the flaking mill cyclone based on a grain loading limit of 0.02 grains-TSP/dscf, air flow of 600 cfm, and a PM10/TSP ratio of 0.50. This limit is equivalent to a PM10 emission factor of 0.0021 lbs per ton of seed processed (@ 600 tons/day). The 9.8 lb-PM10/day potential to emit quantified for the collet cooler/dryer cyclone in Project #980489 was based on a grain loading limit of 0.0095 grains/dscf, air flow of 10,000 cfm, and PM10/TSP ratio of 0.50. Compliance with the grain loading limit was demonstrated by source testing performed on April 29, 1998. Therefore, the 0.0095 grains/dscf limit correlates to a PM10 emission

factor of <u>0.0163 lb</u> per ton of seed processed. Emissions from the meal storage and handling operation, permit C-41-15-0, will be determined based on actual meal production rates and the most recent AP-42 emission factors, Table 9.9.1-2, Particulate Emission Factors for Grain Processing Facilities (5/98) (included in Attachment J). Source test results do not exist for the unit. Refer to process flow diagram in Attachment H for process description.

 Emissions from the meal truck loadout operation, permit C-41-16-0, will be determined based on actual meal throughput, and the most recent AP-42 emission factors, Table 9.9.1-2, Particulate Emission Factors for Grain Processing Facilities (5/98) (included in Attachment J). Source test results do not exist for the unit. Refer to process flow diagram in Attachment H for process description.

B. Emission Factors

PM-10 Emission Factors for Seed/Meal Processing and Handling				
Permit Unit	Description	TSP EF (lb/ton per emissions pt)	PM-10 EF (lb/ton per emissions pt)	Reference
C-41-5-0	1 st Cut Lint Cleaning	0.08	0.04	TSP source test information presented in Fresno County APCD document (Attachment E)
C-41-6-1	Seed Cleaning	0.012	0.006	TSP source test information presented in Fresno County APCD document (Attachment E)
C-41-7-0	2 nd Cut Lint Cleaning	0.022	0.011	TSP source test information presented in Fresno County APCD document (Attachment E)
C-41-8-1	Hulling & Separation	0.098	0.049	TSP source test information presented in Fresno County APCD document (Attachment E)
C-41-15-1	Meal Storage and Handling	Receiving (tank distribution conveyers): 0.017	0.0025	AP-42, Table 9.9.1-2 (5/98)
		Receiving (storage tanks to hoppers) 0.017	0.0025	AP-42, Table 9.9.1-2 (5/98)

Permit Unit	Description	TSP EF (lb/ton per emissions pt)	PM-10 EF (lb/ton per emissions pt)	Reference
C-41-16-0	Meal Truck Loadout	Loading: 0.0033	0.0008	AP-42, Table 9.9.1-2 (5/98)
C-41-19-2	Seed Preparation Room	Flaking Mill Cyclone	0.0021	Based on permitted production rate limit, and grain loading and air flow limits used to calculate the PE in project 970202
·		Collet Cooler/Dryer Cyclone	0.0163	Based on permitted production rate, grain loading limit on permit, and air flow from 4/29/98 source test report.

Permit Unit	Description	VOC Emission Factor (lb/ton of seed)	Reference
C-41-9-1	Hexane Recovery and Oil Extraction Operation	3.67	Project 940442

Permit Unit	Description	Pollutant	Emission Factor (lb/MMBtu)	Reference
C-41-12-1	32.0 MMBtu/hr	NOx	0.036	Rule 4305 Limit
	gas-fired boiler	VOC	0.0022	Current Permit
		PM10	0.0076	AP-42, Table 1.4-2
		SOx (as SO2)	0.0006	AP-42, Table 1.4-2
		CO	0.033	Current Permit

C. Baseline Period Determination and Data

Per Section 3.7.1 of Rule 2201, baseline period is defined as: a) two consecutive years of operation immediately prior to submission of the complete application; or b) another time period of at least two consecutive years within the five years immediately prior to submission of the complete application as determined by the APCO as more representative of normal operation.

Although the seed processing equipment at the Chowchilla Oil Mill is in place and operable, the facility has not processed cotton seed since 1998 (The facility is currently utilized for the temporary receipt and storage of cotton seed). Production at the facility also fluctuated season to season; therefore, the representative production period is the two consecutive years within the previous five-year period (1995 to 2000) that is more representative of normal operation. Also, periods of non-operation are not included in the calculation of baseline production and emission rates since the District does not consider such periods representative of normal operation.

Anderson Clayton proposes to use actual quarterly production data for the period from 1992 to 1998 to establish normal operation for the Chowchilla Oil Mill. Annual production data exists for prior years (see Attachment B), however, quarterly production data is not available for the facility prior to 1992. The baseline period chosen will be two consecutive year period within the last five years that most closely matches the average production rates quantified for the 1992 to 1998 period of operation. Annual production information supplied by the applicant is as follows:

Production Year	Seed Processed (tons/year)	Hexane Usage (gallons/year)	Meal Produced (tons/year)	Natural Gas Usage (Therms/year)
1992	119,784	62,002	61,796	1,022,070
1993	130,779	84,875	69,761	1,026,900
1994	130,413	?	67,363	1,201,200
1995	100,363	105,496	50,468	938,173
1996	123,888	111,992	65,885	1,114,967
1997	74,527	154,594	39,140	766,508
1998	57,137	102,007	29,948	407,158
1999	0	0	0	0
2000	0	0	0	0
Averages	105,270*	103,494**	54,909*	925,282*

^{*}The average production and natural gas use rates are based on 7 years of operation and do not include years 1999 and 2000 since non-operation is not representative of normal operation.

^{**} Average annual hexane usage is based on 6 years as data could not be located for 1994. Data for 1999 and 2000 is not included since process equipment did not operate during these years.

The two consecutive year period that most closely approximates the average 105,270 tons of seed is the 1996 and 1997 operating period with an average production of 99,208 tons of seed per year. Therefore, the 1996 and 1997 production years represent the two consecutive year period during the previous five years to be the most representative of normal operation. The quarterly breakdown of production data for these years is presented below and in Attachment B.

	Year	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Seeds	1996	32,500	34,547	24,773	32,068
Processed (tons)	1997	35,844	28,987	0	9,696
Avera	ges =	34,172	31,767	12,387	20,882
Hexane	1996	21,161	30,525	29,511	30,795
(gallons)	1997	17,230	73,895	0	63,469
Avera	ges =	19,196	52,210	14,756	47,132
Meal	1996	17,212	18,223	13,068	17,382
Produced (tons)	1997	19,266	14,808	0	5,066
Averaç	ges =	18,239	16,516	6,534	11,224
Natural Gas	1996	266,496	297,789	208,968	341,714
(Therms)	1997	331,105	203,009	0	232,394
Averag	jes =	298,801	250,399	104,484	287,054

D. Historical Actual Emissions

1. <u>Seed/Meats Processing Emissions (PM₁₀)</u>

The PM₁₀ HAE for seed/meats processing is calculated as follows:

(quarterly average tons seed/meats processed)(PM10 emission factor) = HAE

	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Average Quarterly Production	34,172	31,767	12,387	20,882
PM10-EF (lb/ton/pt)	0.04	0.04	0.04	0.04
# of Emission Points (cyclones)	7	7	7	7
HAE =	9,568	8,895	3,468	5,847

Permit Unit C-41-6-1, Seed Cleaning						
	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter		
Average Quarterly Production	34,172	31,767	12,387	20,882		
PM-10 EF (lb/ton/pt)	0.006	0.006	0.006	0.006		
# of Emission Points (cyclones)	16	16	16	16		
HAE =	3,281	3,050	1,189	2,005		

Permit Unit C-41-7-0, 1	7-0, 1 st Cut Lint Cleaning				
	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	
Average Quarterly Production	34,172	31,767	12,387	20,882	
PM-10 EF (lb/ton/pt)	0.011	0.011	0.011	0.011	
# of Emission Points (cyclones)	17	17	17	17	
HAE =	6,390	5,940	2,316	3,905	

	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Average Quarterly Production	34,172	31,767	12,387	20,882
PM-10 EF (lb/ton/pt)	0.049	0.049	0.049	0.049
# of Emission Points (cyclones)	6	6	6	6
HAE =	10,047	9,339	3,642	6,139

Permit Unit C-41-19-2, Seed Preparation Room									
	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter					
Average Quarterly Production	34,172	31,767	12,387	20,882					
Flaking Mill Cyclone PM-10 EF (lb/ton)	0.0021	0.0021	0.0021	0.0021					
Collet Cooler/Dryer Cyclone PM-10 EF (lb/ton)	0.0163	0.0163	0.0163	0.0163					
HAE =	629	585	228	384					

2. Meal Storage, Handling, and Loading Emissions (PM₁₀)

The PM₁₀ HAE for meal storage, handling, and loading is calculated as follows: (quarterly average meal produced)(PM10 emission factor) = HAE

Permit Unit C-41-15-0, Meal Storage and Handling									
	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter					
Average Quarterly Production	18,239	16,516	6,534	11,224					
Receiving (tank distribution conveyers) PM-10 EF (lb/ton)	0.0025	0.0025	0.0025	0.0025					
Receiving (storage tanks to hoppers) PM-10 EF (lb/ton)	0.0025	0.0025	0.0025	0.0025					
HAE =	91	83	33	56					

Permit Unit C-41-16-0, Meal Truck Loading									
·	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter					
Average Quarterly Production	18,239	16,516	6,534	11,224					
PM-10 EF (lb/ton)	0.0008	0.0008	0.0008	0.0008					
HAE =	14	13	5	9					

3. Natural Gas-Fired Boiler Emissions

The HAE for SO_X , NO_X , VOC, and CO from the combustion of natural gas in the 32.0 MMBtu/hr boiler, permit C-41-12-1, is calculated as follows:

(quarterly average MMBtu of natural gas used)(emission factor) = HAE

The HAE from the natural gas-fired boiler C-41-12-1 is as follows:

Emissions Adjusted for Rule 4305:

Pursant to Rule 2201, Section 3.2.3.3, Actual Emission Reductions (AERs) are reductions beyond reductions proposed in the District's adopted air quality plan for attaining the reductions required by the California Clean Air Act. Therefore, emission factors used for calculating emission reductions may not exceed the emission limits for NOx and CO from this rule. For this permit unit, the permitted NOx emission factor is higher than the Rule 4305 NOx

limit of 0.036 lb/MMBtu, and therefore the rule limit will be used in quantifying the HAE. The Rule 4305 CO limit is higher than the currently permitted CO emission factor and will therefore not be used.

		1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Avg. Quarterly Gas Use (Therms @ 100,000 Btu)		298,801	250,399	104,484	287,054
Pollutant	Emission Factor	Historical	Actual Emission	ons - Ibs (@ 100	00 Btu/scf)
NOx	0.036 lb/MMBtu	1,076	901	376	1,033
	(Rule 4305 limit)			:	
voc	0.0022 lb/MMBtu (Current PTO)	66	55	23	63
PM10	0.0076 lb/MMBtu (AP- 42, Table 1.4-2)	227	190	79	218
CO	0.033 lb/MMBtu (Current PTO)	986	826	345	947
SOx	0.0006 lb/MMBtu (AP- 42, Table 1.4-2)	18	15	6	17

4. Hexane Recovery and Oil Extraction Unit Emissions

The HAE for VOC from the use of hexane by equipment serving permit unit C-41-9-1, is calculated as follows:

(quarterly average seed processed)(VOC emission Factor) = HAE

The HAE from permit unit C-41-9-1 is as follows:

Permit Unit C-41-9-1, Hexane Recovery and Oil Extraction									
	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter					
Average Quarterly Seed Processed (tons)	34,172	31,767	12,387	20,882					
VOC Emission Factor (lb/tons-seed)	3.67	3.67	3.67	3.67					
HAE =	125,411	116,585	45,460	76,637					

E. Actual Emissions Reductions

Pursuant to Section 3.2 of Rule 2201, AER shall be real, surplus, permanent, quantifiable & enforceable. AER is calculated per subsection 6.5, and is as follows:

AER = HAE (for shutdown of an emissions unit)

Therefore, the AER is equal to the HAE, and can be summarized for each pollutant as follows:

	VOC (pounds)	NOx (pounds)	CO (pounds)	PM10 (pounds)	SOx (pounds)
1st Quarter	125,477	1,076	. 986	30,247	18
2nd Quarter	116,640	901	826	28,095	15
3rd Quarter	45,483	376	345	10,960	6
4th Quarter	76,700	1,033	947	18,563	17

F. Air Quality Improvement Deduction

The Air Quality Improvement Deduction (AQID) is 10% of the AER per Rule 2201, subsection 6.5, and is summarized as follows:

·	VOC (pounds)	NOx (pounds)	CO (pounds)	PM10 (pounds)	SOx (pounds)
1st Quarter	12,548	108	99	3,025	2
2nd Quarter	11,664	90	83	2,810	2
3rd Quarter	4,548	38	35	1,096	1
4th Quarter	7,670	103	95	1,856	2

G. Increase in Permitted Emissions

The ERC banking application has been submitted to bank emission reductions generated by the permanent shutdown of permitted equipment. Therefore, no increase in permitted emissions (IPE) is associated with this project.

H. Bankable Emissions Reductions Credits

The total bankable emissions reductions are summarized as follows:

	VOC	NOx	co	PM10	SOx
	(pounds)	(pounds)	(pounds)	(pounds)	(pounds)
1st Quarter	112,929	968	887	27,222	16
2nd Quarter	104,976	811	743	25,285	13
3rd Quarter	40,935	338	310	9,864	5
4th Quarter	69,030	930	852	16,707	15

VI. COMPLIANCE:

To be eligible for banking, emission reduction credits (ERC's) must be verified as real, surplus, permanent, quantifiable, and enforceable pursuant to District Rules 2201 and 2301. In addition the application must be submitted within a timely manner specified in Rule 2301.

A. Real

The AERs quantified above were based on historical actual emissions and were calculated from actual production data from the stationary source. The affected processing equipment at the Chowchilla Oil Mill are now shutdown and the Permit Unit Requirements have been surrendered; therefore, the reductions are real.

B. Enforceable

The Permit Unit Requirements for the affected processing equipment have been surrendered; subsequently, any future seed processing and meal production cannot be performed unless an enforceable Authority to Construct is issued in compliance with the provisions of New and Modified Stationary Source Review (Rule 2201); therefore the reductions are enforceable.

C. Quantifiable

The AERs were calculated using District recognized emission factors and actual production data; therefore, the AERs are quantifiable.

D. Permanent

Anderson Clayton Corp. permanently shut-down the affected processing equipment at the Chowchilla Oil Mill, and surrendered the valid Permit Unit Requirements to the District, effective July 17, 2000; therefore, the AERs are permanent.

E. Surplus

The shutdown of the affected processing equipment at the stationary source was voluntary. The resulting emission reductions are not mandated by any law, rule, regulation, agreement, or order of the District, State, or Federal Government. The reductions are not attributed to a control measure noticed for workshop or proposed, nor contained in a State Implementation Plan.

As shown in Sections V.A and V.D of this report, the boiler (C-41-12-1) is subject to the requirements of District Rule 4305. In this case, emission factors used for calculating the emission reductions may not exceed the emission limits for NOx and CO for this rule. NOx emissions were calculated based on the Rule 4305 limit, and CO emissions were calculated based on the permitted emission factor as this is more stringent than the rule limit.

Permit Unit C-41-9-1 was in compliance with the requirements of District Rule 4691, Vegetable Oil Processing Operations, as seen in Project #940422 (included in Attachment D). The emission factor used for calculating the emissions from this shutdown operation was based on a control efficiency of at least 90%, meeting the control requirement under Section 5.1 of this rule.

Anderson Clayton cannot process cotton seed and produce meal at the Chowchilla Oil Mill without first obtaining Authorities to Construct and satisfying all applicable New Source Review requirements. Therefore, the AERs are surplus.

F. Timeliness

The application for ERC was submitted to the District on January 4, 2000. Pursuant to Rule 2301, Section 4.2.3, an application for ERC must be filed no later than 180 days after the emission reductions have occurred, in which the eligibility of the ERC application for the shutdown of processing equipment is dependent upon the definition of "shutdown" per Rule 2301. Section 3.11 of Rule 2301 defines "shutdown" as the following: the earlier of the permanent cessation of emissions from an emitting unit or the surrender of operating permits. If prior to the surrender of the operating permits, the APCO determines that the units have been removed or fallen into an inoperable or unmaintained condition such that startup would required an investment exceeding 50% of the current replacement, then the date of shutdown is the date of last emissions.

Anderson Clayton canceled the Permits to Operate (PTOs) equipment shutdown at the Chowchilla Oil Mill (facility ID# C-41) effective July 17, 2000. According to Anderson Clayton,

and based on inspections by the District's Compliance Division, the affected processing equipment was not removed and had not fallen into an inoperable condition at the time the PTO's were surrendered.

The date of shutdown is July 17, 2000 commensurate surrender of the Permit Unit Requirements for the affected processing equipment. The ERC application was submitted on January 4, 2001, which is less than 180 days after the date of shutdown. Therefore, the application is timely.

VII. RECOMMENDATION:

Issue the requested ERC Banking Certificates to Anderson Clayton Corp. after completion of the required 30-day public notification period, and review of comments received, for the following amounts:

	VOC (pounds)	NOx (pounds)	CO (pounds)	PM10 (pounds)	SOx (pounds)
ERC No.	C-398-1	C-398-2	C-398-3	C-398-4	C-398-5
1 st Quarter	112,929	968	887	27,222	16
2 nd Quarter	104,976	811	743	25,285	13
3 rd Quarter	40,935	338	310	9,864	5
4 th Quarter	69,030	930	852	16,707	15

Attachments:

Attachment A: Permit Unit Requirements for Shutdown Equipment

Attachment B: Historical Production Data

Attachment C: PM10/TSP Source Test Results for Cooler Dryer Fan Cyclone, Permit Unit C-41-19-2

Attachment D: Emissions from Hexane Recovery & Oil Extraction Unit

Attachment E: Summary of PM10 Emission Factors for Cottonseed Oil Mills Prepared by Fresno County APCD, 4/10/1991

Attachment F: Potential to Emit Calculations for the Chowchilla Oil Mill Facility (Project #930468)

Attachment G: AP-42 Emission Factors for Natural Gas Combustion

Attachment H: Facility and Process Flow Diagrams

Attachment I: Permit Unit Requirements for Equipment Remaining in Service at the Chowchilla Oil Mill

Attachment J: AP-42 Emission Factors for Grain Processing Facilities, Table 9.9.1-2

Attachment K: Seed/Meal Processing and Handling (Project #970202)

Attachment A

Permit Unit Requirements for Shutdown Equipment

CONDITIONS FOR PERMIT C-41-5-0

Page 1 of 1 E: 07/31/2003

MAILING ADDRESS:

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON CORPLOIL MILL

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

300 HP FIRST CUT DELINTING OPERATION INCLUDING 14 LINTERS WITH ASSOCIATED CONVEYORS SERVED BY 4-42" 2D-2D CYCLONES, 1-30", 1 36", AND 1-18" 1D-3D CYCLONE. REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER

- {12} Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the 1. atmosphere. [District NSR Rule]
- {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 2.
- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three 3. minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {271} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
- 5. {229} The District shall be notified of any breakdown conditions in accordance with Rule 1100 (Equipment Breakdown), [District Rule 1100]
 - {234} The APCO or any authorized representative, upon request, shall have access to inspect any equipment, operation, or method required in this permit, and to sample emissions from the source or require samples to be taken. [District Rule 1081]
- Records of daily seed throughput shall be maintained, retained on the premises for at least two years and made available for District inspection upon request. [District Rule 1070]

CONDITIONS FOR PERMIT C-41-6-1

Page 1 of 1 : 07/31/2003

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORPLOIL MILL

MAILING ADDRESS:

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

183 HP SEED CLEANING OPERATION INCLUDING 6 SEED CLEANERS, WITH ASSOCIATED CONVEYORS, SERVED BY 12-28", 2-36", AND 1-32" 2D-2D CYCLONES; A LINT COLLECTION SYSTEM INCLUDING A 30 HP FAN, A FEEDER, AND A BALER SERVED BY ONE 46" 1D-3D CYCLONE. REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER

- {12} Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District NSR Rule]
- {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 2.
- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three 3. minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {271} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
- {229} The District shall be notified of any breakdown conditions in accordance with Rule 1100 (Equipment Breakdown). [District Rule 1100]
- {234} The APCO or any authorized representative, upon request, shall have access to inspect any equipment, operation, or method required in this permit, and to sample emissions from the source or require samples to be taken. [District Rule 1081]
- Records of daily seed throughput shall be maintained, retained on the premises for at least two years and made available for inspection upon request. [District Rule 1070]
- Emissions of PM10 from the facility shall not exceed 45 pounds per day. [District Rule 2201]

CONDITIONS FOR PERMIT C-41-7-0

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EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORPLOIL MILL

MAILING ADDRESS:

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

FOUIPMENT DESCRIPTION:

888.5 HP SECOND CUT DELINTING OPERATION INCLUDING 40 LINTERS WITH ASSOCIATED CONVEYORS SERVED BY A TOTAL OF 17 CYCLONES - 4-48", 4-54", 3-32", AND 1-34" 2D-2D CYCLONES; 3-28" AND 1-18" 1D-3D CYCLONES; AND 1 KICE CYCLONE *REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER*

- {12} Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the 1. atmosphere. [District NSR Rule]
- {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 2.
- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three 3. minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {271} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
- {229} The District shall be notified of any breakdown conditions in accordance with Rule 1100 (Equipment Breakdown). [District Rule 1100]
 - {234} The APCO or any authorized representative, upon request, shall have access to inspect any equipment, operation, or method required in this permit, and to sample emissions from the source or require samples to be taken. [District Rule 1081]
- Records of daily seed throughput shall be maintained, retained on the premises for at least two years and made available for District inspection upon request. [District Rule 1070]

CONDITIONS FOR PERMIT C-41-8-1

Page 1 of 1 07/31/2003

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORPLOIL MILL

MAILING ADDRESS:

P.O. BOX 12506

FRESNO, CA 93778

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

216 HP DEHULLING OPERATION INCLUDING THREE DECORTICATORS, 3 HULL BEATERS, AND A TAILINGS BEATER SERVED BY THREE 44" AND THREE 34" 1D-3D CYCLONES *REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER*

- {36} All equipment shall be constructed, maintained and operated according to the specifications and plans contained in the permit application except as otherwise specified herein. [District NSR Rule]
- {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 2.
- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three 3. minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {229} The District shall be notified of any breakdown conditions in accordance with Rule 1100 (Equipment 4. Breakdown). [District Rule 1100]
- Records of the facility operating schedule and daily cottonseed throughput shall be maintained, retained for at least two years, and made available to the District upon request. [District Rule 1070]
 - {233} The APCO or any authorized representative, upon request, shall have access to, and copies of, any records required to be kept under the terms and conditions of this permit. [CH&SC 42303]
- Emission of PM10 shall not exceed 112.5 pounds per day. [District Rule 2201]

CONDITIONS FOR PERMIT C-41-9-1

Page 1 of 1 **E:** 07/31/2003

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORPLOIL MILL

MAILING ADDRESS:

P.O. BOX 12506 FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

400 HP HEXANE RECOVERY AND OIL EXTRACTION UNIT INCLUDING A MINERAL OIL PACKED TOWER SCRUBBER *REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER*

- {227} All equipment or systems installed or used to achieve compliance with the terms and conditions of the Authority to Construct shall be maintained in good working order and be operated as efficiently as possible to minimize air pollution emissions. [District NSR Rule]
- The emissions of VOCs, calculated from hexane inventory losses, shall not exceed 2,200 lbs/day or 200,200 lbs/qtr. 2. [District Rule 2201]
- The quantity of seeds and nuts processed shall not exceed 500 tons in any one day. [District Rule 2201]
- The mineral oil scrubber and vent condensers shall be in full operation whenever the extraction unit is operated. [District Rule 2201]
- The extraction plant shall be inspected for fugitive VOC emissions monthly in accordance with EPA Method 21. [District Rule 4691]
- Equipment found to be leaking, with emissions concentrations greater than 10,000 ppm as methane, shall be tagged immediately and repaired within ten days. [District Rule 4691]
- An inspection log with records of the date and results of all inspections, repairs, and reinspections shall be maintained and made available to the District upon request. [District Rule 1070]
- Daily records of the type and quantity of seeds and nuts processed and hexane inventory losses shall be maintained, retained on the premises for at least two years and made available for District inspection upon request. [District Rule 1070]
- The facility shall comply with District Rule 4691 "Vegetable Oil Processing Operations". [District Rule 4691] 9.

CONDITIONS FOR PERMIT C-41-12-1

Page 1 of 1

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORP!OIL MILL

MAILING ADDRESS:

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

32.0 MMBTU/HR MURRAY NATURAL GAS-FIRED BOILER, WITH DIESEL OIL STANDBY CAPACITY *REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER*

- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {271} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize 2. emissions of air contaminants into the atmosphere. [District NSR Rule]
- {234} The APCO or any authorized representative, upon request, shall have access to inspect any equipment, 3. operation, or method required in this permit, and to sample emissions from the source or require samples to be taken. [District Rule 1081]
- This unit shall be fired on PUC grade natural gas except during natural gas curtailment. This exception is limited to 336 cumulative hours per calendar year excluding equipment testing, which is not to exceed 48 hours per calendar year. [District Rule 4305]
 - Daily emissions shall not exceed 0.133 lb-NOx/MMBtu, 0.033 lb-CO/MMBtu, 0.013-lb PM10/MMBtu, nor 0.0022 lb-VOC/MMBtu when fired by natural gas. [District Rule 2201]
- Daily emissions shall not exceed 0.152 lb-NOx/MMBtu, 0.038 lb-CO/MMBtu, 0.055 lb-SOx/MMBtu, 0.015 lb-PM10/MMBtu, nor 0.0003 lb-VOC/MMBtu when fired by distillate oil. [District Rule 2201]
- Records of daily fuel (natural gas and oil) usage and operating hours shall be maintained and retained on the premises for at least two years and made available for District inspection upon request. [District Rule 1070]
- Boiler shall comply with applicable requirements of District Rule 4305. [District Rule 4305]

CONDITIONS FOR PERMIT C-41-15-0

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EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORP!OIL MILL

MAILING ADDRESS:

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

(4) 125 TON MEAL TANKS WITH HOPPERS SERVED BY ONE 20" 1D-3D CYCLONE, 1 SAUNCO PULSEJET MODEL SÉSB6-16-159 BAGHOUSE WITH 14 BAGS, 2 ROTOLIFTS, 2 RECLAIM CONVEYORS, 1 BUCKET ELEVATOR, 1 TANK DISTRIBUTION CONVEYOR, AND 1 COLLECTION CONVEYOR. RATING:96HP *REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER*

- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three 1. minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {118} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] 2.
- {10} The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. 3. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District NSR Rule]
- {11} Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule]
- Particulate matter emissions at the baghouse exhaust shall not exceed 0.1 grains/dscf in concentration. [District Rule 42011
- Only one meal tank shall be loaded at any one time. [District Rule 2201] 6.
- All covers shall remain in place during operation of equipment. [District Rule 2201] 7.
- Daily emissions of PM10 shall not exceed 55 pounds per day. [District Rule 2201] 8.
- 9. Pressure drop across filters shall be maintained between 2" and 6" W.C. [District Rule 2201]

CONDITIONS FOR PERMIT C-41-16-0

Page 1 of 1 E: 07/31/2003

MAILING ADDRESS:

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON SORPLOIL MILL

P.O. BOX 12506

FRESNO, CA 93778-250

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

71 HP TRUCK LOADOUT OF MEAL INCLUDING (1) 20 HP INCLINE CONVEYOR, (1) 15 HP DISTRIBUTION CONVEYOR, AND (1) 3 HP BAGHOUSE CONVEYOR. THE EXHAUST SYSTEM CONSISTS OF FAN WITH 40 HP MOTOR AND (1) 3 HP MICRO PULSEAIR 1F1 BAGHOUSE WITH 80 BAGS.*REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER*

- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three 1. minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 2. {118} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- {10} The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District NSR Rule]
- {11} Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule]
 - 3 {265} All records shall be retained for a minimum of 2 years, and shall be made available for District inspection upon request. [District Rule 1070]
- Particulate matter emissions at the baghouse exhaust shall not exceed 0.1 grains/dscf. [District Rule 4201]
- All covers shall remain in place during operation. [District Rule 2201] 7.
- Exhaust fan and baghouse shall be operated at all times during loading of meal. [District Rule 2201] 8.
- The District may require the flowrate of air into the baghouse to be reduced if emissions at baghouse exhaust exceed the permitted conditions. [District Rule 2201]
- 10. No more than 500 tons of meal shall be loaded per day. [District Rule 2201]
- 11. Daily emissions of PM10 shall not exceed 12.5 pounds per day. [District Rule 2201]
- 12. Pressure drop across bags shall be maintained between 2" and 6" W.C. [District Rule 2201]
- 13. Records of daily meal loaded shall be maintained, retained on the premises for at least two years and made available for District inspection upon request. [District Rule 1070]

CONDITIONS FOR PERMIT C-41-19-2

)EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORP!OIL MILL

MAILING ADDRESS:

P.O. BOX 12506 FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

903 HP COTTON SEED PREPARATION ROOM: CONSISTING OF A FLAKING MILL SERVED BY ONE 22" 1D-3D CYCLONE, A STEAM COOKER, TWO EXPANDERS, AND A COLLET COOLER/DRYER SERVED BY ONE 60" 1D-3D CYCLONE *REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER*

- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is dark or darker than Ringelmann 1 or equivalent to 20% opacity. [District Rule 41011
- No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
- The seed meats processing rate shall not exceed 600 tons per day. [District Rule 2201]
- Records of daily seed meats processed shall be maintained, retained on the premises for at least two years and made available for District inspection upon request. [District Rule 1070]
- Particulate matter (PM) concentration in exhaust from the 1D-3D cyclone serving the meats flaking mill shall not exceed 0.02 grains/dscf. [District Rule 2201]
- Particulate matter (PM) concentration in exhaust from the 1D-3D cyclone serving the collet cooler/dryer shall not exceed 0.0095 grains/dscf. [District Rule 2201]
- Emissions of PM10 from the seed meats preparation facility shall not exceed 11.0 lb/day. [District Rule 2201]

Attachment B

Historical Production Data

- > Summary of Annual Throughputs and Production Rates
- > Cotton Seed Crushed and Meal Produced
- > Hexane Usage
- > Natural Gas Usage

Summary of Annual Throughputs and Production Rates

1979	126,700	69,685	126,350	no data	no data
		•	·		
1980	115,650	63,608	120,420	no data	no data
1981	132,500	72,875	144,630	no data	no data
1982	114,800	63,140	76,460	no data	no data
1983	46,500	25,575	36,225	no data	no data
1984	88,500	48,675	54,110	no data	no data
1985	113,500	62,425	75,290	no data	no data
1986	115,700	63,635	68,000	no data	no data
1987	105,500	58,025	78,160	no data	no data
1988	114,700	63,085	84,510	no data	no data
1989	114,000	62,700	103,090	no data	no data
1990	102,965	56,631	102,129	no data	no data
1991	118,446	65,145	84,273	no data	; no data
1992	119,784	61,796	62,002	1,022,070	97.34
1993	130,779	69,761	84,875	1,026,900	97.8
1994	130,413	67,363	0	1,201,200	114.4
1995	100,363	50,468	105,496	938,173	
1996	123,888	65,885	111,992	1,114,967	
1997	74,527	39,140	154,594	766,508	
1998	57,137	29,948	102,007	407,158	
1999	0	0	0	0	•
2000	. 0	0	0	00	
3 Year Avg (1996-1998)	85,184.00	44,991.00	122,864.33	762,877.67	
7 Year Avg (1992-1998)	105,270.14	54,908.71	103,494.33	925,282.29	
20 Year Avg (1979-1998)	107,317.60	57,978.23	93,400.68	N/A	

.)

Twe	o Year Avera	ges				HISTORICAL PRODUCTION DATA				
Natural Gas Use (Therms)	Hexane Usage (gallons/yr)	Meal Produced (tons/year)	Seed Processed (tons/year)	Two Year Periods	Year	Seed Processed (tons/year)	Meal Produced (tons/year)	Hexane Usage (gallons/yr)	Natural Gas Use (Therms)	Natural Gas Use (MMSCF)
					1979	126,700	69,685	126,350	no data	no data
	-		,		1980 1981	115,650 132,500	63,608 72,875	120,420 144,630	no data no data	no data no data
					1982	114,800	63,140	76,460	no data	no data
	!				1983	46,500	25,575	36,225	no data	no data
	,				1984	88,500	48,675	54,110	no data	no data
					1985	113,500	62,425	75,290	no data	no data
1					1986	115,700	63,635	68,000	no data	no data
1					1987	105,500	58,025	78,160	no data	no data
					1988	114,700	63,085	84,510	no data	no data
11					1989	114,000	62,700	103,090	no data	no data
1	1	}		ł	1990	102,965	56,631	102,129	no data	no data
					1991 1992	118,446 119,784	65,145	84,273 62,002	no data	no data 97.34
					1992	130,779	61,796 69,761	84,875	1,022,070 1,026,900	97.34
					1994	130,779	67,363	04,873	1,201,200	114.4
					1995	100,363	50,468	105,496	938,173	117.7
1,026,570	108,744	58,177	112,126	1995-1996		123,888	65,885	111,992	1,114,967	
940,738				1996-1997	1997	74,527	39,140	154,594	766,508	
586,833	128,301	34,544	65,832	1997-1998		57,137	29,948	102,007	407,158	}
					1999	0	0	Ó	0	
					2000	0	0_	0	0	
					3 Year Avg (1996-1998)	85,184.00	44,991.00	122,864.33	762,877.67	
					7 Year Avg (1992-1998)	105,270.14	54,908.71	103,494.33	925,282.29	
					20 Year Avg (1979-1998)	107,317.60	57,978.23	93,400.68	N/A	

Cotton Seed Crushed and Meal Produced

(Tons/Quarter and Tons/Year)

Seed Crushed

Data	a From Rep	Quarterly Ca	alculation	
		Tons		Tons
1-Jan	1990	?	1st Qtr	?
1-Apr	1990	?	2nd Qtr	?
1-Jul	1990	?	3rd Qtr	?
1-Oct	1990	?	4th Qtr	?
1-Jan	1991	?	Total	?
			reported	102,965
			difference	?

Meal Produced

14/04/ 1 1044004							
Data From Reports			Quarterly Calculation				
		Tons		Tons			
1-Jan	1990	?	1st Qtr	?			
1-Apr	1990	?	2nd Qtr	?			
1-Jul	1990	?	3rd Qtr	?			
1-Oct	1990	?	4th Qtr	?			
1-Jan	1991	?	Total	?			

Seed Crushed

Data From Reports			Quarterly Calculation	
		Tons		Tons
1-Jan	1991	?	1st Qtr	?
1-Apr	1991	?	2nd Qtr	?
1-Jul	1991	?	3rd Qtr	?
1-Oct	1991	?	4th Qtr	?
1-Jan	1992	44,059	Total	?
			reported	188,446
			difference	?

Meal Produced

Middle 1 Todato-a							
Data From Reports			Quarterly Calculation				
		Tons	-	Tons			
1-Jan	1991	?	1st Qtr	?			
1-Apr	1991	?	2nd Qtr	?			
1-Jul	1991	?	3rd Qtr	?			
1-Oct	1991	?	4th Qtr	?			
1-Jan	1992	21,601	Total	?			

Data	Data From Reports			alculation
		Tons		Tons
1-Jan	1992	44,059	1st Qtr	39,336
1-Apr	1992	83,395	2nd Qtr	35,881
1-Jul	1992	119,276	3rd Qtr	8,942
1-Oct	1992	8,942	4th Qtr	30,574
1-Jan	1993	39,516	Total	119,784
			reported	119,784
			difference	0

Data	Data From Reports			alculation
		Tons		Tons
1-Jan	1992	21,601	1st Qtr	21,232
1-Apr	1992	42,833	2nd Qtr	19,251
1-Jul	1992	62,084	3rd Qtr	4,684
1-Oct	1992	4,684	4th Qtr	16,629
1-Jan	1993	21,313	Total	61,796

Data	Data From Reports			lculation
	Tons			Tons
1-Jan	1993	39,516	1st Qtr	33,364
1-Apr	1993	72,880	2nd Qtr	39,174
1-Jul	1993	112,054	3rd Qtr	28,507
1-Oct	1993	28,507	4th Qtr	29,734
1-Jan	1994	58,241	Total	130,779
	6		reported	130,779
•	•			0

Dat	Data From Reports			Quarterly Calculation	
	Tons			Tons	
1-Jan	1993	21,313	1st Qtr	17,916	
1-Apr	1993	39,229	2nd Qtr	21,117	
1-Jul	1993	60,346	3rd Qtr	15,125	
1-Oct	1993	15,125	4th Qtr	15,603	
1-Jan	1994	30,728	Total	69,761	

Data	Data From Reports			lculation
	Tons			Tons
1-Jan	1994	58,241	1st Qtr	39,217
1-Apr	1994	97,458	2nd Qtr	33,369
1-Jul	1994	130,827	3rd Qtr	28,711
1-Oct	1994	28,711	4th Qtr	29,116
1-Jan	1995	57,827	Total	130,413
			reported	130,413
				0

11104111044						
Data	Data From Reports			Quarterly Calculation		
	Tons		Tons			Tons
1-Jan	1994	30,728	1st Qtr	20,165		
1-Apr	1994	50,893	2nd Qtr	16,771		
1-Jul	1994	67,664	3rd Qtr	14,355		
1-Oct	1994	14,355	4th Qtr	`16,072		
1-Jan	1995	30,427	Total	67,363		

0000 0100	110u			
Data	Data From Reports			lculation
	Tons		1	Tons
1-Jan	1995	57,827	1st Qtr	31,728
1-Apr	1995	89,555	2nd Qtr	31,641
1-Jul	1995	121,196	3rd Qtr	10,936
1-Oct	1995	10,936	4th Qtr	26,058
1-Jan	1996	36,994	Total	100,363
			reported	96,984
•	•			-3,379

INDUIT TOLLOOL					
Data	Data From Reports			Quarterly Calculation	
	Ton			Tons	
1-Jan	1995	30,427	1st Qtr	14,978	
1-Apr	1995	45,405	2nd Qtr	14,954	
1-Jul	1995	60,359	3rd Qtr	6,661	
1-Oct	1995	6,661	4th Qtr	13,875	
1-Jan	1996	20,536	Total	50,468	

Data	Data From Reports			culation
	Tons			Tons
1-Jan	1996	36,994	1st Qtr	32,500
1-Apr	1996	69,494	2nd Qtr	34,547
1-Jul	1996	104,041	3rd Qtr	24,773
1-Oct	1996	24,773	4th Qtr	32,068
1-Jan	1997	56,841	Total	123,888
			reported	?
				?

Data	Data From Reports			Quarterly Ca	lculation
	Tons				Tons
1-Jan	1996	20,536		1st Qtr	17,212
1-Apr	1996	37,748		2nd Qtr	18,223
1-Jul	1996	55,971		 3rd Qtr 	. 13,068
1-Oct	1996	13,068		4th Qtr	17,382
1-Jan	1997	30,450		Total	65,885

Jeeu Olus			0	I I - 4!
Data	Data From Reports			lculation
		Tons	<u> </u>	Tons
1-Jan	1997	56,841	1st Qtr	35,844
1-Apr	1997	92,685	2nd Qtr	28,987
1-Jul	1997	121,672	3rd Qtr	0
1-Oct	1997	0	4th Qtr	9,696
1-Jan	1998	9,696	Total	74,527
			reported	73,465
	•	•	difference	-1.062

Data	Data From Reports			Quarterly Calculation		
			Tons			Tons
1-Jan	1997	30,450	1st Qtr	19,266		
1-Apr	1997	49,716	2nd Qtr	14,808		
1-Ju!	1997	64,524	3rd Qtr	0		
1-Oct	1997	0	4th Qtr	5,066		
1-Jan	1998	5,066	Total	39,140		

Data	Data From Reports			Quarterly Calculation		
	Tons			Tons		
1-Jan	1998	9,696				
1-Mar	1998	29,025	1st Qtr	27,486		
1-Apr	1998	8,157	2nd Qtr	29,651		
1-Jul	1998	37,808	3rd Qtr	0		
1-Oct	1998	0	4th Qtr	0		
1-Jan	1999	0	Total	57,137		
			reported	57,137		
			difference	0		

1104111011101							
Dat	Data From Reports			Quarterly Calculation			
Tons					Tons		
1-Jan	1998	5,066					
1-Mar	1998	15,226	1:	st Qtr	14,451		
1-Apr	1998	4,291	21	nd Qtr	15,497		
1-Jul	1998	19,788	3	rd Qtr	0		
1-Oct	1998	0	4;	th Qtr	0		
1-Jan	1999	0		otal	29,948		

Hexane Usage (Gallons/Month and Gallons/Year)

ANDERSON CLAYTON CORP. CHOWCHILLA MILL HEXANE USAGE - GALLONS

		YEAR					
	1995	1996_	1997	1998			
NAL	 -	9,767	8,489	22,562			
FEB		6,171	8,741	20,683			
MAR		5,223	-	16,695			
APR		12,304	20,488	13,098			
MAY		8,254	32,123	19,357			
JUN		9,967	21,284	9,612			
JUL	10,653	6,680	-	-			
AUG	-	13,150	-	-			
SEP		9,681	-	-			
OCT	. 11,767	17,862	-	-			
NOV	11,430	3,661	8,193	-			
DEC	6,075	9,272	<u>55,276</u>				
TOTAL	39,925	111,992	<u>154,</u> 594	102,007			

SOURCE: ACCOUNTING GENERAL LEDGER

HEXANE - CHOWCHILLA MILL

				•	
CALENDAR YEAR	TONS CRUSH	GALLONS USED PURCHASED. LOST	TONS USED	GALLONS/ 6.2#/gal.	,
1979	126,700	126,350	392	1.00	
1980	115,650	120,420	373	1.04	`
1981	132,500	144,630	448	1.09	
1982	114,800	76,460	237	. 67	
1983	46,500	36,225	112	.78	
1984	88,500	54,110	168	. 61	
1985	113,500	75,290	233	. 66	
1986	115,700	68,000	211	. 59	
198/	105,500	78,160	242	.74 4.6	
1988	114,700	84,510	262	#/9d .74 4.6	
1989 1990	114,000 102,965 118,446 119,784	103,090 102,129 84,273 	320- 317 261	6.2 .90 5.6 4 V -6.2 .99 6.1 6.1 4.4 5.7 3.2	CC, but in
1993-	130,779 -	84,875,	242	301 × 6914, 100 tone X 6.24	2 4.6
	1630,024	1300,872	3996 7	for = c/c	
are:	108,668	186,725	266.4	3818 +	
4/16/9	\$ 585974 0 436717 - 4.2 4.254/65	48 4.5 Ho/hon se	ed goohe	.90 pel × 6.2 # × 1 +1	州 =
De Fran	h pays	7 369009/23	114.00 3		
	<i>T 10</i> 2 -		· · · · · · / E	3.576 318.1 tons	
jugures supply	the N.C	Ź.			
marge.	at 6 term	4 .		·	
per ton	sharld got	,			
collism -	1. soms	•			

L

Natural Gas Usage

(Therms/Month)

Location:

Chowchilla Mill - Gas

Account: Meter:

FTN AD 02741-1

Utility Company:

00000

Pacific Gas & Electric

Year:	1995
Rate:	GIPBS

Rea	i Dates	Billing	Gas		Unit Cost	Tx Ohio	Diff	Adjust
From	То	Days	Therm	Total	Per Therm	dth	+-/	+/-
12/31	1/31	31	111555	\$11,276.41	0.101	11250	262.5	\$414.71
1/31	2/28	31	90270	\$ 9,548.35	0.106	11500	-2184.1	(\$2,904.90)
2/28	3/31	31	102654	\$10,637.80	0.104	9800	7 93.9	\$905.04
3/31	4/30	30	98365	\$10,007.62	0.102	11490	-1338.7	(\$1,419.06)
4/30	5/31	31	101835	\$10,310.78	0.101	10245	264.4	\$296.10
5/31	6/30	30	85335	\$8,587.83	0.101	9000	-193.4	(\$243.72)
6/30	7/31	31	92665	\$9,297.48	0.100	9544	19.0	\$ 32.54
7/31	8/31	31	16417	\$2,330.00	0.142	1671	23.2	\$40.89
8/31	9/30	30	0	\$839.33		23	23.0	\$43.24
9/30	10/31	31	37222	\$4,219.13	0.113	3777	64.3	\$120.90
10/30	11/30	30	100018	\$11,620.15	0.116	10434	-112.1	(\$197.37)
11/30	12/31	31	101837	\$12,143.24	0.119	10687	-177.4	(\$312.26)

Total

938173

\$100,818.12

Remarks:

MILLE

From: To:

"Carlson, Robert" <RCC7@pge.com>
"Norm Hansen (E-mail)" <NormH@andersonclayton.com>
12/28/00 11:50AM
FTN AD 02741

SERVICE

Date: Subject:

YEAR YYYYMM CONTROL NI CITY PRIOR READ DATE CURR	RENT_READ_DA	NUM SERVI	ICE STREET IG_PERIOD
GAS_RATE THERMS GAS_0 1996 199601 5849404 12/31/1995 1/31/1996 31	FTNAD02741 GIPBS	25184 RD 16 102,885	MADERA \$13,710.90
1996 199602 5849404	FTNAD02741	25184 RD 16	
1/31/1996 2/29/1996 29	GIPBS	96,812	
1996 199603 5849404 2/29/1996 3/31/1996 31		25184 RD 16 70,248	
1996 199604 5849404	FTNAD02741	25184 RD 16	
3/31/1996 4/30/1996 30	GIPBS	99,436	
1996 199605 5849404	FTNAD02741	25184 RD 16	
4/30/1996 5/31/1996 31	GIPBS	104,620	
1996 199606 5849404	FTNAD02741	25184 RD 16	MADERA
5/31/1996 6/30/1996 30	GIPBS	95,980	\$11,278.83
1996 199607 5849404	FTNAD02741	25184 RD 16	MADERA
6/30/1996 7/31/1996 31	GIPBS	97,189	\$11,410.49
1996 199608 5849404	FTNAD02741	25184 RD 16	
7/31/1996 8/31/1996 31	GIPBS	100,755	
1996 199609 5849404 8/31/1996 9/30/1996 30		25184 RD 16 29,069	
1996 199610 5849404	FTNAD02741	25184 RD 16	
9/30/1996 10/31/1996 31	GIPBS	79,144	
1996 199611 5849404 10/31/1996 11/30/1996 30	FTNAD02741 GIPBS		
1996 199612 5849404	FTNAD02741	25184 RD 16	
11/30/1996 12/31/1996 31	GIPBS	111,494	
1997 199701 5849404	FTNAD02741	25184 RD 16	
12/31/1996 1/31/1997 31	GIPBS	116,296	
1997 199702 5849404	FTNAD02741	25184 RD 16	
1/31/1997 2/28/1997 28	GIPBS	108,212	
1997 199703 5849404 2/28/1997 3/31/1997 31		25184 RD 16 111,045	
1997 199704 5849404 3/31/1997 4/30/1997 30		25184 RD 16 111,848	

					•	
	1997 199705 584940 4/30/1997 5/31/1997	4 FTNAD02741 31 GIPBS	25184 RD 16 118,092	MADERA \$13,247.93		
)	1997 199706 584940 5/31/1997 6/30/1997	4 FTNAD02741 30 GIPBS	25184 RD 16 83,385	MADERA \$9,818.84		
)	1997 199707 584940 6/30/1997 7/31/1997	4 FTNAD02741 31 GIPBS	25184 RD 16 1,532	MADERA		
	\$970.53 1997 199708 584940 7/31/1997 8/31/1997	04 FTNAD02741 31 GIPBS	25184 RD 16	MADERA	-	
	\$804.92 1997 199709 584940 8/31/1997 9/30/1997			MADERA		·
-	\$804.92 1997 199710 584940 9/30/1997 10/31/1997	04 FTNAD02741 31 GIPBS	25184 RD 16	MADERA		· ·
	\$804.92 1997 199711 584940 10/31/1997 11/30/1997	04 FTNAD02741 30 GIPBS	25184 RD 16 25,047	MADERA \$3,921.52		
	1997 199712 584940 11/30/1997 12/31/1997		25184 RD 16 103,256			
	1998 199801 584940 12/31/1997 1/31/1998	04 FTNAD02741 31 GIPBS	25184 RD 16 104,091	MADERA \$12,297.22		•
	1998 199802 584940 1/31/1998 2/28/1998	04 FTNAD02741 28 GIPBS	25184 RD 16 104,519	MADERA \$12,344.51		
1	1998 199804 584940 3/31/1998 4/30/1998	04 FTNAD02741 30 GIPBS	25184 RD 16 102,820	MADERA \$12,297.44		
<i>,</i>	1998 199805 584940 4/30/1998 5/31/1998	04 FTNAD02741 31 GIPBS	25184 RD 16 106,950	MADERA \$5,238.46		
	1998 199806 584940 5/31/1998 6/30/1998	04 FTNAD02741 30 GIPBS	25184 RD 16 84,196	MADERA \$7,215.03		
	1998 199807 584940 6/30/1998 7/31/1998	04 FTNAD02741 31 GIPBS	25184 RD 16 6,581	MADERA		
	\$1,389.25 1998 199808 584940 7/31/1998 8/31/1998			MADERA		
	\$988.88 1998 199809 584940 8/31/1998 9/30/1998)4 FTNAD02741 30 GIPBS		MADERA		
-	\$896.15 1998 199810 584940 9/30/1998 10/31/1998 \$862.83			MADERA		
	1998 199811 584940 10/31/1998 11/30/1998 \$847.28			MADERA		٠
	1998 199812 584940 11/30/1998 12/31/1998	04 FTNAD02741 31 GIPBS	25184 RD 16 -	MADERA		·

	\$321.42				
	1999 199901	5849404	FTNAD02741	25184 RD 16	MADERA
	12/31/1998 1/31/19	999 31	GIPBS	-	•
	\$329.45				
1	1999 199902	5849404	FTNAD02741	25184 RD 16	MADERA
.)	1/31/1999 2/28/1		GIPB\$	307	
•	\$358.38		OII D Q	001	
	1999 199903	5B49404	ETNA002741	25184 RD 16	MADERA
	2/28/1999 3/31/1		GIPBS	2510-110 10	MADERA
		338 31	GIFDS	•	
	\$329.45	EDADADA	ETNIADO2744	25404 DD 45	MADEDA
	1999 199904	5849404		25184 RD 16	MADERA
	3/31/1999 4/30/1	999 30	GIPBS	•	
	\$329.45	5040404	*** *********************************		
	1999 199905	5849404	FTNAD02741	25184 RD 16	MADERA
	4/30/1999 5/31/1	999 31	GIPB\$	-	
	\$86.84				
	1999 199906	5849404		25184 RD 16	MADERA
	5/31/1999 6/30/1	999 30	GIPB\$	•	
	\$11.02		•		
	1999 199907	5849404	FTNAD02741	25184 RD 16	MADERA
	6/30/1999 7/31/19	999 31	GIPBS	_	
	\$11.02				
	V1110E				

Attachment C

PM10/TSP Source Test Results for Cooler Dryer Fan Cyclone, Permit Unit C-41-19-2

ANDERSON CLAYTON 3325 Figarden Drive Fresno, CA 93711

Attn: Steve White

PM10 & TOTAL PARTICULATE TESTING COOLER DRYER FAN CYCLONE ATC #C-41-9-2 April 29, 1998

Submitted to
San Joaquin Valley Unified APCD
1999 Tuolumne Suite 200
Fresno, CA 93721

Attn: Gabe Lazar

Prepared by AIRx TESTING 2175 Goodyear Avenue Unit #105 Ventura, CA 93003

> Job Number 16031

Laboratory Report Number 397-010

Test Team Leader Cam Donnahoo

Results Verified By: Tom Porter Partner

> Submitted July 15, 1998



PARTICULATE EMISSION SUMMARY 4/29/98

)	Run #1	Run #2	Run #3	Average	
Total Particulate					
gr/DSCF	0.0132	0.0119	0.0035	0.0095	
lb/hr	0.76	0.71	0.21	0.56	
Particule Size Distribution		•			
+10μ (%)	20.5	18.1	50.1	29.6	
-10μ (%)	79.5	81.9	49.9	70.4	
<10μ Results					
gr/DSCF	0.0105	0.0098	0.0018	0.0074	
ib/hr	0.60	0.58	0.10	0.43	
Exhaust Flowrate, DSCFM	6737	6903	6794	6811	

Attachment D

Emissions from Hexane Recovery & Oil Extraction Unit

- ➤ VOC Calculations for Hexane Recovery and Oil Extraction Unit, Permit Unit C-41-9-1 (Project 940442)
- VOC Source Test Results for Hexane Recovery and Oil Extraction Unit, Permit Unit C-41-9-1

VOC Calculations for Hexane Recovery and Oil Extraction Unit, Permit Unit C-41-9-1 (Project 940442)

San Joaquin Valley Unified Air Pollution Control District Engineering Evaluation

ANDERSON CLAYTON CORP. - OIL EXTRACTION UNIT, CHOWCHILLA # 940442

Engineer: Tope Adewusi

Date: December 13, 1994

Facility:

Phone:

Anderson Clayton Corporation

Mailing Address:

P.O. Box 847

Chowchilla, CA 93610

Contact Name:

Steve White (209) 487-7932

I. PROPOSAL:

The primary business of this facility is cotton seed oil and nut oil extraction. The applicant proposes to modify the existing Authority to Construct, ATC #C-41-9-1 (copy attached) by implementing the following:

- (1) Removing the mechanical oil extractor which removes about 67% of the seed or nut oil, and replacing it with a system that uses 100% extraction by hexane;
- (2) Increasing seed throughput from 500 tons/day to 600 tons/day;
- (3) Replacing the existing mineral oil scrubber which controls hexane emissions with a larger unit expected to have a higher control efficiency.

The applicant does not expect to have an increase in hexane emission. In fact he is willing to accept hexane emission limitation kept to the current level. The District will require source tests to ensure that hexane emissions do not exceed current permit limitations.

The oil mill will continue to operate 24 hours per day, 7 days per week and 52 weeks per year.

II. APPLICABLE RULES:

Rule 2201 New and Modified Stationary Source Review Rule (Adopted September 19, 1991; Amended October

21, 1993)

Rule 3010	Permit Fees (Adopted May 21, 1992; Amended December 17, 1992)
Rule 4101	Visible Emissions (Adopted May 21, 1992; Amended December 17, 1992)
Rule 4102	Nuisance (Adopted May 21, 1992; Amended December 17, 1992)
Rule 4691	Vegetable Oil Processing Operations (Adopted April 11, 1991; Amended December 17, 1992)
CHSC 42301.6	Source location within 1,000 feet from a school site.

III. PROJECT LOCATION:

25184 Road 16, Chowchilla, CA

Applicant states that there is a school (Chowchilla High School) within 1,000 feet of the project site.

IV. PROCESS DESCRIPTION:

Cotton seeds from local cotton gins are trucked to the facility and unloaded by conveyor belts onto open stockpiles, which are covered by tarps when fully loaded. The applicant is proposing to increase his seed throughput from 500 to 600 tons per day.

Cottonseed meats are mixed with water. Moisturized meats are run through three crushing rolls. Crushed meats are run through one horizontal opposed flaking roll. Flaked meats are cooked in six precookers and cooked meats are formed into collets by two expanders. The collets enter solvent (hexane) plant where all the oil is extracted and refined.

The hexane solvent plant will operate in the same way as the existing system. Some of the equipment will be changed to accommodate the increase in oil. The mixture of oil and solvent is called miscella. Miscella from the evaporator will be pumped to the refinery batch/surge tanks. Miscella will discharge from the tanks and be mixed with caustic soda prior to the sonulator mixer. The miscella and caustic soda mixture will go through the reactor tubes before entering the

centrifuge. The primary centrifuge will discharge soapstock and refined miscella. Soapstock will be pumped to the disolventizer. Refined miscella will be mixed with water before entering the water wash centrifuge. Refined dry miscella will be discharged from the centrifuge and go to the second effect evaporator to continue hexane recovery. Water will discharge to the sump and be reused in the mill processes.

V. REVIEW OF PROPOSED CONTROL EQUIPMENT

Hexane emissions are controlled by a modified and bigger mineral oil, countercurrent, packed tower scrubber.

Air saturated with hexane and water vapor enters the bottom of the column from the vent condenser and passes upward through a wetted packed bed. Mineral oil will absorb more than 90% of hexane from the air. The vent fan discharges the air, water vapor, and unabsorbed hexane vapor to the atmosphere. The volume of hexane vapor discharged to the atmosphere is a function of air flow and mineral oil column capacity.

Air enters the plant with the prepared meats. The quantity of prepared meats will increase but the volume of air will not change.

With the addition of larger mineral oil column (larger contact area) and unchanged air flow, the removal efficiency is expected to increase. The proposed tower will utilize more ceramic saddles for packing. The packing increases hexane absorption efficiency by increasing the surface area over which the scrubber mineral oil flows, presenting a large area for mass transfer to occur. Hexane purchases over a ten year period averaged 0.8 gallons per ton of seed crushed. Average purchases are expected to be equal or less with the proposed plant.

The scrubber design bases are:

Inlet gas to absorber = 75 cfm dry air saturated with hexane and water at 100°F maximum

Exhaust gas = 75 cfm dry air saturated with water and at 90% LEL of hexane

Scrubber efficiency = 95% minimum. However, actual efficiency, which will be demonstrated by source testing is expected to go up higher.

Vol. of proposed column =

Proposed column is 16" diameter and 25' long implying that the volume = $\pi \times (16'/12)^2 \times 1/4 \times 25' = 34.9 \text{ cf.}$

Volume of existing col. =

Existing column is 12" diameter and 20' long implying that the volume = $\pi \times (12'/12)^2 \times 1/4 \times 20' = 15.7 \text{ cf.}$

The increase by (34.9/15.7 x 100%) 222% is expected to translate into improved control efficiency.

While actual dimensions do not accurately reflect the capacity, the relative sizes do approximate a larger contact area.

Design check on hexane velocity:

The flow rate = 75 cfm = 75/60 cfs = 1.25 cubic feet per second. Hexane duct inlet diameter = 18" = 1.5' (per applicant)

Therefore, hexane velocity = flow rate/duct cross-sectional area

 $= (1.25 \times 4)/\pi \times 1.5^2 \text{ ft/sec} = 0.9 \text{ ft/sec}$

According to Section 4-40 of EPA Course 415 (Control of Gaseous Emissions) the ideal velocity in the packed bed scrubbers is approximately 1 to 3 ft/sec. Since the calculated emission is close to that range, the tower column design is acceptable.

VI. EMISSIONS ESTIMATE:

A. Best Available Control Technology (BACT) calculation:

Assumptions:

- Hexane recovery operation is 24 hours per day, 365 days/year.
- All hexane losses from the solvent extraction unit are volatile organic compounds (VOC) emitted to the atmosphere. It is also assumed that the VOC retained in the meal are eventually emitted to the atmosphere.
- The VOC emitted per ton of seed crushed, shall be assumed to be equivalent to the average quantity of hexane lost

per ton of cottonseed crushed in 1991. Since we had 2200 lbs VOC/500 tons of seed per day, an emission factor (EF) of (2200/500) 4.4 lb VOC per ton of seed crushed was established and used on the existing Permit #C-41-9-1. Emission factor prior to this proposal, $EF_{before}=4.4~\#/t$

- The VOC emissions from the seeds and nuts in this process shall be assumed to depend on the quantity of seed processed and not on the quantity of oil produced. Since VOC emissions is expected to remain at 2200 lbs/day for 600 tons of seeds, then an emission factor of (2200/600) 3.7 lb VOC per ton of seed crushed will be established for the proposed modified Permit #C-41-9-2. Emission factor based on this proposal, EF_{after} = 3.7 lbs/ton.
- The emissions from the extraction of seed oils and nuts shall be assumed to be equivalent to the emissions from the extraction of cottonseed oil.

The following acronyms which are fully defined in Section 6.2 of Rule 2201, stand for:

HAPE = Historical Adjusted Potential Emissions

IPE = Increase in Permitted Emissions

PE = Potential to Emit

PEPM = Potential to Emit Prior to Modification

SSPE = Stationary Source Potential to Emit

 Δ CE = Change in Control Efficiency

Hexane emissions will be limited to the previously established limit of 2200 lb VOC/day based on processing 500 tons of seed per day.

From Section 6.2.7 of Rule 2201,

HAPE = PEPM(1 - Δ CE) = 2200 lbs/day x (1 - Δ CE)

From Policy # NSR/ERC 5-1 dated 3/25/92,

 $\Delta CE = 1 - EF_{after}/EF_{before} = 1 - 3.67/4.4 = 0.17$

Therefore,

HAPE = 2200(1 - 0.17) = 1835

IPE = PE - HAPE = 2200 - 1835 = 365 lbs/day
Since IPE is greater than 2 lbs/day, BACT is required.

IPE for BACT calculation exceeds 100 lbs/day, but we use true permitted emissions changes to determine offsets, SSPE, NSR balance and public noticing. So public noticing is not required since $PE_{before} = PE_{after} = 2200 \ lbs/day$.

No other permit unit is being modified as a result of this project.

B. Determination of SSPE

1) Permit No. C-41-12-0 is for a 13.5 MMBTU/HR natural gas fired boiler. The permit condition does not include a daily emission limit (DEL), nonetheless, it contributes to SSPE.

Per AP-42, the emission factor for NOx is $140 \text{ lb}/10^6 \text{ cf}$ (Table 1.4-2) and for VOC, it is 5.8 lb/ 10^6 cf (Table 1.4-3).

The heating value of natural gas is 1050 BTU/CF per District practice.

PE $(NOx) = 140 \text{ lb}/10^6 \text{ cf } x 13,500,000 \text{ BTU/HR } x 1/1050 \text{ BTU/cf} x 24 \text{ hrs/day } x 365 \text{ days/year } x 1/2000 \text{ lbs/ton} = 7.884 \text{ ton/year}$

PE (VOC) = $5.8 \times 13.5/1050 \times 24 \times 365/2000 = 0.33 \text{ tons/year}$

Table 1

10010 1						
	PE (pounds per day)					
PERMIT NO.	PM ₁₀	SOx	NOx	VOC	CO	
C-41-6-1 *	45		<u>-</u>	_		
C-41-8-1 *	112.5	-		_	1	
C-41-9-2		<u>-</u>	<u> </u>	2200	_	
C-41-12-0	-	-	43.2	1.8		
C-41-15~0 *	55	<u>-</u>	–			
C-41-16-0	12.5			_	1	
C-41-4, 5, 7, 10, 11, 13, 14, 17 * (have no DELs)	-	1	-	-		
Total (lbs/day)	225	-	43.2	2201.8	-	
Partial SSPE (tons/year) .	-	-	7.9	401.8	_	

The figures in the above Table 1 are taken from existing permits.

* There are no combustion emissions with these emission units, and therefore no contribution to VOC & NOx SSPE's.

C. NSR Balance Calculations:

The New Source Review (NSR) balance is equal to the sum of the PE's for all emission units after the baseline date. The baseline date for Madera County is May 21, 1979. The facility was in operation prior to that date. There have been no increases in permitted emissions since the baseline.

Therefore, NSR Balance equals zero for the pollutants.

D. Offset Determination:

The SSPE for VOC as shown in Table 1 is 401.8 tons which exceeds the offset trigger level of 10 tons/year indicated in Section 4.2.3 of Rule 2201, therefore, offset is required. The quantity of offset required is to be evaluated per Section 6.8.2.1 of Rule 2201 as follows:

Offset = $[SSPE_{after} - SSPE_{before}] \times Offset ratio$

Since there are no changes in PE's shown in Table 1,

 Δ SSPE = 0, and offsets are not required.

VII. COMPLIANCE:

Rule 2201 New and Modified Stationary Source Review Rule

The mineral oil scrubber and condenser with a 95% capture and control efficiency will be accepted as BACT. The scrubber with condenser is BACT per South Coast Air Quality Management District BACT Guideline (copy of Sec. 175 is attached). SJVUAPCD Clearinghouse and CAPCOA Clearinghouse do not have BACT determinations for vegetable oil purification process. In addition, the District is not aware of any other technologically feasible technology for controlling these emissions. Therefore BACT is being proposed.

NSR balance for affected pollutants is zero. There is no increase in SSPE for VOC or NOx. Therefore, no offsets are required.

Rule 3010 Permit Fees

Applicant has paid \$60.00 application fee.

Rule 4101 Visible Emissions

Emissions are not expected to exceed 20% opacity based on inspections of past operations.

Rule 4102 Nuisance

The current operation has not created a public nuisance in the past, there has been no known odor complaints. Continued compliance is expected. In addition, since no increase in emissions of hexane are proposed, no increased health risk is expected from this project.

Rule 4691 Vegetable Oil Processing Operations

Applicant has so far been complying with this rule by utilizing a mineral oil scrubber with at least 95% removal efficiency, keeping records of hexane usage, and checking for leaks. Further compliance is expected, and the 90% capture, and control efficiency requirements will be verified by source test.

CHSC 42301.6 Sources within 1000 feet from a school site.

Since there are no expected hexane emission increases at this facility, public notification will not be required.

VIII. RECOMMENDATION:

Issue Authority to Construct as shown on the attached draft.

IX. BILLING INFORMATION:

Rule 3020: Schedule 1 Electrical Motor Horsepower Schedule

Motor Size: 870.5 HP <u>\$ 665.00</u> (302-01 G)

VOC Source Test Results for Hexane Recovery and Oil Extraction Unit, Permit Unit C-41-9-1

ANDERSON CLAYTON 3325 Figarden Drive Fresno, CA 93711

Attn: Steve White

VOLATILE ORGANIC COMPOUNDS TESTING MOS SCRUBBER SYSTEM

April 29, May 5, May 27 & June 11, 1998

Prepared by AIRx TESTING 2175 Goodyear Avenue Unit #105 Ventura, CA 93003

> Job Number 16031

Laboratory Report Number 397-010

Test Team Leader Cam Donnahoo

Results Verified By: Tom Porter Partner

> Submitted July 16, 1998



VOC's EMISSION SUMMARY

) 4/29/98 Volatile Orgainic Compounds	Run #1	Run #2	Run #3	Average
lb/hr (Outlet)	1.64	1.67	1 07	
lb/hr (Inlet)	6.93	7.40	1.27 7.07	1.52
		7.40	7.07	7.14
Reduction, %	-	-	-	78.7
Exhaust Flowrate, DSCFM	-	-	-	49
5/5/98	•			
Volatile Orgainic Compounds				
lb/hr (Outlet)		4.61		4.61
lb/hr (Inlet)		37.55		37.55
				37.33
Reduction, %		•		87.8
Exhaust Flowrate, DSCFM				49
5/27/98				
)Volatile Orgainic Compounds	•			
lb/hr (Outlet)	10.12	14.53	44.40	
lb/hr (Inlet)	11.30	15.04	. 11.19	11.95
	11.00	,	7.10	11.15
Reduction, %	•			0.0
Exhaust Flowrate, DSCFM		,		46
6/11/98				
Volatile Orgalnic Compounds				•
lb/hr (Outlet)	41.95	32.96		37.46
lb/hr (Inlet)	33.78	71.62		52.70
Reduction, %				. 28.9
Exhaust Flowrate, DSCFM				
•				46



Attachment E

Summary of PM10 Emission Factors for Cottonseed Oil Mills Prepared by Fresno County APCD, 4/10/1991

FRESNO COUNTY AIR POLLUTION CONTROL DISTRICT

ENGINEERING REVIEW

COOL

OF

PRODUCERS COTTONSEED OIL MILL 2365 E. NORTH FRESNO, CA 93721

SHUTDOWN OF COTTONSEED OIL MILL

,
Mage 4. De
MC.

4/10/91

ATTACHMENT C

Post-It™ brand fax transmitta	al memo 76/1 # of pages >
L. Stern	From R. McVaral
Ca ARB	COSTUVAPOD
Dept.	Phone #
Fax# 1-916-445-50	Fax#

PM10 EMISSIONS

COPY

P/O#1030040101 - Unloading and Storage

Emissions from this process are mostly fugitive; and therefore, not verifiable. Hence, no credits will be granted for this operation.

P/O#1030040102 - Cleaning and Delinting

This is the largest source of PM10 emissions in the facility. Emissions will be calculated by using source test results (see attached) and applying them throughout the delinting stage.

Processes: Seed Cleaning

1st Cut Lint Cleaning 2nd Cut Lint Cleaning 1st Cut Lint Beaters 2nd Cut Lint Beaters

Motes

Bates Press Room

[Please note, that emissions from these processes are only from cottonseed,and not safflower.]

PM10 Emissions = (source test results) x (# cyclones) x (Tonnage) x (PM10 Fraction)

Seed Cleaning:

12-44 " "2D-2D" cyclones Test = .008 g/dscf > per cyclones = .012 lb/ton

Emissions = (.012 lb/ton) (12 cyclones) (245.9 tons/day) $(0.5 \frac{\text{ibPM10}}{\text{lbPM}})$

PM10 = 17.7 lb/day

1st Cut Lint Cleaning -

PM10 = 131.0 lb/day

2nd Cut Lint Cleaning -

32-364 "1D-3D" cyclones

Test = .021 g/dscf

> per cyclone

.022 lb/ton

Emissions = $(.22 \text{ lb/ton})(32 \text{ cyclones})245.9 \underline{\text{tons/day}})(0.5\underline{\text{lbPM10}})$

PM10 = 86.56 lb/day

1st Cut Lint Beaters -

4-30" "20-2D" cyclones

Test = .21 g/dscf

> per cyclone

.019 lb/ton

Emissions = (.019 lb/ton) (4 cyclones) (245.9tons/day) (.5<u>lbPM10</u>) lbPM

PM10 = 9.34 lb/day

2nd Cut Lint Beaters

8-26"10-30" Cyclones

Test = 0.41 g/dscf

> per cyclone

.039 lb/bale

Emissions = $(.011 \text{ lb/ton})(8 \text{ cyclones})(245.9 \underline{\text{tons/day}})(0.5\underline{\text{lbPM10}})$

PM10 = 10.82 lb/day

Bake Press Room

3-62" "1D-3D" 1-36" "2D-2D"

1-26 "2D-2D"

Test = .072 g/dscf

> per cyclone ("20-2D")

.24 lb/ton

PM10 = (.24lb/ton)(245.9tons)(3 cyclones)(0.5 lbPM10) lbPM10

PM10 = 92.21 lb/day

P/O#1030040103 - Hulling & Separating Room

Results from the RANCHERS COTTON OIL MILL will be used since no source test results exist from PRODUCERS.

Source Tests Results = 1.47 lb/hr = .098 lb/ton (TOTAL)

(Ranchers 8/24-8/25/76) Chronocology) 15 tons/hr

IbPM10

PM10 = (245.9 tons/day)(.098 ib/ton)(0.5 ibPM10)

PM10 = 12.05 lb/day For Cottonseed

PM10 = (136.7 tons)(.098 lb/day)(0.5 lbPM10)

IbPM10

PM10 = 6.7 lb/day for Safflower

TOTAL = 18.75 lb/day

cost

For the rest of the plant, no actual source testing was performed. An average lb/ton emission factor from the source test results will be used since it was not documented if the tests were performed an "1D-3D" or "2D-2d" cyclones, the average lb/ton emission factor for "2D-2D" cyclones will be used for all cyclones. The average emission factor based on source test results (see attached summary) is 0.06 <u>lbPM</u> (per cyclone).

ton

P/O# 1030040104 - Solvent Extraction

PM10 emissions from meal handling

1-"1D-2D" cyclone @ 15415 cfm

$$PM10 = (.06 \underline{lbPM})(245.9 \underline{tons})(0.5\underline{lbPM10})$$

ton day $\underline{lbPM10}$

PM10 = 7.4 lb/day

P/O#1030040105 - Bulk Meal Storage

PM emissions are from meal loading for both cottonseed and safflower.

4-"2D-2D" cyclones

$$PM10 = (.06\underline{lbPM})(4 \text{ cyclones})(245.9+136.7\underline{tons})(0.5\underline{lbPM10})$$

ton day Pm10

P/O#1030040106 - Meal Processing

PM10 emissions from cotton seed and safflower

2 - Baghouses

5 - "1D-3D" cyclones

Attachment F

Potential to Emit Calculations for the Chowchilla Oil Mill Facility (Project #930468)

Table 1. Potential to Emit (PE)

T-	· · · · · · · · · · · · · · · · · · ·	1	ν	(50)		
Operation (PTO#)	E.F. (1b PM /ton)	Thruput ton/day	PM10/PM	# of cyclones	lb/day (ton/yr)	
Receiving C-41-4-0	1.0	500	0.5		250 (41.88)	
Seed Cleaning C-41-6-1	0.012	500	0.5	15	45 (7.54)	
lst Cut Linter C-41-5-0	0.08	500	0.5	7	140 (23.45)	
2nd Cut Linter C-41-7-0	0.022	500	0.5	17	93.5 (15.66)	
Hulling C-41-8-1	0.09	500	0.5	5	112.5 (18.84)	
Storage & Loading C-41-10-0 & C-41-13-0	0.01 gr/dscf	2664 scfm	34560 min/day	11b/ 7000 gr	131.5 (22.03)	
Hull Storage C-41-14-0	0.06	500	0.5	1	15.0 (12.56)	
Boiler PM10 C-41-12-0	0.005 lb/MMBtu	13.5 MMBtu/hr	24 hr/day		43.1 (7.22)	
TOTAL PM10					830.6 (139.12)	
Hexane Loss C-41-9-0 & C-41-11-0	5.58 lb. VOC/ton	500			2,791 (467.5)	
Boiler VOC	0.003 lb/MMBtu	13.5 MMBtu/hr	24 hr/day		0.96 (0.16)	
TOTAL VOC					2,792 (467.66)	
Boiler NOx (PENOx)	0.133 lb/MMBtu	13.5 MMBtu/hr	24 hr/day		43.1 (7.22)	
Boiler CO (PECO)	0.033 1b/MM8tu	13.5 MMBtu/hr	24 hr/day		10.7 (1.79)	
Boiler SOx (PESOx)	0.001 lb/MMBtu	13.5 MMBtu/hr	24 hr/day		0.3 (0.05)	

Attachment G

AP-42 Emission Factors for Natural Gas Combustion

Table 1.4-1. EMISSION FACTORS FOR NITROGEN OXIDES (NO_x) AND CARBON MONOXIDE (CO) FROM NATURAL GAS COMBUSTION*

	NO _x ^b		C	0
Combustor Type (MMBtu/hr Heat Input) [SCC]	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating
Large Wall-Fired Boilers (>100)				
[1-01-006-01, 1-02-006-01, 1-03-006-01]				•
Uncontrolled (Pre-NSPS)°	280	Α	84	В
Uncontrolled (Post-NSPS) ^c	190	Λ.	84	В
Controlled - Low NO _x burners	140	٨	84	В
Controlled - Flue gas recirculation	100	D	84	В
Small Boilers (<100) [1-01-006-02, 1-02-006-02, 1-03-006-02, 1-03-006-03]	,			
Uncontrolled	100	В	84	В
Controlled - Low NO _x burners	50	Ď	84	В
Controlled - Low NO _x burners/Flue gas recirculation	32	С	84	В
Tangential-Fired Boilers (All Sizes) [1-01-006-04]				
Uncontrolled	170	Α	24	С
Controlled - Flue gas recirculation	76	D	98	D
Residential Furnaces (<0.3) [No SCC]				
Uncontrolled	94	В	40	В

Reference 13. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. To convert from 1b/10 6 sef to kg/106 m³, multiply by 16. Existing factors are based on an average natural gas higher heating value of 1,020 Btu/sef. To convert from 1b/10 6 sef to 1b/MMBtu, divide by 1,020. The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. SCC = Source Classification Code. ND = no data. NA = not applicable.

Expressed as NO₂. For large and small wall fired boilers with SNCR control, apply a 24 percent reduction to the appropriate NO x emission factor. For intial-fired boilers with SNCR control, apply a 13 percent reduction to the appropriate NO x emission factor.

S=New Source Performance Standard as defined in 40 CFR 60 Subparts D and Db. Post-NSPS units are boilers with greater than 250 MMBtu/hr of input that commenced construction modification, or reconstruction after August 17, 1971, and units with heat input capacities between 100 and MBtu/hr that commenced construction modification, or reconstruction after June 19, 1984.



Pollutant	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating
CO ₂ ^b	120,000	A
Lead	0.0005	D
N ₂ O (Uncontrolled)	2.2	E
N ₂ O (Controlled-low-NO _X burner)	0.64	E
PM (Total) ^c	7.6	D
PM (Condensable) ^c	5.7	D
PM (Filterable) ^c	1.9	В
SO ₂ d	0.6	A
тос	11	B
Methane	2.3	В
voc	5.5	С

- * Reference 13. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. Data are for all natural gas combustion sources. To convert from lb/10⁶ scf to kg/10⁶ m³, multiply by 16. To convert from lb/10⁶ scf to 1b/MMBtu, divide by 1,020. The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. TOC = Total Organic Compounds.

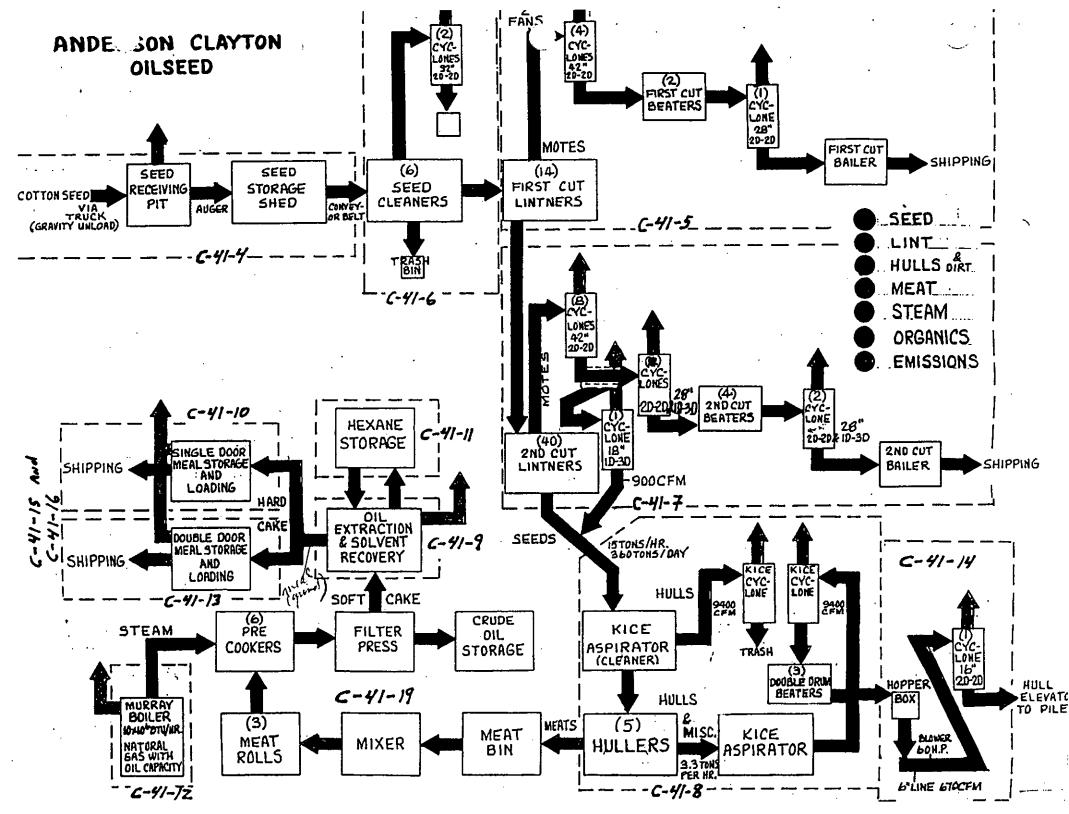
 VOC = Volatile Organic Compounds.
- b Based on approximately 100% conversion of fuel carbon to CO₂. CO₂[lb/10⁶ scf] = (3.67) (CON) (C)(D), where CON = fractional conversion of fuel carbon to CO₂, C = carbon content of fuel by weight (0.76), and D = density of fuel, 4.2x10⁴ lb/10⁶ scf.
- ^e All PM (total, condensible, and filterable) is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors presented here may be used to estimate PM₁₀, PM_{2.5} or PM₁ emissions. Total PM is the sum of the filterable PM and condensible PM. Condensible PM is the particulate matter collected using EPA Method 202 (or equivalent). Filterable PM is the particulate matter collected on, or prior to, the filter of an EPA Method 5 (or equivalent) sampling train.
- ^d Based on 100% conversion of fuel sulfur to SO₂.

 Assumes sulfur content is natural gas of 2,000 grains/10⁶ scf. The SO₂ emission factor in this table can be converted to other natural gas sulfur contents by multiplying the SO₂ emission factor by the ratio of the site-specific sulfur content (grains/10⁶ scf) to 2,000 grains/10⁶ scf.

Attachment H

Facility and Process Flow Diagrams

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Attachment I

Permit Unit Requirements for Equipment Remaining in Service at the Chowchilla Oil Mill

CONDITIONS FOR PERMIT C-41-4-0

Page 1 of 1 **E:** 07/31/2003

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORPLOIL MILL

AAILING ADDRESS:

P.O. BOX 12506 FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

659 HP SEED RECEIVING OPERATION INCLUDING SEED RECEIVING PITS, STORAGE HOUSES AND PILES, AND RELATED CONVEYING EQUIPMENT.

CONDITIONS

- Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District NSR Rule]
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
- The District shall be notified of any breakdown conditions in accordance with Rule 1100 (Equipment Breakdown). [District Rule 1100]
- The APCO or any authorized representative, upon request, shall have access to inspect any equipment, operation, or method required in this permit, and to sample emissions from the source or require samples to be taken. [District Rule 1081]
- Records of daily cotton seed throughput shall be maintained, retained on the premises for at least two years and made available for District inspection upon request. [District Rule 1070]

Nov 2 2000 10 21AM - VILLEGAE

(firm wire

CONDITIONS FOR PERMIT C-41-10-1

Page 1 of 1 : 07/31/2003

LEGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORPLOIL MILL

.∕IAILING ADDRESS:

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

815 HP MEAL LOADING AND STORAGE OPERATION NORTH, INCLUDING FLOOR SCREW CONVEYOR IN MEAL HOUSE WITH THREE DOORS, SERVED BY ONE 32" 1D-3D CYCLONE AND A BAGHOUSE DUST COLLECTOR (THE CYCLONE AND BAGHOUSE ALSO SERVE PTO #C-41-13-1).

- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {118} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] 2.
- The meal house doors shall remain closed during receiving or shipping of meal at the meal house. [District Rule 3.
- Throughput of meal shall not exceed 270 tons per day. [District Rule 2201]

CONDITIONS FOR PERMIT C-41-11-0

Page 1 of 1 E: 07/31/2003

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON SORPLOIL MILL

AAILING ADDRESS:

P.O. BOX 12506 FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

30,000 GALLON CAPACITY ABOVEGROUND HEXANE STORAGE TANK.

- {271} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
- {234} The APCO or any authorized representative, upon request, shall have access to inspect any equipment, operation, or method required in this permit, and to sample emissions from the source or require samples to be taken. [District Rule 1081]
- 3. Records of daily amount of solvent (hexane) throughput shall be maintained, retained on the premises for at least two years and made available for District inspection upon request. [District Rule 1070]

CONDITIONS FOR PERMIT C-41-13-1

Page 1 of 1 E: 07/31/2003

YEGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORP/OIL MILL

MAILING ADDRESS:

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

101 HP MEAL LOADING AND STORAGE OPERATION SOUTH, INCLUDING FLOOR SCREW CONVEYOR IN MEAL HOUSE WITH DOUBLE DOORS, SERVED BY ONE 32" 1D-3D CYCLONE AND A BAGHOUSE DUST COLLECTOR (CYCLONE AND BAGHOUSE ALSO SERVE PTO #C-41-10-1).

- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three 1. minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {118} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] 2.
- The meal house doors shall be closed during recieving or shipping of meal at the meal house. [District Rule 2201] 3.
- Throughput of meal shall not exceed 275 tons per day. [District Rule 2201]

- CONDITIONS FOR PERMIT C-41-14-0

Page 1 of 1 : 07/31/2003

'EGAL OWNER OR OPERATOR: ANDERSON CLAYTON

MAILING ADDRESS:

P.O. BOX 12506

FRESNO, CA 93778-

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

60 HP HULL STORAGE PILE SERVED BY 1-20" 2D-2D CYCLONE.

- {12} Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the 1. atmosphere. [District NSR Rule]
- {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 2.
- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three 3. minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {271} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
- {234} The APCO or any authorized representative, upon request, shall have access to inspect any equipment, 5. operation, or method required in this permit, and to sample emissions from the source or require samples to be taken. [District Rule 1081]
- Records of daily seed throughput shall be maintained, retained for at least two years and made available for District inspection upon request. [District Rule 1070]

CONDITIONS FOR PERMIT C-41-18-0

Page 1 of 1 07/31/2003

...AILING ADDRESS:

FGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORPLOIL MILL

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

208 HP DIESEL-FUELED CUMMINS ENGINE, WITH TURBOCHARGER AND AFTERCOOLER, POWERING AN EMERGENCY FIRE PROTECTION STANDBY PUMPING SYSTEM.

- {271} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {118} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] 3.
- A daily log of operating hours shall be maintained on the premises, retained for at least two years, and made available to the District upon request. [District Rule 1070]
- Particulate matter emission concentration shall not exceed 0.10 grains per standard dry cubic foot. [District Rule 42011
- The engine shall be operated only for maintenance testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance and testing purposes shall not exceed 200 hrs per year. [District Rule 2201 and 4701]
- 7. {310} The engine shall be equipped with a turbocharger and with an aftercooler or intercooler. [District NSR Rule]
- {313} The sulfur content of the diesel fuel used shall not exceed 0.05% by weight. [District NSR Rule] 8.
- If engine operates with visible emissions greater than 1/2 Ringelmann or 10% opacity, compliance with particulate matter emissions shall be conducted by District-witnessed sample collection within 60 days of District determination. [District Rule 1081]
- 10. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 11. {309} The engine shall be equipped with a non-resettable elapsed-time meter indicating total hours of operation. [District NSR Rule]

Attachment J

AP-42 Emission Factors for Grain Processing Facilities, Table 9.9.1-2

Table 9.9.1-2. PARTICULATE EMISSION FACTORS FOR GRAIN PROCESSING FACILITIES^a

		Filterable ^b			Condensible PM ^c				
Type of Facility/ Emission Source	Type of Control	РМ	EMISSION FACTOR RATING	PM-10 ^d	EMISSION FACTOR RATING	Inorganic	Organic	Total	EMISSION FACTOR RATING
Animal feed mills Grain receiving (SCC 3-02-008-02)	None	0.017¢	Ē	0.0025 ^e	E				
Grain cleaning (SCC 3-02-008-07)	Cyclone	(f)		(f) .					
Storage	None	ND		ND					
Grain milling (SCC 3-02-008-15)									
Hammermill (2003)	Cyclone	0.067 ^h	E	(g)		٠			
(SCC 3-02-008-17)	Baghouse	0.012 ^j	E	(y)					
Flaker (SCC 3-02-008-18)	Cyclone	0.15 ^k	Ė	(g)					
Grain cracker (SCC 3-02-008-19)	Cyclone	0.024 ^k	E	(g)					
Mixer	None	ND		ND					
Conditioning	None	ND		ND					
Pelletizing Pellet cooler ^m (SCC 3-02-008-16)	Cyclone	0.36 ⁿ	E	(g)		_	-	0.059 ^p	E E
(SCC 3-02-006-10)	High efficiency cyclone ^r	0.15 ^q	E	(g)					,
Feed shipping (SCC 3-02-008-03)	None	0.0033 ^e	Е	0.0008 ^e	E				
Wheat flour mills Grain receiving (SCC 3-02-007-31)	None	(f)		(f)				ı	
Grain handling (SCC 3-02-007-32) (legs, belts, etc.)	None	(f)	, , , , , , , , , , , , , , , , , , ,	(f)					

Attachment K

Seed/Meal Processing and Handling (Project #970202)

APPLICATION REVIEW

Project #: 970202
Application #: C-41-19-0
Deemed Complete: 04/16/97

Engineer: Hashim Navrozali **Date:** August 14, 1997

Facility Name: Anderson Clayton Corp. - Chowchilla Mill

Mailing Address: P.O. Box 12506

Fresno, CA 93778-2506

Contact Name: Steven White Phone: (209) 446-6420

I. PROPOSAL

Facility's primary business is cotton seed oil processing. Anderson Clayton Corporation is proposing to modify its existing cotton seed meats expansion/preparation room, at the Chowchilla Oil Mill. The meats preparation room was previously considered to be part of the solvent extraction facility (C-41-9). The applicant is now requesting that this operation be treated as a separate permit unit, since it can be independently operated (the prepared meats can be stockpiled and do not have to be continuously fed into the solvent extraction system). The preparation room will be designated a new permit number (i.e. C-41-19). The applicant is further proposing to modify the meats preparation operation by adding a flaking mill, a steam cooker, and a meats cooler/dryer (using an air circulation system), and associated conveying equipment (refer to Diagram #101-1 in Attachment 1) to existing processing system. Particulate Matter (PM) emissions from the flaking mill and cooler/dryer will be served by 1D-3D cyclones.

The existing seed preparation room consists of three meat crushing rolls, the cotton seeds are cracked and then directly fed into a pre-cooker and conditioned with steam (refer to Diagram #100-1 in Attachment 1). After pre-cooking the meats are transferred to a series of expellers where over 75% of vegetable oil is removed. The hard meats from the expeller units are subsequently routed to a hexane pre-press solvent unit where the remainder of the oil is extracted and solvent recovered. The new oil extraction system will involve using the same meat crushers, but the existing expellers will be removed. The process will now use a flaking mill, a cooler/dryer, and a set of expanders to make the meats porous. Oil will not be removed in the new cotton seed preparation room. The prepared meats or collets (bearing 100% of the oil) will now be routed directly to the solvent extraction area (C-41-9) for extraction of oil. Total meats processed will remain unchanged at 600 tons/yr (refer to ATC #C-41-9-2; this ATC is pending conversion into a PTO).

II. APPLICABLE RULES

Rule 2020	Exemptions (Adopted September 19, 1991; Last Amended July 21, 1994)
Rule 2201	New and Modified Stationary Source Review Rule (Adopted September 19, 1991; Last Amended June 15, 1995)
Rule 4101	Visible Emissions (Adopted May 21, 1992; Amended Dec 17, 1992)
Rule 4102	Nuisance (Adopted May 21, 1992; Amended Dec 17, 1992)
Rule 4201	Particulate Matter Concentration (Adopted May 21, 1992; Amended Dec 17, 1992)
Rule 4202	Particulate Matter - Emission Rate (Adopted May 21, 1992; Amended Dec 17, 1992)
Rule 4691	Vegetable Oil Processing Operations (Adopted April 11, 1991; Amended December 17, 1992)

III. PROJECT LOCATION

Equipment will be located at: 25184 Road 16, Chowchilla, CA.

The applicant states that the facility is not within 1,000 feet of the outer boundary of a school site, so the public noticing requirement of California Health and Safety Code 42301.6 shall not apply. The project is located in a CO attainment area.

IV. PROCESS DESCRIPTION

The primary purpose of the cotton seed meats expansion/preparation plant is to convert meats into porous oil bearing pellets known as collets. The meats are first separated from hulls of the cotton seeds by a series of dehullers, delinters, and scalpers (Permit Units C-41-5, 6, 7, & 8), and then routed to the preparation plant for further processing (see Attachment 1 for process flow diagram #101). At the preparation plant, the meats are mixed with water and then run through three fully enclosed crushing rolls (no particulate matter emissions are expected, since the crushers are not vented to atmosphere. Furthermore, the high moisture content of the process, prevents dust or meat fragments to enter the air stream). The moisture laden crushed meats are then fed through a flaking mill consisting of two 1500 mm x 600 mm, horizontally opposed metal rolls. The constant grinding action of the rolls has a potential to cause them to overheat, and exceed their normal operating temperature of 135°F. For this reason an aspirator fan will be used to blow cool air over the flaking rolls and keep them operating at optimum temperatures. The

aspiration air may have a tendency to trap trace quantities of flaked meat fragments and fine particles generated from the rolls. As a cautionary measure, the particulate emissions entrained in the aspirated air exhaust, will be routed through a 20" 1D-3D cyclone for control, prior to release to atmosphere. Flaked meats produced from the flaking mills will be transported through a cooker unit equipped with six perforated trays, using a mechanical incline conveyor system. The flaked meats are injected with steam (produced by a 32.0 MMBtu/hr boiler; Permit Unit C-41-12) to soften and condition them, and to assist in the oil extraction operation. Steaming the meats does not produce particulate emissions since the condensate traps any fines released by the meats transportation system. In addition, there is no aspiration air involved in the cooking process. After cooking, the meats are introduced into two parallel expander units, where there are once again treated with steam, this time under high pressure, causing the break down of the cell walls and rendering the meats extremely porous. These soft and permeable processed meats are now known as collets. The hydrated and temperate collets are now conveyed to a dryer/cooler unit for treatment. The dryer unit is served by a series of heated electric elements and an ambient air circulation system. Any particulate matter, including collet shreds and flaked meat fragments, that may be trapped in the circulating air are controlled by a 60" 1D-3D cyclone. The air stream exiting the dryer unit is laden in steam and condensates, therefore very small amounts of fine dust particles (assume negligible) are expected to be entrained therein.

The dried and cooled collets (bearing 100% of the oil) are transferred to the solvent extraction facility (C-41-9) by coil mounted shaker conveyors where all the oil is extracted (using an hexane solvent), by means of a shallow bed rectangular loop type crusher. The oil and hexane mixture known as miscella is then refined and the pure vegetable oil produced is then routed for storage. For a comprehensive description of the oil extraction and refining process and the solvent distillation/recovery system refer to Project #970201.

The maximum operating schedule for the collet processing operation is 24 hours per day, 7 days per week, 18 weeks per year.

The proposed cotton seed meat processing rate is 600 tons per day.

V. EQUIPMENT LISTING

C-41-19

903 HP Cotton seed meats preparation/expansion operation (collet producing facility) including: (4) meats feeder bins, (1) meats mixer, (3) meats crushing rolls, (1) meats flaking mill served by a 20" 600 cfm 1D-3D cyclone, (1) flaked meat steam cooker, (2) meats steam expanders, (1) collet cooler/dryer served by a 60" 10,000 cfm 1D-3D cyclone, and associated equipment including feeders and discharge conveyors.

VI. <u>EMISSION CONTROL TECHNOLOGY EVALUATION</u>

There are two emissions points associated with the collet manufacturing facility, that are directly vented to atmosphere, and are a source of potential Particulate Matter (PM) emissions (all other operations are fully enclosed, high moisture laden processes, and are not expected to generate any dust or fines to atmosphere):

- 1) PM emissions from the 20" 600 cfm 1D-3D cyclone, serving the meats flaking mill.
- 2) PM emissions from the 60" 10,000 cfm 1D-3D cyclone, serving the collets cooler/dryer.

Cyclone Design Check

A design check is performed to ensure that the size and configuration of the two cyclones is adequate in handling the corresponding air flow rates and particulate grain loading of the waste streams exiting the meats flaking mill and collet cooler/dryer systems:

According to the U.S.D.A Cotton Ginners Handbook, Dec. 1994, the recommended inlet velocity for a 1D-3D cyclone is 2,800 to 3,650 ft/min (derived from the equations listed in *Fluid Flow in Fan Engineering*, pp. 61-134. Buffalo Forge Company, Buffalo, NY, 1970). The proposed inlet velocities are calculated using the following formula.

```
V = Q ÷ A where, V = inlet velocity (ft/min)
Q = air flow rate (cfm)
A = inlet area (ft²)
= inlet height (H<sub>c</sub>) × inlet width (B<sub>c</sub>)
```

For the 1D-3D cyclones, $H_c = D_c$ and $B_c = D_c/8$, where $D_c =$ cyclone diameter. Therefore, $A = D_c^2/8$.

20" 1D-3D cyclone serving the meats flaking mill:

Based on the maximum proposed air flow (Q) of 600 cfm, and the effective inlet area (A) of 0.35 ft², the inlet velocity for the 20" 1D-3D cyclone is calculated as follows:

$$V = Q \div A = (600 \text{ ft}^3/\text{min}) \div (0.35 \text{ ft}^2) = 1,714 \text{ ft/min}.$$

The inlet velocity of 1,714 ft/min for the 20" 1D-3D cyclone is below the lower end of the recommended range (i.e. 2,800 ft/min). The applicant has provided the following justifications for maintaining the inlet velocity at 1,714 ft/min:

The manufacturer of the aspirator fan connected to the flaking mill; has recommended that the air flow rate not exceed 600 cfm. Any air flow rate exceeding this level could cause turbulence in the mill and adversely affect the function of the metal rolls serving the mill.

- The high moisture content of the flaked seed meats will cause negligible PM emissions from the mill (estimated at 0.02 gr/dscf). The applicant hence feels that the 1D-3D sizing will have a minimal impact on overall emissions.
- The primary purpose of the aspiration system connected to the flaking mill is to provide air cooling and maintain temperature of the milling rolls to within 135° F. Most comparable meats flaking systems are not vented to control devices, since they are considered to be insignificant emissions sources. The applicant hence feels that the installation of the 1D-3D cyclone is an added control measure, and slight undersizing of the cyclone will not impact the overall handling capacity and efficiency of the cyclone in controlling the already negligible emissions. Furthermore, a source test will be conducted to verify particulate matter grain loading in exhaust from the cyclone and appropriate changes in control parameters (i.e. cyclone size, air flow rates and product throughput) will be proposed by future permitting actions, if emissions requirements are not met.

60" 1D-3D cyclone serving the collets cooler/dryer:

Based on the maximum proposed air flow (Q) of 13,500 cfm, and the effective inlet area (A) of 4.5 ft², the inlet velocity for each of the 60" 1D-3D cyclones is calculated as follows:

$$V = Q \div A = (10,000 \text{ ft}^3/\text{min}) \div (3.13 \text{ ft}^2) = 3,195 \text{ ft/min}.$$

As shown above, the inlet velocity for proposed 60" 1D-3D cyclone collector (serving the collet drying process) is within the recommended range of 2,800 - 3,650 ft/min, indicating that this cyclone is adequately sized to handle the corresponding air flow rate.

A. Best Available Control Technology (BACT) Requirement

1. Applicability

Per Rule 2201 Sections 4.1.1 and 4.1.1.1, BACT shall be applied to a new or modified emissions unit if the new unit or modification results in an increase in permitted emissions (IPE) greater than 2 pounds per day for NO_x, PM₁₀, SO_x, CO, or VOC. In a CO attainment area, the stationary source New Source Review (NSR) balance must also exceed 550 pounds per day to trigger BACT.

As shown in Section VII.C, BACT IPE for emissions from each of the two new emissions units (i.e. flaking mill & cooler/dryer) does not exceed 2 lb/day for PM₁₀. Therefore, BACT is not required for control of this pollutant.

VII. CALCULATIONS

A. Emission Factors and Assumptions

- The permitted meats processing rate shall remain unchanged at 600 tons/day, after modification of the cotton seed meat preparation/expansion facility.
- Grain loading values of particulate matter (PM) emissions in the exhaust from the 1D-3D cyclones serving the new flaking mill and collet cooler/dryer, are estimated at 0.02 gr/dscf & 0.001 gr/dscf respectively, per applicant. Anderson Clayton, Inc., has stated that the high moisture content of the process streams involved in the flaking mills and cooler/dryer system will cause very insignificant amounts of PM₁₀ to be present in the aspirated air. The air streams are expected to be saturated with high levels of water droplets and oil condensates. There is no published source testing data or emission factors available for particulate matter emissions from comparable cotton seed meats flaking or collet drying operations (most existing systems are uncontrolled). A review of source tests conducted for agricultural grain flakers and dryers, including Valley Grain Products (source test conducted on 01/04/84, for a 18 MMBtu/hr corn flaker/dryer) indicated that the maximum PM grain loading in a high dust oriented process such as corn meal flaking/drying was 0.03 gr/dscf. Seed meat flaking and collet drying is a much cleaner process compared to corn meal drying since there are no husks or grain skins involved. The applicant is hence confident that the actual PM grain loading values from these operations will be almost negligible, and well below the values being proposed. The facility has agreed to verify these values by performing a source test upon issuance of an Authority to Construct (ATC), and prior to start up of the operations (a condition requiring source testing will be inserted in the ATC).
- Air flow rates from the 1D-3D cyclones serving the new flaking mill and collet cooler/dryer, are 600 cfm and 10,000 cfm respectively
- PM₁₀ is 50% of total particulate matter (PM) emissions generated from the meats flaking and collet cooling/drying operations (per Rule 2201, Section 4.22.3).
- Maximum equipment operating schedule is 24 hr/day and 18 wks/yr.

B. Potential to Emit Calculation

Potential to Emit

The existing emissions of PM₁₀ from the cotton seed meat preparation operations are considered to be insignificant. All meat processing equipment (including conveyors, roll crushers, and expellers) are fully enclosed and not vented to atmosphere. As mentioned earlier, the facility is proposing to remove existing expellers and install a meat flaking and expansion system which will make the meats porous and permeable, but retain 100% of the oil within the cell membranes. The oil bearing conditioned meats (collets) will subsequently be routed to the solvent extraction facility for further processing. The addition of the flaking

mill and air assisted collet cooling/drying system will cause a small amount PM₁₀ emissions (including meat/collet fragments and flakes) to be generated and emitted to atmosphere. This quantity of PM must be calculated and added to the overall permitted emissions of Permit Unit C-41-19 (meats preparation facility), as show below:

 PM_{10} (flaking mill) = [grain loading, gr/dscf]x[air flow rate, dscf/min]x[60 min/hr] x [24 hrs/day]x[1 lb/7000 grains]x[0.5 lb-PM₁₀ / lb-PM]

- = [0.02 gr PM/dscf]x[600 cfm]x[60 min/hr]x[24 hrs/day]x [1 lb/7000 grains]x[0.5 lb-PM₁₀ / lb-PM]
- = 1.23 lb-PM₁₀/day

 PM_{10} (collet cooler/dryer) = [grain loading, gr/dscf]x[air flow rate, dscf/min]x[60 min/hr] x [24 hrs/day]x[1 lb/7000 grains]x[0.5 lb-PM₁₀ / lb-PM]

= [0.001 gr PM/dscf]x[10000 cfm]x[60 min/hr]x[24 hrs/day]x [1 lb/7000 grains]x[0.5 lb-PM₁₀ / lb-PM]

= 1.03 lb-PM₁₀/day

Potential to Emit (Permit Unit C-41-19) = 1.23 + 1.03 = 2.3 lb-PM₁₀/day

Increase in Permitted Emissions (IPE) = Post-project Emissions - Pre-project Emissions = (2.3 - 0) lb-PM₁₀/day

 $= 2.3 \text{ lb-PM}_{10}/\text{day}$

C. BACT Determination

According to NSR Section 4.1.1, BACT is triggered if increase in permitted emissions (BACT IPE) is > 2 lbs/day for a new or modified emissions unit, as calculated per Section 6.0.

The meats flaking cyclone and collet cooler/dryer are two new emissions units being added to the meats preparation facility. BACT IPE is calculated as follows for each of the two new units:

BACT IPE = PE

Where: PE = Potential to Emit for the new emissions unit.

BACT IPE_{FLAKING MILL} = PE = 1.23 lb-PM₁₀/day (as calculated in Section VII.B)

BACT IPE_{COOLER/DRYER} = PE = 1.03 lb-PM₁₀/day (as calculated in Section VII.B)

Since BACT IPE < 2 lb/day for PM₁₀ emissions from flaking mill and collet cooler/dryer, BACT will not be triggered for this pollutant.

D. Facility New Source Review (NSR) Balance:

According to Section 6.1.4 of NSR Rule 2201, the stationary source NSR balance for PM₁₀, SO_X, and CO must be determined (for a CO attainment area). The NSR balance is equal to the sum of the daily potential to emit (PE) for all emission units installed after the baseline date (May 21, 1979 - Madera County).

The facility was in operation prior to the May 1979 at its present capacity of 600 ton/day of seed. All modifications documented in the facility's source file have caused a decrease in the emissions from the facility. Pursuant to section 6.6 of Rule 2201, the pre-project NSR Balance for PM10, SOx and CO is set equal to zero since the cumulative net emissions change for the facility since 1979 less than zero.

The post-project NSR balance for PM₁₀, CO, and SOx, is presented Table 1:

Table 1: Facility NSR Balance, lbs/day

Project # Permit #		Description	PM ₁₀	CO	SO _x
		Pre-Project NSR Balance	0	0	0
970528	C-437-27	IPE due to current project	2.3	0	0
		Post-Project NSR Balance	2.3	0	0
Offset Thresholds			80	550	150

As shown in Table 1, the NSR balance for PM₁₀, CO, and SOx continues to be below the offset threshold levels hence facility will not be subject to offset requirements for these pollutants.

E. Stationary Source Potential to Emit (SSPE)

Pursuant to Section 4.2.3 of the NSR rule, offsets are triggered when a new or modified stationary source potential to emit (SSPE) exceeds 10 tons per year for either NOx or VOCs (in a CO attainment area).

The proposed system only emit PM₁₀ in significant amounts, hence its contribution to the facility SSPE for NOx and VOC, will be zero. Since the change in facility SSPE for will be zero, after implementation of this project, offsets will not be triggered.

F. Major Source/Title | Modification Determination

The facility is an existing major source (existing potential to emit of the stationary source for VOC emissions exceed the 50 ton/yr major source limit; per Rule 2201, Section 3.19). Therefore, the project does not constitute formation of a new major source or Title I modification.

G. Notification and Publication of Preliminary Decision

According to Sections 5.1.3.4.3 through 5.1.3.4.5 of the NSR rule, public notification is required for new and modified sources with an increase in permitted emissions for those pollutants reaching the NSR Balance notification thresholds (equal to or greater than 140 lb SOx/day, 70 lb PM₁₀/day, or 550 lb CO/day). As shown in Table 1 of this report the post-project NSR balance of PM₁₀ (the only affected pollutant from this project) is 2.3 lb/day.

Therefore, public notification pursuant to Rule 2201 Sections 5.1.3.4.3 through 5.1.3.4.5 is not triggered.

H. Daily Emission Limitations (DELs)

According to Section 5.1.9.2 of the NSR Rule 2201, a Permit to Operate shall include daily emission limitations (DEL) which reflect applicable emission limits including the offset requirements. The DELs for the permitted seed meats preparation operation shall be represented by the following conditions:

- Seed meat processing rate shall not exceed 600 tons/day.
- Particulate Matter (PM) grain loading in exhaust from the 1D-3D cyclone serving the flaking mill shall not exceed 0.02 gr/dscf.
- Particulate Matter (PM) grain loading in exhaust from the 1D-3D cyclone serving the cooler/dryer shall not exceed 0.001 gr/dscf.
- Total PM₁₀ emissions from the meats preparation/expansion operation shall not exceed 2.3 lb/day.

Although the maximum design flow-rate (dscfm) through the 1D-3D cyclones in combination with grain loading factor (gr/dscf) are adequate to enforce DEL (assuming continuous operation for 24 hr/day), the facility process weight limit (tons of meats processed/day) will also be included to ensure correct sizing of the cyclone collector control systems.

VIII. COMPLIANCE

Rule 2201: New and Modified Stationary Source Review

Section 4.1.1 requires BACT if emissions from a new or modified unit results in an Increase in Permitted Emissions (BACT IPE) greater than 2 pounds per day.

As shown in section VIIC of this document, BACT IPE for PM₁₀ (the only affected pollutant from this project) from each of the two new emissions units (i.e. flaking mill and collet cooler/dryer) is < 2.0 lb/day, hence BACT will not be triggered for this pollutant.

Offsets are required if pollutant emissions exceed the trigger levels set in Section 4.2.2.1 and 4.2.3 for stationary source NSR balance and stationary source potential to emit (SSPE), respectively.

As shown in Table 1 of this report, the NSR balance for PM10 (the only affected pollutant from this stationary source) is 2.3 lb/day, which is below the designated offset threshold level of 80 lb PM10/day, therefore offsets are not required for this pollutant.

Since the proposed equipment only emits PM10, the facility SSPE balance for VOCs, and NOx will remain unchanged (SSPE_{after} = SSPE_{before}, and \triangle SSPE = 0). Therefore, offsets will not be required for these pollutants.

According to Section 5.1.3.4.4 new sources and modifications with an NSR balance of 70 pounds PM10 per day or greater and an increase in permitted emissions of PM10 are required to comply with public notification procedures.

As shown in Table 1, facility NSR balance for PM10 is 2.3 lb/day. Hence public notification requirements will not be triggered.

Section 5.1.9.2 requires enforceable conditions to be included to reflect applicable emission limits. This requirement will be satisfied by included the DELs listed in Section VII.H of this document on Permit C-41-19-0.

Facility should comply with this Rule.

Rule 4101: Visible Emissions

Visible emissions are expected to be less than Ringelmann No.1. As indicated in Section VI of this report, the exhaust streams from the meats preparation facility are saturated with high levels of water vapor and trace quantities of oil and meat/collet fragments. The processes are not expected to generate any fugitive dust or smoke. In addition, the 1D-3D cyclones that serve the only two emission points in this plant (i.e. the meats flaking mill and collet cooler/dryer) should be instrumental in controlling any incidental particulate matter entrained in the exhausts. This should reduce any visible fugitive dust emissions. Continued compliance is therefore expected.

Rule 4102: Nuisance

A review of past inspection reports has shown no complaints or nuisance conditions due to the particulate matter emissions from existing meats preparation/expansion operations at this facility. This project is expected to result in very insignificant emissions increases (i.e. 2.3 lb PM10/day), and should not create any undesirable or adverse conditions. Therefore continued compliance is expected.

The risk from this project was reviewed by performing a prioritization in accordance with the requirements of the CAPCOA prioritization guidelines. The resulting prioritization score from this project is 0.00011 (see Attachment 4). Pursuant to District Risk Management Policy for New and Modified Sources, BACT for toxic emission control (T-BACT) is not required for projects with prioritization scores of less than one, and no further risk analysis is required.

Rule 4201: Particulate Matter Concentrations

Section 3.0 requires emissions of dust, fumes or particulate matter not to exceed 0.1 grains/dscf.

As shown in section VIIA, the PM grain loading in the exhaust from the 1D-3D cyclones serving the meats flaking mill and collet cooler/dryer is not expected to exceed 0.02 gr/dscf and 0.001 gr/dscf respectively.

Therefore, compliance with this rule is expected

Rule 4202 Particulate Matter - Emission Rate

Section 4.1 sets the maximum allowable particulate emission rates as a function of process weight rate. Based on the maximum process rate of 25 tons per hour, the maximum allowable particulate emission rate for this operation can be calculated as follows:

 $E = 3.59 P^{0.62}$

where;

E = Allowable particulate emission rate, lbs/hr

P = Process rate (\le 30 tons/hr) E = 3.59 x 25^{0.62} = 26.4 lb PM/hr

The maximum potential emission rate of particulate matter (PM) from this seed meats processing operation is 4.6 lb/hr (assume 0.5 lb-PM₁₀ / lb-PM), which is lower than the specified limit.

Therefore compliance with this rule is expected.

Rule 4691: Vegetable Oil Processing Operations

According to Section 1.0, the purpose of this rule is to limit VOC emissions from vegetable oil processing operations and to provide the administrative requirements for recording and measuring emissions.

As discussed in section IV (Process Description) of this report, the only pollutant expected to be emitted from the meats preparation/expansion room (Permit Unit C-41-19) is PM_{10} . The equipment in the preparation room will not be used to extract oil or treat the meats with VOC

containing solvents. All vegetable oil extraction and solvent recovery operations will be administered in a separate plant located on the facility premise (Permit Unit C-41-9). As shown in Project #970201, the VOC emissions from the solvent recovery plant continue to be in compliance with this rule.

IX. RECOMMENDATION

Compliance with all applicable prohibitory rules and regulations is expected. Recommend issuance of ATC # C-41-19-0 with following permit conditions:

see attached draft ATC

X. BILLING INFORMATION

The \$60.00 application filing fees have been paid.

For Permit to Operate annual renewals, the following renewal fees (based on Rule 3010) shall apply):

PTO#	Description	Schedule #	Fee
C-41-19-0	903 HP seed meats preparation/expansion operation	1G	\$ 698

Attachments:

- 1) Layout diagrams of seed meats processing facility (Diagram #s 100-1 & 101-1)
- 2) Existing PTO #C-41-9-1 & ATC #C-41-9-2
- 3) Draft ATC #C-41-19-0
- 4) Poject risk prioritization score

J.S.

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PUBLIC NOTICE

#119498 NOTICE OF FINAL ACTION FOR THE ISSUANCE OF EMISSION REDUCTION CREDITS

NOTICE IS HEREBY GIVEN that the Air Pollution Control Officer has issued Emission Reduction Credits (ERCs) to Anderson Clayton Corp./Oil Mill for emission reduction generated by the shutdown of equipment at the Chowchille Oil Mill Floatility ID C411 represented by Permit Unit Requirements (PURs) C4115-0, C41-61, 0.41-7.0 C41-81, C41-9-1, C41-12-1, C41-13-0, C41-16-0 and C41-19-2 at 25184 Road 16 in Chowchilla, CA the quantity of ERCs to be issued is 327,870 lb-VOC/yr. 3,047 lb- NOX/yr. 2,792 lb-CO/yr. 79,078 lb-PM10yr. and 49 lb-SOX/yr.

No comments were received following the District's preliminary decision on this project.

The application review for Project #C 1010009 is available for public inspection of the SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 1990 EAST GETTYSBURG AVENUE, FRESNO CA 93726

(Pub: March 21, 2001)

The undersigned states:

93726

CA

McClatchy Newspapers in 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 November 22, 1994, Action No. 520058-9.

The undersigned is and on all 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.

Beginning on the day of 19, to the day of 19 inclusive.

I certify (or declare) under penalty of perjury that the foregoing is true and correct:

Dated	MARCH	21,2001	
17	1		
Cal	hu H914	lleia_	
	7-1700		

Page 1

Story #93990 System FRSCZ

by JALONZO

Time 10:48:51 Date 3/26/01

Account: 2306000SAN Class: 894

Last user: JALONZO

Ad Start: 3/27/01 Ad Stop: 3/27/01 Total Cost: \$147.00 Run Days:

PUBLIC NOTICE

#73990
NOTICE OF FINAL ACTION
FOR THE ISSUANCE OF AUTHORITY
TO CONSTRUCT PERMITS

NOTICE IS HERENY GIVEN that the Air Pollution Control Officer has issued Authority to Construct permits to Krall Foods, Inc. for two 2487.9 LIP diesel fixed IC original driving 1750 kW electrical generators, at 2494 South Orange (2009 in Fresno, CA.

No comments were received following the District's preliminary decision on this project

The application review for Project #C 1010119 is available for public inspection at the SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 1990 EAST GETTYSBURG AVENUE, FRESNO, CA 93726.

(PU8: Mar 27, 2001)



From The Fresno Bee Legal Notices Desk Ph. (559) 441-6115

1.3

Fax (559) 495-6825

-Please Proofread-This notice will run as-is unless otherwise instructed

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(F

Story #119498 System FRSCZ

by LHARROD

Time 9:19:18 Date 3/20/01

Account: 2906000SAN Class: Ad Start: 3/21/01

Last user: LHARROD

,C

41 6

Ad Stop: 3/21/01 Total Cost: \$176.40 Bun Days:

Page 1

PUBLIC NOTICE

#119498
NOTICE OF FINAL ACTION
FOR THE ISSUANCE OF
EMISSION REDUCTION CREDITS

NOTICE IS HEREBY GIVEN that the Air Pollution Control Officer has issued Emission Reduction Credits ICRCs) to Anderson Clayton Corp./Oil Mill for emission reduction generated by the shutdown of aquipment at the Chowchilla Oil Mill (Facility ID C-41) represented by Permit Unit Requirements (PUR) C-41-5-0, C-41-6-1, 0-41-7-0, C-41-8-1, C-41-9-1, C-41-12-1, C-41-15-0, C-41-16-0, und C-41-19-2, at 25184 Rand 16 in Chowchilla, CA. The quantity of ERCs to be issued is 327,870 lb-VOC/yr, 3,047 lh- NOx/yr, 2,792 lb-CO/yr, 79,028 lb-PM10yr, and 49 lb 50x/yr.

No comments were received following the District's preliminary decision on this project.

The application renew for Project #C-Int0009 is available for public inspection at the SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 1990 EAST GETTYSBURG AVENUE, FRESNO, CA 93724.

(Pub: March 21, 2001)

SAMIR SHEIKH TO:

From The Fresno Bee Legal Notices Desk Ph. (559) 441-6115 Fax (559) 495-6825

-Please Proofread-This notice will run as-is unless otherwise instructed Story #188161 System FRSCZ

by JALONZO

Time 10:52:53 Date 1/26/01

Account: 2306000\$AN Class: 894 Last user: JALONZO

Ad Start: 1/30/01 Ad Stop: 1/30/01 Total Cost: \$193.20 Run Days:

Page i

PUBLIC NOTICE

#188161 NOTICE OF PRELIMINARY DECISION FOR THE PROPOSED ISSUANCE OF EMISSION REDUCTION CREDITS

NOTICE IS HERRBY GIVEN that the San Joaquin Vallay Unified Air Pollution Control District solicits public comment on the prepased awance of Emission Reduction Credits (ERCs) to Anderson Clayon Corp./Oil Mill for emission reductions generoted by the shutdown of equipment at the Chowchillo Oil Mill (faculty ID C-41) represented by Parmit Unit Requirements (PURs) C-41-5 0, C-41-6-1, C-41-7-0, C-41-8-1, C-41-9-1, C-41-19-1, C-41-

The analysis of the regulatory basis for these proposed actions, Project #4-1010009, is available for public inspection at the District office of the address below. Written comments on this project must be submitted within 30 days of the publication date of the notice to SEYED SADREDIN, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 1990, EAST GETTYSBURG AVENUE, FRESNO, CA 93726.

(Pub. Jun. 30, 2001)



TO: MADELEINE M. ARMI

From The Fresno Bee Legal Notices Desk Ph. (559) 441-6115

Fax (559) 495-6825

-Please Proofread-This notice will run as-is unless otherwise instructed g. 3.

SAN JOAQUIN VALLEY APCD ATTN FINANCE DEPARTMENT 1990 E GETTYSBURG FRESNO , CA 93726

RECEIVED

FEB 0 1 2001

ADMIN. SERVICES
SJVUAPCD

PROOF OF PUBLICATION



COUNTY OF FRESNO STATE OF CALIFORNIA

EXHIBIT A.

PUBLIC NOTICE

NOTICE OF PRELIMINARY DECISION FOR THE PROPOSED ISSUANCE OF EMISSION REDUCTION CREDITS

NOTICE IS HEREBY GIVEN that the San Jaqquin Valler, Unified Air Pollution. Control District solicits public comment on the proposed issuance of Emission Reduction Credits (ERCs) to Anderson Clarlyon Corp. (Oil Mill for emission reductions generated by the shutdown of equipment of the Chowchillo Oil Mill [facility ID C*41] represented by Permit Unit Requirements (PURs) C*41:50, C*41:6-1, C*41:70, C*41:8-1, C*41:9-1, C*41:12-1) C*41:15-0, C*41:0-1, C*41:

The analysis of the regulatory basis for these proposed actions. Project #c-101009, is available for public inspection of the District office at the address below. Written comments on this project must be submitted within 30 days of the publication date of this notice to SFYED SADREDIN; DIRECTOR-OF-PERMIT SERVICES, SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT; 1990. EAST. GETTYSBURG AVENUE FRESNO CA 93726

(Pub: Jan. 30, 2001)

The undersigned states:

McClatchy Newspapers in 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 November 22, 1994, Action No. 520058-9.

The undersigned is and on all 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.

Beginning on the day of 19, to the day of 19 inclusive.

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Cathy Aquileia

RECEIVED

MAR 1 4 2001

ADMIN. SERVICES
SJVUAPCD

SAN JOAQUIN VALLEY APCD ATTN FINANCE DEPARTMENT

1990 E GETTYSBURG

FRESNO

CA 93726

PROOF OF PUBLICATION



COUNTY OF FRESNO STATE OF CALIFORNIA



EXHIBIT A.

PUBLIC NOTICE

#32608
NOTICE OF FINAL ACTION
FOR THE ISSUANCE OF AUTHORITY
TO CONSTRUCT PERMITS

NOTICE IS HEREBY GIVEN that the Air Pollution Control Officer; has issued Authority to Construct permits to 360 Networks (USA) Inc. for a 2220 HP diesel-fired IC engine driving a 1500 kW electric generator, at 7620 N. Del Mar in Fresno, CA:

No comments were recieved following the District's preliminary decision on this project.

The application review for Project #C-1001634 is available for public inspection at the SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 1990 EAST GETTYSBURG AVENUE, FRESNO, CA 93726.

(Pub.: March 13, 2001) i-

The undersigned states:

McClatchy Newspapers in 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 November 22, 1994, Action No. 520058-9.

The undersigned is and on all 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.

Beginning on the day of 19, to the day of 19 inclusive.

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Cally Hquilera

_{FAD}

NOTICE OF FINAL ACTION FOR THE ISSUANCE OF EMISSION REDUCTION CREDITS

NOTICE IS HEREBY GIVEN that the Air Pollution Control Officer has issued Emission Reduction Credits (ERCs) to Anderson Clayton Corp./Oil Mill for emission reduction generated by the shutdown of equipment at the Chowchilla Oil Mill (Facility ID C-41) represented by Permit Unit Requirements (PURs) C-41-5-0, C-41-6-1, C-41-7-0, C-41-8-1, C-41-12-1, C-41-15-0, C-41-16-0, and C-41-19-2, at 25184 Road 16 in Chowchilla, CA.. The quantity of ERCs to be issued is 327,870 lb-VOC/yr, 3,047 lb-NOx/yr, 2,792 lb-CO/yr, 79,078 lb-PM10/yr, and 49 lb-SOx/yr.

No comments were received following the District's preliminary decision on this project.

The application review for Project #C-1010009 is available for public inspection at the SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 1990 EAST GETTYSBURG AVENUE, FRESNO, CA 93726.





March 15, 2001

Mike Tollstrup, Chief Project Assessment Branch Stationary Source Division California Air Resources Board PO Box 2815 Sacramento, CA 95812-2815

RE: Notice of Final Action - Emission Reduction Credits

Project Number: C-1010009

Dear Mr. Tollstrup:

The Air Pollution Control Officer has issued Emission Reduction Credits (ERCs) to Anderson Clayton Corp./Oil Mill for emission reduction generated by the shutdown of equipment at the Chowchilla Oil Mill (Facility ID C-41) represented by Permit Unit Requirements (PURs) C-41-5-0, C-41-6-1, C-41-7-0, C-41-8-1, C-41-9-1, C-41-12-1, C-41-15-0, C-41-16-0, and C-41-19-2, at 25184 Road 16 in Chowchilla, CA.. The quantity of ERCs to be issued is 327,870 lb-VOC/yr, 3,047 lb-NOx/yr, 2,792 lb-CO/yr, 79,078 lb-PM10/yr, and 49 lb-SOx/yr.

Enclosed are copies of the ERC Certificates and a copy of the notice of final action to be published approximately three days from the date of this letter.

Notice of the District's preliminary decision to issue the ERC Certificates was published on January 30, 2001. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on January 25, 2001. No comments were received following the District's preliminary decision on this project.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. David Warner at (559) 230-5900.

Sincerely,

Seved Sadredin

Director of Permit Services

SS:sqs

Enclosures

David Warner, Permit Services Manager

David L. Crow Executive Director/Air Pollution Control Officer



March 15, 2001

Gerardo C. Rios (AIR 3)
Acting Chief, Permits Office
Air Division
U.S. E.P.A. - Region IX
75 Hawthorne Street
San Francisco, CA 94105

RE: Notice of Final Action - Emission Reduction Credits

Project Number: C-1010009

Dear Mr. Rios:

The Air Pollution Control Officer has issued Emission Reduction Credits (ERCs) to Anderson Clayton Corp./Oil Mill for emission reduction generated by the shutdown of equipment at the Chowchilla Oil Mill (Facility ID C-41) represented by Permit Unit Requirements (PURs) C-41-5-0, C-41-6-1, C-41-7-0, C-41-8-1, C-41-9-1, C-41-12-1, C-41-15-0, C-41-16-0, and C-41-19-2, at 25184 Road 16 in Chowchilla, CA.. The quantity of ERCs to be issued is 327,870 lb-VOC/yr, 3,047 lb-NOx/yr, 2,792 lb-CO/yr, 79,078 lb-PM10/yr, and 49 lb-SOx/yr.

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Thank you for your cooperation in this matter. If you have any questions, please contact Mr. David Warner at (559) 230-5900.

Sincerely,

Seved Sadredin

Director of Permit Services

SS:sqs Enclosures

c: David Warner, Permit Services Manager

David L. Crow Executive Director/Air Pollution Control Officer



March 15, 2001

Duncan McCook Anderson Clayton Corp./Oil Mill P.O. Box 12506 Fresno, CA 93778-2506

RE: Notice of Final Action - Emission Reduction Credits

Project Number: C-1010009

Dear Mr. McCook:

The Air Pollution Control Officer has issued Emission Reduction Credits (ERCs) to Anderson Clayton Corp./Oil Mill for emission reduction generated by the shutdown of equipment at the Chowchilla Oil Mill (Facility ID C-41) represented by Permit Unit Requirements (PURs) C-41-5-0, C-41-6-1, C-41-7-0, C-41-8-1, C-41-9-1, C-41-12-1, C-41-15-0, C-41-16-0, and C-41-19-2, at 25184 Road 16 in Chowchilla, CA.. The quantity of ERCs to be issued is 327,870 lb-VOC/yr, 3,047 lb-NOx/yr, 2,792 lb-CO/yr, 79,078 lb-PM10/yr, and 49 lb-SOx/yr.

Enclosed are copies of the ERC Certificates and a copy of the notice of final action to be published approximately three days from the date of this letter.

Notice of the District's preliminary decision to issue the ERC Certificates was published on January 30, 2001. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on January 25, 2001. No comments were received following the District's preliminary decision on this project.

Also enclosed is an invoice for the engineering evaluation fees pursuant to District Rule 3010. Please remit the amount owed, along with a copy of the attached invoice, within 30 days.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. David Warner at (559) 230-5900.

Sincerely.

Seved Sadredin

Director of Permit Services

SS:sqs Enclosures

c: David Warner, Permit Services Manager

David L. Crow Executive Director/Air Pollution Control Officer

SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT FEES

BILLING DATE: March 15, 2001

FACILITY I.D. #C-41 PROJECT #C-1010009 DISTRICT TAXPAYER ID #770262563

Anderson Clayton Corp./Oil Mill P.O. Box 12506 Fresno, CA 93778-2506

BILLING FOR: ENGINEERING TIME (OVERTIME)

The following fees are due to your request for extended hours processing based on the hours expended and the average weighted overtime labor rate:

TOTAL FEES

\$ 1128.40

BALANCE DUE

\$ 1128.40

THE ABOVE TOTAL IS BASED ON THE FOLLOWING ITEMIZED LISTING:

UNIT

FEE

DESCRIPTION

ENGINEERING TIME (14 HRS X \$80.60/HR)

\$1128.40

AFTER-HOURS ENGINEERING EVALUATION, ATC

PLEASE **RETURN A COPY OF THIS BILL**, WITH THE AMOUNT DUE, WITHIN 30 DAYS TO:

SAN JOAQUIN VALLEY APCD 1990 EAST GETTYSBURG AVENUE FRESNO, CA 93726-0244 ATTENTION: Samir Sheikh

cc: Finance

SAN JOAQUIN VALLEY{PRIVATE } AIR POLLUTION CONTROL DISTRICT

OFFICE MEMO

DATE:

March 8, 2001

TO:

File

FROM:

Samir Sheikh, Air Quality Engineer

SUBJECT: Billing for Project #1010009

A total of 8.3 hours were worked as public notice hours during regular working days. A total of 14 hours of Reimbursable Overtime were worked and the facility will be charged for these hours and the application filing fee. The \$650 filing fee paid will cover the cost of engineering hours during the regular work week.

The facility will be billed as follows:

UNIT	FEE	DESCRIPTION
ENGINEERING TIME (14 HRS X \$80.60/HR)	\$1128.40	AFTER-HOURS ENGINEERING EVALUATION, ATC
Total	\$1128.40	



Central Regional Office * 1990 East Gettysburg * Fresno, CA 93726

Emission Reduction Credit Certificate C-398-1

ISSUED TO: Anderson Clayton Corporation

ISSUED DATE: March 15, 2001

LOCATION OF REDUCTION: 25184 Road 16

Chowchilla, CA



For VOC Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
112,929	104,976	40,935	69,030

[] Conditions Attached

Method Of Reduction

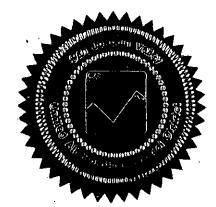
[] Shutdown of Entire Stationary Source

[x] Shutdown of Emissions Units

[] Other:

David L. Crow, APCO

Seyed Sadredin





Central Regional Office * 1990 East Gettysburg * Fresno, CA 93726

Emission Reduction Credit Certificate C-398-2

ISSUED TO: Anderson Clayton Corporation

ISSUED DATE: March 15, 2001

LOCATION OF REDUCTION: 25184 Road 16

Chowchilla, CA



For NOx Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
968	811	338	930

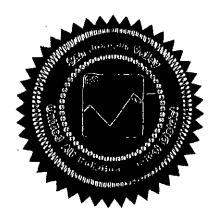
[] Conditions Attached

Method Of Reduction

- [x] Shutdown of Entire Stationary Source
- [] Shutdown of Emissions Units
- [] Other:

David L. Crow, APCO

Seyed Sadredin





Central Regional Office * 1990 East Gettysburg * Fresno, CA 93726

Emission Reduction Credit Certificate C-398-3

ISSUED TO: Anderson Clayton Corporation

ISSUED DATE: March 15, 2001

LOCATION OF REDUCTION: 25184 Road 16

Chowchilla, CA



For CO Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
887	743	310	852

[] Conditions Attached

Method Of Reduction

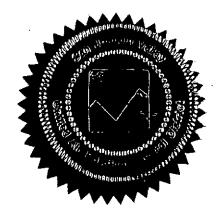
[x] Shutdown of Entire Stationary Source

| Shutdown of Emissions Units

[] Other:

David L. Crow, APCO

Seyell Sadredin





Central Regional Office * 1990 East Gettysburg * Fresno, CA 93726

Emission Reduction Credit Certificate C-398-4

ISSUED TO:

Anderson Clayton Corporation

ISSUED DATE: March 15, 2001

LOCATION OF REDUCTION: 25184 Road 16

Chowchilla, CA

For PM₁₀ Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
27,222	25,285	9,864	16,707

[] Conditions Attached

Method Of Reduction

[x] Shutdown of Entire Stationary Source

] Shutdown of Emissions Units

1 Other:

David L. Crow, APCO





Central Regional Office * 1990 East Gettysburg * Fresno, CA 93726

Emission Reduction Credit Certificate C-398-5

ISSUED TO: Anderson Clayton Corporation

ISSUED DATE: March 15, 2001

LOCATION OF REDUCTION: 25184 Road 16

Chowchilla, CA



For SOx Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
16	13	5	15

[] Conditions Attached

Method Of Reduction

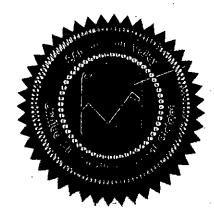
[x] Shutdown of Entire Stationary Source

[] Shutdown of Emissions Units

[] Other:

David L. Crow, APCO

Seyed Sadredin





ANDERSON CLAYTON CORP. CAPP ERC APPLICATION

Facility: CHOWCHILLA OIL MILL (#C-41)

25184 Road 16

Chowchilla, CA 93610

Agency: SJVUAPCD

CENTRAL REGION

1990 E. Gettysburg Avenue

Fresno, CA 93726

Prepared by: PARSONS ENGINEERING SCIENCE, INC.

2520 PEGASUS DRIVE

BAKERSFIELD, CA 93308

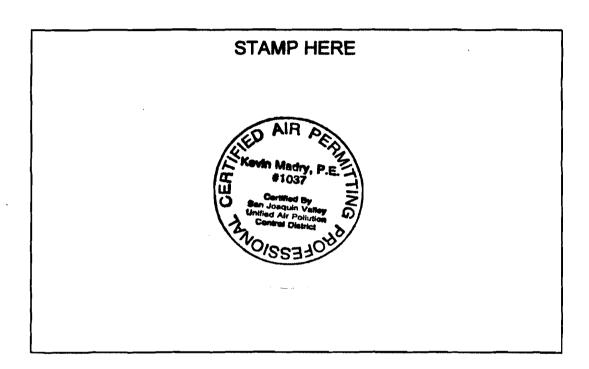
Date: January 3, 2000





PERMIT APPLICATION SUBMITTED BY

CERTIFIED AIR PERMITTING PROFESSIONAL



This application package is submitted by a Certified Air Permitting Professional. Included in this package is a complete application for Authority to Construct/Permit to Operate, a hard copy of the Application Review in the format prescribed by the District and a copy of the Application Review in either Microsoft Word or WordPerfect format on a 3 1/2 floppy.

Signature Mody Date 1-3-01

CAPP ERC APPLICATION SUBMITTAL FOR

ANDERSON CLAYTON CORPORATION (FACILITY #C-41)

Facility:

Chowchilla Oil Mill

Mailing Address:

P.O. Box 12506

Fresno, CA 93778-2506

Contact:

Duncan McCook

ANCE PROJECT NOTICING.

Telephone:

(559) 446-6415 (559) 447-4425

Fax: E-Mail:

DuncanM@AndersonClayton.com

CAPP Engineer:

Kevin Madry

Telephone:

(661) 393-0272 (661) 393-8306

Fax: E-Mail:

Kevin_Madry@Parsons.com

Other Contact:

John Gruber, P.E.

Telephone:

(661) 393-0272

Fax:

(661) 393-8306

E-Mail:

John.Gruber@Parsons.com

Affected Permits:

C-41-5, -6-1, -7-0, -8-1, -9-1, -12-1, -15-0, -16-

0, and -19-2

Submitted:

January 3, 2000

ANDERSON CLAYTON CORPORATION CAPP Application

Table of Contents for Attached ERC Application Review

		Page
1.	Summary	1
II.	Applicable Rules	2
III.	Location of Reductions	2
IV.	Method of Generating Reductions	2
V.	ERC Calculations	3
VI.	Compliance	13
VII.	Recommendation	15

Supplemental Documentation

Attachment A	Permits to Operate for Shutdown Equipment
Attachment B	Historical Production Data
Attachment C	Source Test Results for Cooler Dryer Cyclone
Attachment D	VOC Emissions for Hexane Recovery Unit
Attachment EPM	110 Emission Factors for Cotton Seed Oil Mills
Attachment FPoten	tial to Emit Calculations for Chowchilla Oil Mill
Attachment G	Emission Factors for Natural Gas Combustion
Attachment H	Facility and Process Flow Diagrams
Attachment IF	PTO's for Equipment Remaining at the Facility

Project #:

Facility Name:

Anderson Clayton Corporation

Mailing Address:

P.O. Box 12506

Fresno, CA 93778-2506

Contact Name:

Duncan McCook, Manager - Technical Services

Telephone:

(559) 446-6415

Fax:

(559) 447-4425

Engineer:

Date:

Reviewed By:

Date:

Certificate #(s):

C-XXXX-1, C-XXXX-2, C-XXXX-3, C-XXXX-4, C-XXXX-5

Submitted:

January 3, 2000/

Deemed Complete:

I. SUMMARY:

Anderson Clayton Corp. requests emission reduction credit (ERC) banking certificates for emission reductions generated by the shutdown of equipment at the Chowchilla Oil Mill (Facility ID C-41) represented by Permits to Operate (PTO) C-41-5-0, C-41-6-1, C-41-7-0, C-41-8-1, C-41-9-1, C-41-12-1, C-41-15-0, C-41-16-0, and C-41-19-2. Copies of the cancelled PTO's for the shutdown equipment are presented in Attachment A. The facility will continue to operate exclusively as a cotton seed receiving and storage facility. Copies of PTO's for the remaining operations at the facility are presented in Attachment I.

The following emission reductions have been found to qualify for ERC banking certificates C-XXX-1, C-XXXX-2, C-XXXX-3, C-XXXX-4, and C-XXXX-5:

,	VOC (pounds)	NOx (pounds)	CO (pounds)	PM10 (pounds)	SOx (pounds)
ERC No.	C-XXXX-1	C-XXXX-2	C-XXXX-3	C-XXXX-4	C-XXXX-5
1 st Quarter	113,852	2,689	887	29,508	16
2 nd Quarter	105,834	2,254	743	27,355	13
3 rd Quarter	41,269	940	310	10,682	5
4 th Quarter	69,593	2,584	852	18,113	15

II. APPLICABLE RULES:

Rule 2201: New and Modified Stationary Source Review Rule (June 15, 1995)

Rule 2301: Emission Reduction Credit Banking (December 17, 1992)

III. PROJECT LOCATION:

The facility is located at 25184 Road 16, Chowchilla, CA. The facility is located within 1000 feet of a K-12 schools.

IV. METHOD OF GENERATING REDUCTIONS:

The Actual Emissions Reductions (AER) have been generated by the voluntary shutdown of equipment at the Chowchilla Oil Mill. Anderson Clayton Corp. has forfeited the Permits to Operate (PTO) for the following equipment in order to validate the emission reduction credits:

- C-41-5-0: 300 Hp First Cut Delinting Operation Including 14 Linters with Associated Conveyors Served by 4 42" 2D-2D Cyclones, 1-30", 1-36", and 1-18" 1D-3D Cyclone.
- C-41-6-1: 183 Hp Seed Cleaning Operation Including 6 Seed Cleaners, with Associated Conveyors, Served by 12 28", 2 36", and 1- 32" 2D-2D Cyclones; A Lint Collection System Including a 30 Hp Fan, A Feeder, And a Baler Served by One 46" 1D-3D Cyclone.
- C-41-7-0: 888.5 Hp Second Cut Delinting Operation Including 40 Linters with Associated Conveyors Served by a Total of 17 Cyclones 4 48", 4 54", 3 32", and 1 34" 2D-2D Cyclones; 3 28" and 1 18" 1D-3D Cyclones; and 1 Kice Cyclone.
- C-41-8-1: 216 Hp Dehulling Operation Including Three Decorticators, 3 Hull Beaters, and a Tailings Beater Served by Three 44" and Three 34" 1D-3D Cyclones.
- C-41-9-1: 400 Hp Hexane Recovery and Oil Extraction Unit Including a Mineral Oil Packed Tower Scrubber.
- C-41-12-1: 32.0 MMBtu/hr Murray Natural Gas-Fired Boiler, with Diesel Oil Standby Capacity.
- C-41-15-0: (4) 125 Ton Meal Tanks with Hoppers Served by One 20" 1D-3D Cyclone, 1 Saunco Pulsejet Model SFSB6-16-159 Baghouse with 14 Bags, 2 Rotolifts, 2 Reclaim Conveyors, 1 Bucket Elevator, 1 Tank Distribution Conveyor, and 1 Collection Conveyor. Rating: 96 Hp.

C-41-16-0: 71 Hp Truck Loadout of Meal Including (1) 20 Hp Incline Conveyor, (1) 15 Hp Distribution Conveyor, and (1) 3 Hp Baghouse Conveyor. The Exhaust System Consists of Fan with 40 Hp Motor and (1) 3 Hp Micro PULSEAIR 1F1 Baghouse with 80 Bags.

C-41-19-2: 903 Hp Cotton Seed Preparation Room: Consisting of a Flaking Mill Served by One 22" 1D-3D Cyclone, A Steam Cooker, Two Expanders, and a Collet Cooler/Dryer Served by One 60" 1D-3D Cyclone.

As required by Rules 2201 & 2301, creditable emission reductions are to be based upon historical actual emissions (HAE) quantified using process/throughput rates for the facility over the appropriate baseline period, and the use of acceptable emission factors including source test derived emission factors. The following table briefly describes the source and type of pollutants for each process including the method(s) for quantifying historical actual emissions (HAE):

Permit Unit	Pollutant(s)	Emissions Source(s)	Method of Quantifying HAE
C-41-5-0	PM-10	1D-3D and 2D-2D cyclones	Actual Seed Process Rate and District Approved Emission Factors
C-41-6-1	PM-10	1D-3D and 2D-2D cyclones	Actual Seed Process Rate and District Approved Emission Factors
C-41-7-0	PM-10	1D-3D and 2D-2D cyclones	Actual Seed Process Rate and District Approved Emission Factors
C-41-8-0	PM-10	1D-3D cyclones	Actual Seed Process Rate and District Approved Emission Factors
C-41-9-1	VOC (as Hexane)	Mineral oil scrubber used to reclaim solvent (hexane)	Actual Seed Process Rate and District Approved Emission Factor
C-41-12-1	NOx, VOC, PM10, SOx, and CO	Combustion of natural gas in 32.0 MMBtu/hr boiler	Actual Fuel Usage and Permitted Emission Factors
C-41-15-0	PM10	1D-3D cyclone and baghouse exhaust	Actual Meal Production Rate and District Approved Emission Factors
C-41-16-0	PM10	Baghouse exhaust	Actual Meal Production Rate and District Approved Emission Factors
C-41-19-2	PM10	1D-3D cyclones	Actual Seed Process Rate and District Approved Emission Factors

V. CALCULATIONS:

A. Assumptions

Calculation of HAE and the corresponding Actual Emission Reductions (AERs) is dependent on both the actual production data submitted by an applicant, and appropriate emission factors. The assumptions used to quantify the HAE for the affected permit units are described below:

- Emissions from the first cut delinting operation (permit C-41-5-0) and second cut delinting operation (permit C-41-7-0) will be calculated based on actual historical seed processing rates, the number of emissions points (cyclones), and emission factors used to calculate the potentials to emit for the permit units in project 930468. These emission factors are based on source test results for similar cottonseed oil mills in Fresno County (see Attachment E). Actual source test data and records of measured airflow rates do not exist for the cyclones serving these operations.
- Emissions from the seed cleaning operation (permit C-41-6-1) and dehulling operation (permit C-41-8-1) will be calculated based on actual historical seed processing rates, the number of emissions points (cyclones), and AP-42 based emission factors used to calculate the current daily emissions limitations (DELs) for the permit units. These emission factors are based on source test results for similar cottonseed oil mills in Fresno County (see Attachment E). Actual source test data and records of measured airflow rates do not exist for the cyclones serving these operations.
- As discussed in project #940442, VOC emissions from the hexane recovery and oil
 extraction unit, permit C-41-9-1, is dependent on the quantity of seed processed and not
 on the quantity of oil produced. All hexane losses from the solvent extraction unit are VOC
 emitted to the atmosphere, and the VOC retained in the meal are eventually emitted to the
 atmosphere. Therefore, the 3.7 lb-VOC/ton (seed processed) emission factor used to
 calculate the current DEL will be used to quantify the HAE for the operation.
- Emissions from the 32.0 MMBtu/hr natural gas-fired boiler, permit C-41-12-1, equipped with standard burners will be based on actual fuel use records and either permitted emission factors or the latest emission factors provided in AP-42, Tables 1.4-1 and 1.4-2, whichever is lower. The HAE for CO and VOC will be quantified using current permitted emission factors, whereas, the HAE for NOx, PM10, and SOx will be quantified using emission factors from AP-42. Source test results do not exist for this unit.
- Emissions from the cotton seed preparation room, permit C-41-19-2, will be quantified by developing lb-PM10/ton emission factors based on the 600 tons/day process limit and grain loading concentrations and air flow rates for the two cyclones serving the operation. In project 970202, a 1.23 lb-PM10/day potential to emit was calculated for the flaking mill cyclone based on a grain loading limit of 0.02 grains-TSP/dscf, air flow of 600 cfm, and a PM10/TSP ratio of 0.50. This limit is equivalent to a PM10 emission factor of 0.0021 lbs per ton of seed processed (@ 600 tons/day). The 9.8 lb-PM10/day potential to emit quantified for the collet cooler/dryer cyclone in project 980489 was based on a grain loading limit of 0.0095 grains/dscf, air flow of 10,000 cfm, and PM10/TSP ratio of 0.50. Compliance with the grain loading limit was demonstrated by source testing performed on April 29, 1998. Therefore, the 0.0095 grains/dscf limit correlates to a PM10 emission factor of 0.0163 lb per ton of seed processed.

- Emissions from the meal storage and handling operation, permit C-41-15-0, will be determined based on actual meal production rates, AP-42 based emission factors used to calculate the current DEL, and a 97% control efficiency for the Saunco Pulsejet baghouse. Source test results do not exist for the unit. In project 930002, the baghouse was assumed capable of achieving a control efficiency of 95%. However, the air to cloth ratio calculated in that project was determined to be within the acceptable range. Therefore, a higher 97% control efficiency will be used to calculate the HAE based on the assumption the baghouse was reasonably maintained and operated.
- Emissions from the meal truck loadout operation, permit C-41-16-0, will be determined based on actual meal throughput, the AP-42 based emission factor used to calculate the current DEL, and a 95% control efficiency for the Micro PulseAir baghouse. Source test results do not exist for the unit. In project 930002, the baghouse was assumed to be capable of achieving a control efficiency of 95% since the air to cloth ratio calculated in that project was not within the acceptable range for the material being handled. Therefore, the 95% control efficiency will be used to calculate the HAE since the baghouse air flow exceeds the optimum range (AP-40, Tables 38 and 41) necessary to achieve higher control efficiencies.

B. Emission Factors

Permit Unit	Description	TSP EF (lb/ton per emissions pt)	PM-10 EF (lb/ton per emissions pt)	Reference
C-41-5-0	1 st Cut Lint Cleaning	0.08	0.04	TSP source test inforn presented in Fresno C APCD document (Attach
C-41-6-1	Seed Cleaning	0.012	0.006	TSP source test inform presented in Fresno Cc APCD document (Attachn
C-41-7-0	2 nd Cut Lint Cleaning	0.022	0.011	TSP source test informa presented in Fresno Cou APCD document (Attachm
C-41-8-1	Hulling & Separation	0.098	0.049	TSP source test information presented in Fresno County APCD document (Attachment E)
C-41-15-1	Meal Storage and Handling	Receiving: 2.5	1.25	Project 930002 and AP-42, Table 6.4-6
		Handling: 5.5	2.75	Project 930002 and AP-42, Table 6.4-6

Permit Unit	Description	TSP EF (lb/ton per emissions pt)	PM-10 EF (lb/ton per emissions pt)	Reference
C-41-16-0	Meal Truck Loadout	Loading: 1.0	0.50	Project 930002 and AP-42, Table 6.4-6 Project 930002
C-41-19-2	Seed Preparation Room	Flaking Mill Cyclone	0.0021	Based on permitted production rate limit, and grain loading and air flow limits used to calculate the PE in project 970202
		Collet Cooler/Dryer Cyclone	0.0163	Based on permitted production rate, grain loading limit on PTO, and air flow from 4/29/98 source test report.

VOC Emissions from Hexane					
Permit Unit	Description	VOC Emission Factor (lb/ton of seed)	Reference		
C-41-9-1	Hexane Recovery and Oil Extraction Operation	3.7	Project 940442		

Combustion Emissions					
Permit Unit	Description	Pollutant	Emission Factor (lb/MMBtu)	Reference	
C-41-12-1	32.0 MMBtu/hr gas-fired boiler	NOx	0.133	Current PTO – 950657	
		VOC	0.0022	Current PTO – 950657	
		PM10	0.013	Current PTO - 950657	
		SOx (as SO2)	0.0006	AP-42, Table 1.4-2	
		CO	0.033	Current PTO – 950657	

C. Baseline Period Determination and Data

Per Section 3.7.1 of Rule 2201, baseline period is defined as: a) two consecutive years of operation immediately prior to submission of the complete application; or b) another time period of at least two consecutive years within the five years immediately prior to submission of the complete application as determined by the APCO as more representative of normal operation.

Although the seed processing equipment at the Chowchilla Oil Mill is in place and operable, the facility has not processed cotton seed since 1998 (The facility is currently utilized for the temporary receipt and storage of cotton seed). Production at the facility also fluctuated season to season; therefore, the representative production period is the two consecutive years within the previous five-year period (1995 to 2000) that is more representative of normal operation. Also, periods of non-operation are not included in the calculation of baseline production and emission rates since the District does not consider such periods representative of normal operation.

Since the term "normal operation" is not specifically defined by District rule or policy, Anderson Clayton proposes to use actual quarterly production data for the period from 1992 to 1998 to establish normal operation for the Chowchilla Oil Mill. Annual production data exists for prior years (see Attachment B), however, quarterly production data is not available for the facility prior to 1992. The baseline period chosen will be two consecutive year period within the last five years that most closely matches the average production rates quantified for the 1992 to 1998 period of operation. Annual production information supplied by the applicant is as follows:

Production Year	Seed Processed (tons/year)	Hexane Usage (gallons/year)	Meal Produced (tons/year)	Natural Gas Usage (Therms/year)
1992	119,784	62,002	61,796	1,022,070
1993	130,779	84,875	69,761	1,026,900
1994	130,413	?	67,363	1,201,200
1995	100,363	105,496	50,468	938,173
1996	123,888	111,992	65,885	1,114,967
1997	74,527	154,594	39,140	766,508
1998	57,137	102,007	29,948	407,158
1999	0	0	0	0
2000	0	0	0	0
Averages	105,270*	103,494**	54,909*	925,282*

^{*}The average production and natural gas use rates are based on 7 years of operation and do not include years 1999 and 2000 since non-operation is not representative of normal operation.

^{**} Average annual hexane usage is based on 6 years as data could not be located for 1994. Data for 1999 and 2000 is not included since process equipment did not operate during these years.

The two consecutive year period that most closely approximates the average 105,270 tons of seed is the 1996 and 1997 operating period with an average production of 99,208 tons of seed per year. Therefore, the 1996 and 1997 production years represent the two consecutive year period during the previous five years to be the most representative of normal operation. The quarterly breakdown of production data for these years is presented below and in Attachment B.

Baseline Prod	duction Av		1		
	Year	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Seeds	1996	32,500	34,547	24,773	32,068
Processed (tons)	1997	35,844	28,987	0	9,696
Averag	jes =	34,172	31,767	12,387	20,882
Hexane	1996	21,161	30,525	29,511	30,795
(gallons)	1997	17,230	73,895	0	63,469
Averag	jes =	19,196	52,210	14,756	47,132
Meal	1996	17,212	18,223	13,068	17,382
Produced (tons)	1997	19,266	14,808	0	5,066
Averag	jes =	18,239	16,516	6,534	11,224
Natural Gas	1996	266,496	297,789	208,968	341,714
(Therms)	1997	331,105	203,009	0	232,394
Averag	jes =	298,801	250,399	104,484	287,054

D. Historical Actual Emissions

1. Seed/Meats Processing Emissions (PM₁₀)

The PM₁₀ HAE for seed/meats processing is calculated as follows:

(quarterly average tons seed/meats processed)(PM10 emission factor) = HAE

Permit Unit C-41-5-0, 1	ित्ति । विशेषक विशेषिक विशेषिक विशेषक व विशेषक विशेषक			
	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Average Quarterly Production	34,172	31,767	12,387	20,882
PM10-EF (lb/ton/pt)	0.04	0.04	0.04	0.04
# of Emission Points (cyclones)	7	7	7	7
HAE =	9,568	8,895	3,468	5,847

Permit Unit C-41-6-1, S				
	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Average Quarterly Production	34,172	31,767	12,387	20,882
PM-10 EF (lb/ton/pt)	0.006	0.006	0.006	0.006
# of Emission Points (cyclones)	16	16	16	16
HAE =	3,281	3,050	1,189	2,005

Permit Unit C-41-7-0, 1				
	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Average Quarterly Production	34,172	31,767	12,387	20,882
PM-10 EF (lb/ton/pt)	0.011	0.011	0.011	0.011
# of Emission Points (cyclones)	17	17	17	17
HAE =	6,390	5,940	2,316	3,905

Permit Unit C-41-8-1, F	lulling and Separ	ation	, ,	e e e e e e e e e e e e e e e e e e e
	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Average Quarterly Production	34,172	31,767	12,387	20,882
PM-10 EF (lb/ton/pt)	0.049	0.049	0.049	0.049
# of Emission Points (cyclones)	6	6	6	6
HAE =	10,047	9,339	3,642	6,139

Permit Unit C-41-19-2,				
	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Average Quarterly Production	34,172	31,767	12,387	20,882
Flaking Mill Cyclone PM-10 EF (lb/ton)	0.0021	0.0021	0.0021	0.0021
Collet Cooler/Dryer Cyclone PM-10 EF (lb/ton)	0.0163	0.0163	0.0163	0.0163
HAE =	629	585	228	384

Meal Storage, Handling, and Loading Emissions (PM₁₀) 2.

The PM₁₀ HAE for meal storage, handling, and loading is calculated as follows:

(quarterly average meal produced)(PM10 emission factor) = HAE

Permit Unit C-41-15-0, Meal Storage and Handling						
	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter		
Average Quarterly Production	18,239	16,516	6,534	11,224		
Receiving PM-10 EF (lb/ton)	1.25	1.25	1.25	1.25		
Handling PM-10 EF (lb/ton)	2.75	2.75	2.75	2.75		
Baghouse Control Efficiency	97%	97%	97%	97%		
HAE =	2,189	1,982	784	1,347		

Permit Unit C-41-16-0, Meal Truck Loading						
	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter		
Average Quarterly Production	18,239	16,516	6,534	. 11,224		
PM-10 EF (lb/ton)	0.50	0.50	0.50	0.50		
Baghouse Control Efficiency	95%	95%	95%	95%		
HAE =	456	413	163	281		

3. **Natural Gas-Fired Heater Emissions**

The HAE for SO_x, NO_x, VOC, and CO from the combustion of natural gas in the 32.0 MMBtu/hr boiler, permit C-41-12-1, is calculated as follows:

(quarterly average MMBtu of natural gas used)(emission factor) = HAE

The HAE from the natural gas-fired boiler C-41-12-1 is as follows:

		1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Avg. Quarterly Gas Use (Therms @ 100,000 Btu)		298,801	250,399	104,484	287,054
Pollutant	Emission Factor	Historical	Actual Emission	ons - Ibs (@ 100	00 Btu/scf)
NOx	0.10 lb/MMBtu	2,988	2,504	1,045	2,871
	(AP-42, Table 1.4-1)				
VOC	0.0022 lb/MMBtu (Current PTO)	66	55	23	63
PM10	0.0076 lb/MMBtu (AP- 42, Table 1.4-2)	227	190	79	218
СО	0.033 lb/MMBtu (Current PTO)	986	826	345	947
SOx	0.0006 lb/MMBtu (AP- 42, Table 1.4-2)	18	15	6	17

4. Hexane Recovery and Oil Extraction Unit Emissions

The HAE for VOC from the use of hexane by equipment serving permit unit C-41-9-1, is scalculated as follows:

(quarterly average seed processed)(VOC emission Factor) = HAE

The HAE from permit unit C-41-9-1 is as follows:

Permit Unit C-41-9-1, Hexane Recovery and Oil Extraction				*	
	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	
Average Quarterly Seed Processed (tons)	34,172	31,767	12,387	20,882	
VOC Emission Factor (lb/tons-seed)	(3.7')	(3.7	(3.7)	(3.7)	
HAE =	126,436	117,538	45,832	77,263	

99208

3,4093

E. Actual Emissions Reductions

Pursuant to Section 3.2 of Rule 2201, AER shall be real, surplus, permanent, quantifiable & enforceable. AER is calculated per subsection 6.5, and is as follows:

AER = HAE (for shutdown of an emissions unit)

Therefore, the AER is equal to the HAE, and can be summarized for each pollutant as follows:

	VOC (pounds)	NOx (pounds)	CO (pounds)	PM10 (pounds)	SOx (pounds)
1st Quarter	126,502	2,988	986	32,787	18
2nd Quarter	117,593	2,504	826	30,394	15
3rd Quarter	45,855	1,045	345	11,869	6
4th Quarter	77,326	2,871	947	20,126	17

F. Air Quality Improvement Deduction

The Air Quality Improvement Deduction (AQID) is 10% of the AER per Rule 2201, subsection 6.5, and is summarized as follows:

	VOC (pounds)	NOx (pounds)	CO (pounds)	PM10 (pounds)	SOx (pounds)
1st Quarter	12,650	299	99	3,279	2
2nd Quarter	11,759	250	83	3,039	2
3rd Quarter	4,586	105	35	1,187	1
4th Quarter	7,733	287	95	2,013	2

G. Increase in Permitted Emissions

The ERC banking application has been submitted to bank emission reductions generated by the permanent shutdown of permitted equipment. Therefore, no increase in permitted emissions (IPE) is associated with this project.

H. Bankable Emissions Reductions Credits

The total bankable emissions reductions are summarized as follows:

	VOC (pounds)	NOx (pounds)	CO (pounds)	PM10 (pounds)	SOx (pounds)
1st Quarter	113,852	2,689	887	29,508	16
2nd Quarter	105,834	2,254	743	27,355	13
3rd Quarter	41,269	940	310	10,682	5
4th Quarter	69,593	2,584	852	18,113	15

VI. COMPLIANCE:

To be eligible for banking, emission reduction credits (ERC's) must be verified as real, surplus, permanent, quantifiable, and enforceable pursuant to District Rules 2201 and 2301. In addition the application must be submitted within a timely manner specified in Rule 2301.

A. Real

The AERs quantified above were based on historical actual emissions and were calculated from actual production data from the stationary source. The affected processing equipment at the Chowchilla Oil Mill are now shutdown and the Permits to Operate have been surrendered; therefore, the reductions are real.

B. Enforceable

The Permits to Operate for the affected processing equipment have been surrendered; subsequently, any future seed processing and meal production cannot be performed unless an enforceable Authority to Construct is issued in compliance with the provisions of New and Modified Stationary Source Review (Rule 2201); therefore the reductions are enforceable.

C. Quantifiable

The AERs were calculated using District recognized emission factors and actual production data; therefore, the AERs are quantifiable.

D. Permanent

Anderson Clayton Corp. permanently shut-down the affected processing equipment at the Chowchilla Oil Mill, and surrendered the valid Permits to Operate to the District, effective July 17, 2000; therefore, the AERs are permanent.

E. Surplus

The shutdown of the affected processing equipment at the stationary source was voluntary. The resulting emission reductions are not mandated by any law, rule, regulation, agreement, or order of the District, State, or Federal Government. The reductions are not attributed to a control measure noticed for workshop or proposed, nor contained in a State Implementation Plan.

Anderson Clayton cannot process cotton seed and produce meal at the Chowchilla Oil Mill without first obtaining Authorities to Construct and satisfying all applicable New Source Review requirements. Therefore, the AERs are surplus.

F. Timeliness

The application for ERC was submitted to the District on January 4, 2000. Pursuant to Rule 2301, Section 4.2.3, an application for ERC must be filed no later than 180 days after the emission reductions have occurred, in which the eligibility of the ERC application for the shutdown of processing equipment is dependent upon the definition of "shutdown" per Rule 2301. Section 3.11 of Rule 2301 defines "shutdown" as the following: the earlier of the permanent cessation of emissions from an emitting unit or the surrender of operating permits. If prior to the surrender of the operating permits, the APCO determines that the units have been removed or fallen into an inoperable or unmaintained condition such that startup would required an investment exceeding 50% of the current replacement, then the date of shutdown is the date of last emissions.

Anderson Clayton canceled the Permits to Operate (PTOs) equipment shutdown at the Chowchilla Oil Mill (facility ID# C-41) effective July 17, 2000. According to Anderson Clayton, and based on inspections by the District's Compliance Division, the affected processing equipment was not removed and had not fallen into an inoperable condition at the time the PTO's were surrendered.

The date of shutdown is July 17, 2000 commensurate surrender of the Permits to Operate for the affected processing equipment. The ERC application was submitted on January 4, 2001, which is less than 180 days after the date of shutdown. Therefore, the application is timely.

VII. RECOMMENDATION:

Issue the requested ERC Banking Certificates to Anderson Clayton Corp. after completion of the required 30-day public notification period, and review of comments received, for the following amounts:

	VOC (pounds)	NOx (pounds)	CO (pounds)	PM10 (pounds)	SOx (pounds)
ERC No.	C-XXXX-1	C-XXXX-2	C-XXXX-3	C-XXXX-4	C-XXXX-5
1 st Quarter	113,852	2,689	887	29,508	16
2 nd Quarter	105,834	2,254	743	27,355	13
3 rd Quarter	41,269	940	310	10,682	5
4 th Quarter	69,593	2,584	852	18,113	15

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Permits to Operate for Shutdown Equipment

CONDITIONS FOR PERMIT C-41-5-0

Page 1 of 1 E: 07/31/2003

MAILING ADDRESS:

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON SORP!OIL MILL

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

300 HP FIRST CUT DELINTING OPERATION INCLUDING 14 LINTERS WITH ASSOCIATED CONVEYORS SERVED BY 4-42" 2D-2D CYCLONES, 1-30", 1 36", AND 1-18" 1D-3D CYCLONE. REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER

- {12} Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the 1. atmosphere, [District NSR Rule]
- {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 2.
- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three 3. minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {271} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
- {229} The District shall be notified of any breakdown conditions in accordance with Rule 1100 (Equipment Breakdown), [District Rule 1100]
- {234} The APCO or any authorized representative, upon request, shall have access to inspect any equipment, operation, or method required in this permit, and to sample emissions from the source or require samples to be taken. [District Rule 1081]
- Records of daily seed throughput shall be maintained, retained on the premises for at least two years and made available for District inspection upon request. [District Rule 1070]

CONDITIONS FOR PERMIT C-41-6-1

Page 1 of 1 **E:** 07/31/2003

MAILING ADDRESS:

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON SORPLOIL MILL

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

183 HP SEED CLEANING OPERATION INCLUDING 6 SEED CLEANERS, WITH ASSOCIATED CONVEYORS, SERVED BY 12-28", 2-36", AND 1-32" 2D-2D CYCLONES; A LINT COLLECTION SYSTEM INCLUDING A 30 HP FAN, A FEEDER. AND A BALER SERVED BY ONE 46" 1D-3D CYCLONE. REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER

- {12} Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the 1. atmosphere. [District NSR Rule]
- {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 2.
- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three 3. minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {271} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize 4. emissions of air contaminants into the atmosphere. [District NSR Rule]
- {229} The District shall be notified of any breakdown conditions in accordance with Rule 1100 (Equipment Breakdown), [District Rule 1100]
- {234} The APCO or any authorized representative, upon request, shall have access to inspect any equipment, operation, or method required in this permit, and to sample emissions from the source or require samples to be taken. [District Rule 1081]
- Records of daily seed throughput shall be maintained, retained on the premises for at least two years and made available for inspection upon request. [District Rule 1070]
- Emissions of PM10 from the facility shall not exceed 45 pounds per day. [District Rule 2201]

CONDITIONS FOR PERMIT C-41-7-0

Page 1 of 1 **ÅTE:** 07/31/2003

MAILING ADDRESS:

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORPLOIL MILL

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

888.5 HP SECOND CUT DELINTING OPERATION INCLUDING 40 LINTERS WITH ASSOCIATED CONVEYORS SERVED BY A TOTAL OF 17 CYCLONES - 4-48", 4-54", 3-32", AND 1-34" 2D-2D CYCLONES; 3-28" AND 1-18" 1D-3D CYCLONES; AND 1 KICE CYCLONE *REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER*

- {12} Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District NSR Rule]
- 2. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {271} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
- {229} The District shall be notified of any breakdown conditions in accordance with Rule 1100 (Equipment 5. Breakdown). [District Rule 1100]
- {234} The APCO or any authorized representative, upon request, shall have access to inspect any equipment, operation, or method required in this permit, and to sample emissions from the source or require samples to be taken. [District Rule 1081]
- Records of daily seed throughput shall be maintained, retained on the premises for at least two years and made available for District inspection upon request. [District Rule 1070]

CONDITIONS FOR PERMIT C-41-8-1

Page 1 of 1 E: 07/31/2003

MAILING ADDRESS:

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORP!OIL MILL

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

216 HP DEHULLING OPERATION INCLUDING THREE DECORTICATORS, 3 HULL BEATERS, AND A TAILINGS BEATER SERVED BY THREE 44" AND THREE 34" 1D-3D CYCLONES *REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER*

- {36} All equipment shall be constructed, maintained and operated according to the specifications and plans contained in the permit application except as otherwise specified herein. [District NSR Rule]
- {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 2.
- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three 3. minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {229} The District shall be notified of any breakdown conditions in accordance with Rule 1100 (Equipment Breakdown). [District Rule 1100]
- Records of the facility operating schedule and daily cottonseed throughput shall be maintained, retained for at least two years, and made available to the District upon request. [District Rule 1070]
- {233} The APCO or any authorized representative, upon request, shall have access to, and copies of, any records required to be kept under the terms and conditions of this permit. [CH&SC 42303]
- Emission of PM10 shall not exceed 112.5 pounds per day. [District Rule 2201]

CONDITIONS FOR PERMIT C-41-9-1

Page 1 of 1 E: 07/31/2003

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORPLOIL MILL

MAILING ADDRESS:

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

400 HP HEXANE RECOVERY AND OIL EXTRACTION UNIT INCLUDING A MINERAL OIL PACKED TOWER SCRUBBER *REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER*

- 1. {227} All equipment or systems installed or used to achieve compliance with the terms and conditions of the Authority to Construct shall be maintained in good working order and be operated as efficiently as possible to minimize air pollution emissions. [District NSR Rule]
- The emissions of VOCs, calculated from hexane inventory losses, shall not exceed 2,200 lbs/day or 200,200 lbs/qtr. 2. [District Rule 2201]
- The quantity of seeds and nuts processed shall not exceed 500 tons in any one day. [District Rule 2201] 3.
- The mineral oil scrubber and vent condensers shall be in full operation whenever the extraction unit is operated. 4 [District Rule 2201]
- The extraction plant shall be inspected for fugitive VOC emissions monthly in accordance with EPA Method 21. 5. [District Rule 4691]
- Equipment found to be leaking, with emissions concentrations greater than 10,000 ppm as methane, shall be tagged immediately and repaired within ten days. [District Rule 4691]
- An inspection log with records of the date and results of all inspections, repairs, and reinspections shall be 7. maintained and made available to the District upon request. [District Rule 1070]
- Daily records of the type and quantity of seeds and nuts processed and hexane inventory losses shall be maintained. retained on the premises for at least two years and made available for District inspection upon request. [District Rule 10701
- The facility shall comply with District Rule 4691 "Vegetable Oil Processing Operations". [District Rule 4691] 9.

CONDITIONS FOR PERMIT C-41-12-1

Page 1 of 1 E: 07/31/2003

MAILING ADDRESS:

GAL OWNER OR OPERATOR: ANDERSON CLAYTON GORPLOIL MILL

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

32.0 MMBTU/HR MURRAY NATURAL GAS-FIRED BOILER, WITH DIESEL OIL STANDBY CAPACITY *REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER*

- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {271} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
- {234} The APCO or any authorized representative, upon request, shall have access to inspect any equipment, operation, or method required in this permit, and to sample emissions from the source or require samples to be taken. [District Rule 1081]
- This unit shall be fired on PUC grade natural gas except during natural gas curtailment. This exception is limited to 336 cumulative hours per calendar year excluding equipment testing, which is not to exceed 48 hours per calendar year. [District Rule 4305]
- Daily emissions shall not exceed 0.133 lb-NOx/MMBtu, 0.033 lb-CO/MMBtu, 0.013-lb PM10/MMBtu, nor 0.0022 lb-VOC/MMBtu when fired by natural gas. [District Rule 2201]
- Daily emissions shall not exceed 0.152 lb-NOx/MMBtu, 0.038 lb-CO/MMBtu, 0.055 lb-SOx/MMBtu, 0.015 lb-PM10/MMBtu, nor 0.0003 lb-VOC/MMBtu when fired by distillate oil. [District Rule 2201]
- Records of daily fuel (natural gas and oil) usage and operating hours shall be maintained and retained on the premises for at least two years and made available for District inspection upon request. [District Rule 1070]
- Boiler shall comply with applicable requirements of District Rule 4305. [District Rule 4305] 8.

CONDITIONS FOR PERMIT C-41-15-0

Page 1 of 1 E: 07/31/2003

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORP!OIL MILL

MAILING ADDRESS:

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

(4) 125 TON MEAL TANKS WITH HOPPERS SERVED BY ONE 20" 1D-3D CYCLONE, 1 SAUNCO PULSEJET MODEL SÉSB6-16-159 BAGHOUSE WITH 14 BAGS, 2 ROTOLIFTS, 2 RECLAIM CONVEYORS, 1 BUCKET ELEVATOR, 1 TANK DISTRIBUTION CONVEYOR, AND 1 COLLECTION CONVEYOR. RATING:96HP *REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER*

- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three 1. minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {118} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- {10} The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District NSR Rule]
- {11} Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule]
- Particulate matter emissions at the baghouse exhaust shall not exceed 0.1 grains/dscf in concentration. [District Rule 42011
 - Only one meal tank shall be loaded at any one time. [District Rule 2201] 6.
 - 7. All covers shall remain in place during operation of equipment. [District Rule 2201]
 - Daily emissions of PM10 shall not exceed 55 pounds per day. [District Rule 2201] 8.
 - 9. Pressure drop across filters shall be maintained between 2" and 6" W.C. [District Rule 2201]

CONDITIONS FOR PERMIT C-41-16-0

Page 1 of 1 E: 07/31/2003

MAILING ADDRESS:

GAL OWNER OR OPERATOR: ANDERSON CLAYTON GORPLOIL MILL

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

71 HP TRUCK LOADOUT OF MEAL INCLUDING (1) 20 HP INCLINE CONVEYOR, (1) 15 HP DISTRIBUTION CONVEYOR, AND (1) 3 HP BAGHOUSE CONVEYOR. THE EXHAUST SYSTEM CONSISTS OF FAN WITH 40 HP MOTOR AND (1) 3 HP MICRO PULSEAIR 1F1 BAGHOUSE WITH 80 BAGS.*REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER*

- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity, [District Rule 4101]
- {118} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] 2.
- {10} The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. 3. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District NSR Rule]
- {11} Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule]
- {265} All records shall be retained for a minimum of 2 years, and shall be made available for District inspection upon request. [District Rule 1070]
- Particulate matter emissions at the baghouse exhaust shall not exceed 0.1 grains/dscf. [District Rule 4201] 6.
- 7. All covers shall remain in place during operation. [District Rule 2201]
- 8. Exhaust fan and baghouse shall be operated at all times during loading of meal. [District Rule 2201]
- The District may require the flowrate of air into the baghouse to be reduced if emissions at baghouse exhaust exceed the permitted conditions. [District Rule 2201]
- 10. No more than 500 tons of meal shall be loaded per day. [District Rule 2201]
- 11. Daily emissions of PM10 shall not exceed 12.5 pounds per day. [District Rule 2201]
- 12. Pressure drop across bags shall be maintained between 2" and 6" W.C. [District Rule 2201]
- 13. Records of daily meal loaded shall be maintained, retained on the premises for at least two years and made available for District inspection upon request. [District Rule 1070]

CONDITIONS FOR PERMIT C-41-19-2

Page 1 of 1 E: 07/31/2003

MAILING ADDRESS:

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORPLOIL MILL

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

903 HP COTTON SEED PREPARATION ROOM: CONSISTING OF A FLAKING MILL SERVED BY ONE 22" 1D-3D CYCLONE, A STEAM COOKER, TWO EXPANDERS, AND A COLLET COOLER/DRYER SERVED BY ONE 60" 1D-3D CYCLONE *REQUESTED CANCELLATION OF PERMIT, PER 7/17/00 LETTER*

- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is dark or darker than Ringelmann 1 or equivalent to 20% opacity. [District Rule 41011
- No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
- The seed meats processing rate shall not exceed 600 tons per day. [District Rule 2201] 4.
- Records of daily seed meats processed shall be maintained, retained on the premises for at least two years and made available for District inspection upon request. [District Rule 1070]
- Particulate matter (PM) concentration in exhaust from the 1D-3D cyclone serving the meats flaking mill shall not exceed 0.02 grains/dscf. [District Rule 2201]
- Particulate matter (PM) concentration in exhaust from the 1D-3D cyclone serving the collet cooler/dryer shall not exceed 0.0095 grains/dscf. [District Rule 2201]
- Emissions of PM10 from the seed meats preparation facility shall not exceed 11.0 lb/day. [District Rule 2201]

Attachment B

Historical Production Data

- > Summary of Annual Throughputs and Production Rates
- > Cotton Seed Crushed and Meal Produced
- > Hexane Usage
- Natural Gas Usage

Summary of Annual Throughputs and Production Rates

HISTORICAL PRODUCTION DATA						
Year	Seed Processed (tons/year)	Meal Produced (tons/year)	Hexane Usage (gallons/yr)	Natural Gas Use (Therms)	Natural Gas Use (MMSCF)	
1979	126,700	69,685	126,350	no data	no data	
1980	115,650	63,608	120,330	no data	no data	
1980	132,500	72,875	144,630	no data	no data	
1982	114,800	63,140	76,460	no data	no data	
1983	46,500	25,575	76,460 36,225	no data	no data	
1984	88,500	25,575 48,675	56,225 54,110	no data	no data	
1985	113,500	40,675 62,425	75,290	no data	no data	
1986	115,700	63,635	68,000	no data	no data	
1987	105,500	58,025	78,160	no data	no data	
1988	114,700	63,085	84,510	no data	no data	
1989	114,700	62,700	103,090	no data	no data	
1990	102,965	56,631	102,129	no data	no data	
1990	118,446	65,145	84,273	no data	- no data	
1992	119,784	61,796	62,002	1,022,070	97.34	
1993	130,779	69,761	84,875	1,026,900	97.8	
1993	130,413	67,363	04,075	1,201,200	97.0 114.4	
1994	100,363	50,468	105,496	938,173	1 14,4	
1995	123,888	65,885	111,992	1,114,967		
1990	74,527	39,140	154,594	766,508		
1998	57,137	29,948	102,007	407,158		
1999	0	29,940	02,007	407,158		
2000	0	0	0	0		
3 Year Avg (1996-1998)	85,184.00	44,991.00	122,864.33	762,877.67		
7 Year Avg (1992-1998)	105,270.14	54,908.71	103,494.33	925,282.29		
20 Year Avg (1979-1998)	107,317.60	57,978.23	93,400.68	N/A		

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Two	o Year Avera	ges				HISTORICAL PRODUCTION DATA				
Natural	Hexane	Meal	Seed			Seed	Meal	Hexane	Natural	Natural
Gas Use	Usage	Produced	Processed	Two Year		Processed	Produced	Usage	Gas Use	Gas Use
(Therms)	(gallons/yr)	(tons/year)	(tons/year)	Periods	Year	(tons/year)	(tons/year)	(gallons/yr)	(Therms)	(MMSCF)
					1979	126,700	69,685	126,350	no data	no data
					1980	115,650	63,608	120,420	no data	no data
				[1981	132,500	72,875	144,630	no data	no data
					1982	114,800	63,140	76,460	no data	no data
					1983	46,500	25,575	36,225	no data	no data
					1984	88,500	48,675	54,110	no data	no data
					1985	113,500	62,425	75,290	no data	no data
					1986	115,700	63,635	68,000	no data	no data
					1987	105,500	58,025	78,160	no data	no data
					1988	114,700	63,085	84,510	no data	no data
					1989	114,000	62,700	103,090	no data	no data
					1990	102,965	56,631	102,129	no data	no data
				1	1991	118,446	65,145	84,273	no data	no data
					1992	119,784	61,796	62,002	1,022,070	97.34
					1993	130,779	69,761	84,875	1,026,900	97.8
				[1994	130,413	67,363	0	1,201,200	114.4
}					1995	100,363	50,468	105,496	938,173	
1,026,570	108,744	58,177	112,126	1995-1996		123,888	65,885	111,992	1,114,967	
940,738	133,293	52,513	99,208	1996-1997	1997	74,527	39,140	154,594	766,508	
586,833	128,301	34,544	65,832	1997-1998	1998	57,137	29,948	102,007	407,158	
					1999	0	0	0	0	
				· .	2000	0	0	0	0	
					3 Year Avg (1996-1998)	85,184.00	44,991.00	122,864.33	762,877.67	
				:	7 Year Avg (1992-1998)	105,270.14	54,908.71	103,494.33	925,282.29	
·				<u></u>	20 Year Avg (1979-1998)	107,317.60	57,978.23	93,400.68	N/A	

Cotton Seed Crushed and Meal Produced

(Tons/Quarter and Tons/Year)

Data	Data From Reports			lculation
		Tons		Tons
1-Jan	1990	?	1st Qtr	?
1-Apr	1990	?	2nd Qtr	?
1-Jul	1990	?	3rd Qtr	?
1-Oct	1990	?	4th Qtr	?
1-Jan	1991	?	Total	?
•			reported	102,965
			difference	?

mou							
Data	Data From Reports			lculation			
		Tons		Tons			
1-Jan	1990	?	1st Qtr	?			
1-Apr	1990	?	2nd Qtr	?			
1-Jul	1990	?	3rd Qtr	?			
1-Oct	1990	?	4th Qtr	?			
1-Jan	1991	?	Total	?			

Occu Olus			1	
Data	Data From Reports			lculation
		Tons		Tons
1-Jan	1991	?	1st Qtr	?
1-Apr	1991	?	2nd Qtr	?
1-Jul	1991	?	3rd Qtr	?
1-Oct	1991	?	4th Qtr	?
1-Jan	1992	44,059	Total	?
			reported	188,446
			difference	?

Data	Data From Reports			Quarterly Calculation		
		Tons		Tons		
1-Jan	1991	?	1st Qtr	?		
1-Apr	1991	?	2nd Qtr	?		
1-Jul	1991	?	3rd Qtr	?		
1-Oct	1991	?	4th Qtr	?		
1-Jan	1992	21,601	Total	?		

0004 0140						
Data	Data From Reports			Quarterly Calculation		
<u> </u>		Tons		Tons		
1-Jan	1992	44,059	1st Qtr	39,336		
1-Apr	1992	83,395	2nd Qtr	35,881		
1-Jul	1992	119,276	3rd Qtr	8,942		
1-Oct	1992	8,942	4th Qtr	30,574		
1-Jan	1993	39,516	Total	119,784		
		•	reported	119,784		
			difference	0		

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Data	Data From Reports			Quarterly Calculation		
_		Tons		Tons		
1-Jan	1992	21,601	1st Qtr	21,232		
1-Apr	1992	42,833	2nd Qtr	19,251		
1-Jul	1992	62,084	3rd Qtr	4,684		
1-Oct	1992	4,684	4th Qtr	16,629		
1-Jan	1993	21,313	Total	61,796		

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Data	Data From Reports			Quarterly Calculation			
		Tons		Tons			
1-Jan	1993	39,516	1st Qtr	33,364			
1-Apr	1993	72,880	2nd Qtr	39,174			
1-Jul	1993	112,054	3rd Qtr	28,507			
1-Oct	1993	28,507	4th Qtr	29,734			
1-Jan	1994	58,241	Total	130,779			
	· · · ·		reported	130,779			
			difference	0			

Data	Data From Reports			Quarterly Calculation		
		Tons		Tons		
1-Jan	1993	21,313	1st Qtr	17,916		
1-Apr	1993	39,229	2nd Qtr	21,117		
1-Jul	1993	60,346	3rd Qtr	15,125		
1-Oct	1993	15,125	4th Qtr	15,603		
1-Jan	1994	30,728	Total	69,761		

Data	Data From Reports			Quarterly Calculation		
		Tons		Tons		
1-Jan	1994	58,241	1st Qtr	39,217		
1-Apr	1994	97,458	2nd Qtr	33,369		
1-Jul	1994	130,827	3rd Qtr	28,711		
1-Oct	1994	28,711	4th Qtr	29,116		
1-Jan	1995	57,827	Total	130,413		
			reported	130,413		
			difference	0		

Data	Data From Reports			Quarterly Calculation			
		Tons		Tons			
1-Jan	1994	30,728	1st Qtr	20,165			
1-Apr	1994	50,893	2nd Qtr	16,771			
1-Jul	1994	67,664	3rd Qtr	14,355			
1-Oct	1994	14,355	4th Qtr	`16,072			
1-Jan	1995	30,427	Total	67,363			

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Dața	Daṭa From Reports			Quarterly Calculation				
		Tons		Tons				
1-Jan	1995	57,827	1st Qtr	31,728				
1-Apr	1995	89,555	2nd Qtr	31,641				
1-Jul	1995	121,196	3rd Qtr	10,936				
1-Oct	1995	10,936	4th Qtr	26,058				
1-Jan	1996	36,994	Total	100,363				
			reported	96,984				
			difference	-3,379				

Data	Data From Reports			Quarterly Calculation		
		Tons		Tons		
1-Jan	1995	30,427	1st Qtr	14,978		
1-Apr	1995	45,405	2nd Qtr	14,954		
1-Jul	1995	60,359	3rd Qtr	6,661		
1-Oct	1995	6,661	4th Qtr	13,875		
1-Jan	1996	20,536	Total	50,468		

Data	Data From Reports			Quarterly Calculation		
		Tons		Tons		
1-Jan	1996	36,994	1st Qtr	32,500		
1-Арг	1996	69,494	2nd Qtr	34,547		
1-Jul	1996	104,041	3rd Qtr	24,773		
1-Oct	1996	24,773	4th Qtr	32,068		
1-Jan	1997	56,841	Total	123,888		
			reported	?		
			difference	?		

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Data	Data From Reports			Quarterly Calculation			
				Tons			
1-Jan	1996	20,536	1st Qtr	17,212			
1-Apr	1996	37,748	2nd Qtr	18,223			
1-Jul	1996	55,971	3rd Qtr	13,068			
1-Oct	1996	13,068	4th Qtr	17,382			
1-Jan	1997	30,450	Total	65,885			

Data	Data From Reports			Quarterly Calculation		
		Tons		Tons		
1-Jan	1997	56,841	1st Qtr	35,844		
1-Apr	1997	92,685	2nd Qtr	28,987		
1-Jul	1997	121,672	3rd Qtr	0		
1-Oct	1997	0	4th Qtr	9,696		
1-Jan	1998	9,696	Total	74,527		
			reported	73,465		
			difference	-1,062		

Data	Data From Reports			Quarterly Calculation				
		Tons		Tons				
1-Jan	1997	30,450	1st Q	tr 19,266				
1-Apr	1997	49,716	2nd C	tr 14,808				
1-Jul	1997	64,524	3rd Q	tr 0				
1-Oct	1-Oct 1997 0		4th Q	tr 5,066				
1-Jan	1998	5,066	Tota	I 39,140				

Data	Data From Reports			Quarterly Calculation		
		Tons		Tons		
1-Jan	1998	9,696				
1-Mar	1998	29,025	1st Qtr	27,486		
1-Арг	1998	8,157	2nd Qtr	29,651		
1-Jul	1998	37,808	3rd Qtr	0		
1-Oct	1998	0	4th Qtr	0		
1-Jan	1999	0	Total	57,137		
			reported	57,137		
			difference	0		

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Data	Data From Reports			Quarterly Calculation				
	Tons				Tons			
1-Jan	1998	5,066						
1-Mar	1998	15,226		1st Qtr	14,451			
1-Apr	1998	4,291		2nd Qtr	15,497			
1-Jul	1998	19,788		3rd Qtr	0			
1-Oct	1998	0.		4th Qtr	0			
1-Jan	1999	0		Total	29,948			

Hexane Usage

(Gallons/Month and Gallons/Year)

ANDERSON CLAYTON CORP. CHOWCHILLA MILL HEXANE USAGE - GALLONS

		YEAR					
	1995	1996_	1997	1998			
JAN		9,767	8,489	22,562			
FEB		6,171	8,741	20,683			
MAR		5,223	-	16,695			
APR		12,304	20,488	13,098			
MAY		8,254	32,123	19,357			
JUN		9,967	21,284	9,612			
JUL	10,653	6,680	-	-			
AUG	•	13,150	-	-			
SEP	-	9,681	-	-			
OCT	11,767	17,862	-	-			
NOV	11,430	3,661	8,193	•			
DEC	6,075	9,272	55,276				
TOTAL	39,925	111,992	154,594	_102,007			

SOURCE: ACCOUNTING GENERAL LEDGER

HEXANE - CHOWCHILLA MILL

CALENDAR YEAR	TONS CRUSH	GALLONS USED PURCHASED. LOST	TONS USED	GALLONS/ 6.2#/gal.	
1979	126,700	126,350	392	1.00	
1980	115,650	120,420	373	1.04	
1981	132,500	144,630	448	1.09	
1982	114,800	76,460	237	.67	
1983	46,500	36,225	112	.78	
1984	88,500	54,110	168	. 81	
1985	113,500	75,290	233	. 66	
1986	115,700	68,000	211	.59	
198/	105,500	78,160	242	.74 4.6	
1988	114,700	84,510	262 #/91	.74	
Al France the	1630,779- 1630,024 108,668 3 585974 0 436717-4.24 4.254/60 4 page 4 he l	4.5 lle/km se (here) 90-9) 342 7 369009/23	.91	318.1 tons	Error of the ball
sarge. per ton. 684,000 7	the N.C. at 6 term chanle get herma	2	,		

,

Natural Gas Usage

(Therms/Month)

Location:

Chowchilla Mill - Gas

Account:

FTN AD 02741-1

Meter:

00000

Utility Company:

Pacific Gas & Electric

Year: 1995

Rate:

GIPBS

Read I	Dates	Billing	Gas		Unit Cost	Tx Ohio	Diff	Adjust
From	To	Days	Therm	Total	Per Therm	dth	+-/	+/
12/31	1/31	31	111555	\$11,276.41	0.101	11250	262.5	\$414.71
1/31	2/28	31	90270	\$ 9,548.35	0.106	1150 0	-2184.1	(\$2,904.90)
2/28	3/31	31	102654	\$10,637.80	0.104	9800	793.9	\$905.04
3/31	4/30	30	98365	\$10,007.62	0.102	11490	-1338.7	(\$1,419.06)
4/30	5/31	31	101835	\$10,310.78	0.101	10245	264.4	\$296.10
5/31	6/30	30	85335	\$8,587.83	0.101	9000	-193.4	(\$243.72)
6/30	7/31	31	92665	\$9,297.48	0.100	9544	19.0	\$ 32.54
7/31	8/31	31	16417	\$2,330.00	0.142	1671	23.2	\$40.89
8/31	9/30	30	0	\$839.33		23	23.0	\$43.24
9/30	10/31	31	37222	\$4,219.13	0.113	3777	64.3	\$120.90
10/30	11/30	30	100018	\$11,620.15	0.116	10434	-112.1	(\$197.37)
11/30	12/31	31	101837	\$12,143.24	0.119	10687	-177.4	(\$312.26)

Total

938173

\$100,818.12

Remarks:

150

311.45 335.553 336.553 OI- MILL

From:

"Carlson, Robert" < RCC7@pge.com>

To:

"Norm Hansen (E-mail)" < NormH@andersonclayton.com>

SERVICE

Date: Subject: 12/28/00 11:50AM FTN AD 02741

CONTROL NUM ACCT NUM SERVICE STREET YEAR YYYYMM CITY PRIOR_READ_DATE CURRENT_READ_DATE BILLING PERIOD THERMS GAS CHARGES GAS RATE FTNAD02741 25184 RD 16 MADERA 1996 199601 5849404 1/31/1996 31 GIPBS 102.885 \$13,710.90 12/31/1995 FTNAD02741 25184 RD 16 MADERA 1996 199602 5849404 2/29/1996 29 GIPBS 96.812 \$12.950.38 1/31/1996 FTNAD02741 25184 RD 16 MADERA 199603 5849404 1996 **GIPBS** 3/31/1996 70.248 / \$9.623.77 2/29/1996 31 FTNAD02741 25184 RD 16 MADERA 1996 199604 5849404 4/30/1996 GIPBS 99,436 \$11,655.19 3/31/1996 FTNAD02741 25184 RD 16 MADERA 5849404 199605 1996 5/31/1996 **GIPBS** 104.620 \$12,219.73 4/30/1996 31 FTNAD02741 25184 RD 16 MADERA 1996 199606 5849404 5/31/1996 6/30/1996 30 95,980 \$11,278.83 GIPBS FTNAD02741 25184 RD 16 MADERA 1996 199607 5849404 7/31/1996 31 GIPBS 6/30/1996 97,189 \$11,410,49 5849404 FTNAD02741 25184 RD 16 MADERA 199608 1996 8/31/1996 GIPBS 7/31/1996 31 100.755 \$11.306.96 FTNAD02741 25184 RD 16 MADERA 1996 199609 5849404 **GIPBS** 8/31/1996 9/30/1996 30 29.069 \$3.817.81 FTNAD02741 25184 RD 16 MADERA 1996 199610 5849404 9/30/1996 10/31/1996 31 GIPBS 79,144 \$8,918.08 1996 199611 FTNAD02741 25184 RD 16 MADERA 5849404 11/30/1996 30 GIPBS 113,924 \$14,343.76 10/31/1996 FTNAD02741 25184 RD 16 MADERA 5849404 1996 199612 **12/31/1996** 31 GIPBS 111,494 \$14,054.98 11/30/1996 FTNAD02741 25184 RD 16 MADERA 5849404 199701 1/31/1997 GIPB\$ 116,296 \$14,625,65 12/31/1996 FTNAD02741 25184 RD 16 MADERA 199702 5849404 1997 GIPBS 2/28/1997 28 108,212 \$13,664.94 1/31/1997 FTNAD02741 25184 RD 16 MADERA 1997 199703 5849404 2/28/1997 3/31/1997 31 GIPBS 111,045 \$14.001.62 5849404 FTNAD02741 25184 RD 16 MADERA 1997 199704 4/30/1997 30 GIPBS 111.848 3/31/1997 \$12,270,57

	1997 4/30/199	199705 7	58 5/31/1997	49404 3	:1	FTNAD02741 GIPBS	25184 RD 16 118,092	MADERA \$13,247.93
	1997 5/31/199	199706 7	58 6/30/1997	49404 3	10	FTNAD02741 GIPBS	25184 RD 16 83,385	MADERA \$9,818.84
	1997 6/30/199 \$970.53	7	58 7 /31/1 997	4940 4 3	31	FTNAD02741 GIPB\$	25184 RD 16 1,532	MADERA
	1007	199708 7	58 8/31/199 7	349404 3	31	FTNAD02741 GIPBS	25184 RD 16	MADERA
	1997	199709 7				FTNAD02741 GIPBS	25184 RD 16	MADERA
	1997 9/30/199 \$804.92	199710 7	10/31/199	7 3	51	GIPBS		
	1997	199711	58 11/30/1 9 9	349404 7 3	10	FTNAD02741 GIPBS	25184 RD 16 25,047	MADERA \$3,921.52
	1997 11/30/19	199712 97	58 12/31/199	349404 7 3	31	FTNAD02741 GIPBS	25184 RD 16 103,256	MADERA \$13,653.06
	1998 12/31/19	199801 97	58 1/31/199 8	349404 3	31	FTNAD02741 GIPBS	25184 RD 16 104,091	MADERA \$12,297.22
	1998 1/31/199	199802 8	58 2/28/1998	349404 2	28	FTNAD02741 GIPBS	25184 RD 16 104,519	MADERA \$12,344.51
)			58 4/30/1998				25184 RD 16 102,820	
,	1998 4/30/199	199805 8	58 5/31/1998	349 4 04 3	31	FTNAD02741 GIPBS	25184 RD 16 106,950	MADERA \$5,238.46
			58 6/30/1998				25184 RD 16 84,196	
	1998 6/30/199 \$1,389.2	8	58 7/31/1998	349404 3		FTNAD02741 GIPBS	25184 RD 16 6,581	MADERA
	1998	199808 18	58 8/31/1998	3494 0 4 3	31	FTNAD02741 GIPBS	25184 RD 16 1,247	MADERA
	1998	199809 18	58 9/30/1998	349404 3	80	FTNAD02741 GIPBS	25184 RD 16 641	MADERA
		199810 8	58 10/31/199			FTNAD02741 GIPBS	25184 RD 16 204	MADERA
	1998	199811 98	58 11/30/199			FTNAD02741 GIPB\$	25184 RD 16	MADERA
	1998	199812	58 12/31/199			FTNAD02741 GIPBS	25184 RD 16	MADERA

\$321.42					
1999 199901	58494	04	FTNAD02741	25184 RD 16	MADERA
12/31/1998	1/31/1999	31	GIPBS	-	
\$329,45					
1999 199902	58494	04	FTNAD02741	25184 RD 16	MADERA
1/31/1999	2/28/1999	28	GIPB\$	307	
\$358.38					
1999 199903	58494	04	FTNAD02741	25184 RD 16	MADERA
2/28/1999	3/31/1999	31	GIPBS	•	
\$329.45					
1999 199904	58494	04	FTNAD02741	25184 RD 16	MADERA
3/31/1999	4/30/1999	30	GIPBS	-	
\$329.45					
1999 199905 5849404		FTNAD02741	25184 RD 16	MADERA	
4/30/1999	5/31/1999	31	GIPB\$	-	
\$86.84					
1999 199906	58494	04	FTNAD02741	25184 RD 16	MADERA
5/31/1999	6/30/1999	30	GIPBS	-	
\$11.02	•				
1999 199907	58494	04	FTNAD02741	25184 RD 16	MADERA
6/30/1999	7/31/1999	31	GIPBS		
\$11.02					

•

.

Attachment C

PM10/TSP Source Test Results for Cooler Dryer Fan Cyclone, Permit Unit C-41-19-2

ANDERSON CLAYTON 3325 Figarden Drive Fresno, CA 93711

Attn: Steve White

PM10 & TOTAL PARTICULATE TESTING COOLER DRYER FAN CYCLONE ATC #C-41-9-2 April 29, 1998

Submitted to
San Joaquin Valley Unified APCD
1999 Tuolumne Suite 200
Fresno, CA 93721

Attn: Gabe Lazar

Prepared by AIRx TESTING 2175 Goodyear Avenue Unit #105 Ventura, CA 93003

> Job Number 16031

Laboratory Report Number 397-010

Test Team Leader Cam Donnahoo

Results Verified By: Tom Porter Partner

Submitted July 15, 1998



PARTICULATE EMISSION SUMMARY 4/29/98

	Run #1	Run #2	Run #3	Average
Total Particulate				- 3 -
gr/DSCF	0.0132	0.0119	0.0035	0.0095
lb/hr	0.76	0.71	0.21	0.56
Particule Size Distribution				
+1 0μ (%)	20.5	18.1	50.1	29.6
-10μ (%)	79.5	81.9	49.9	70.4
<10μ Results				
gr/DSCF	0.0105	0.0098	0.0018	0.0074
ib/hr	0.60	0.58	0.10	0.43
Exhaust Flowrate, DSCFM	6737	6903	6794	6811

Attachment D

Emissions from Hexane Recovery & Oil Extraction Unit

- > VOC Calculations for Hexane Recovery and Oil Extraction Unit, Permit Unit C-41-9-1 (Project 940442)
- ➤ VOC Source Test Results for Hexane Recovery and Oil Extraction Unit, Permit Unit C-41-9-1

VOC Calculations for Hexane Recovery and Oil Extraction Unit, Permit Unit C-41-9-1 (Project 940442)

San Joaquin Valley Unified Air Pollution Control District Engineering Evaluation

ANDERSON CLAYTON CORP. - OIL EXTRACTION UNIT, CHOWCHILLA # 940442

Engineer:

Tope Adewusi

Date:

December 13, 1994

Facility:

Anderson Clayton Corporation

Mailing Address:

P.O. Box 847

Chowchilla, CA 93610

Contact Name:

Phone:

Steve White

(209) 487-7932

I. PROPOSAL:

The primary business of this facility is cotton seed oil and nut oil extraction. The applicant proposes to modify the existing Authority to Construct, ATC #C-41-9-1 (copy attached) by implementing the following:

- (1) Removing the mechanical oil extractor which removes about 67% of the seed or nut oil, and replacing it with a system that uses 100% extraction by hexane;
- (2) Increasing seed throughput from 500 tons/day to 600 tons/day;
- (3) Replacing the existing mineral oil scrubber which controls hexane emissions with a larger unit expected to have a higher control efficiency.

The applicant does not expect to have an increase in hexane emission. In fact he is willing to accept hexane emission limitation kept to the current level. The District will require source tests to ensure that hexane emissions do not exceed current permit limitations.

The oil mill will continue to operate 24 hours per day, 7 days per week and 52 weeks per year.

II. APPLICABLE RULES:

Rule 2201 Ne

New and Modified Stationary Source Review Rule (Adopted September 19, 1991; Amended October

21, 1993)

Rule 3010	Permit Fees (Adopted May 21, 1992; Amended December 17, 1992)
Rule 4101	Visible Emissions (Adopted May 21, 1992; Amended December 17, 1992)
Rule 4102	Nuisance (Adopted May 21, 1992; Amended December 17, 1992)
Rule 4691	Vegetable Oil Processing Operations (Adopted April 11, 1991; Amended December 17, 1992)
CHSC 42301.6	Source location within 1,000 feet from a school site.

III. PROJECT LOCATION:

25184 Road 16, Chowchilla, CA

Applicant states that there is a school (Chowchilla High School) within 1,000 feet of the project site.

IV. PROCESS DESCRIPTION:

Cotton seeds from local cotton gins are trucked to the facility and unloaded by conveyor belts onto open stockpiles, which are covered by tarps when fully loaded. The applicant is proposing to increase his seed throughput from 500 to 600 tons per day.

Cottonseed meats are mixed with water. Moisturized meats are run through three crushing rolls. Crushed meats are run through one horizontal opposed flaking roll. Flaked meats are cooked in six precookers and cooked meats are formed into collets by two expanders. The collets enter solvent (hexane) plant where all the oil is extracted and refined.

The hexane solvent plant will operate in the same way as the existing system. Some of the equipment will be changed to accommodate the increase in oil. The mixture of oil and solvent is called miscella. Miscella from the evaporator will be pumped to the refinery batch/surge tanks. Miscella will discharge from the tanks and be mixed with caustic soda prior to the sonulator mixer. The miscella and caustic soda mixture will go through the reactor tubes before entering the

centrifuge. The primary centrifuge will discharge soapstock and refined miscella. Soapstock will be pumped to the disolventizer. Refined miscella will be mixed with water before entering the water wash centrifuge. Refined dry miscella will be discharged from the centrifuge and go to the second effect evaporator to continue hexane recovery. Water will discharge to the sump and be reused in the mill processes.

V. REVIEW OF PROPOSED CONTROL EQUIPMENT

Hexane emissions are controlled by a modified and bigger mineral oil, countercurrent, packed tower scrubber.

Air saturated with hexane and water vapor enters the bottom of the column from the vent condenser and passes upward through a wetted packed bed. Mineral oil will absorb more than 90% of hexane from the air. The vent fan discharges the air, water vapor, and unabsorbed hexane vapor to the atmosphere. The volume of hexane vapor discharged to the atmosphere is a function of air flow and mineral oil column capacity.

Air enters the plant with the prepared meats. The quantity of prepared meats will increase but the volume of air will not change.

With the addition of larger mineral oil column (larger contact area) and unchanged air flow, the removal efficiency is expected to increase. The proposed tower will utilize more ceramic saddles for packing. The packing increases hexane absorption efficiency by increasing the surface area over which the scrubber mineral oil flows, presenting a large area for mass transfer to occur. Hexane purchases over a ten year period averaged 0.8 gallons per ton of seed crushed. Average purchases are expected to be equal or less with the proposed plant.

The scrubber design bases are:

Inlet gas to absorber = 75 cfm dry air saturated with hexane and water at 100°F maximum

Exhaust gas = 75 cfm dry air saturated with water and at 90% LEL of hexane

Scrubber efficiency = 95% minimum. However, actual efficiency, which will be demonstrated by source testing is expected to go up higher.

Vol. of proposed column =

Proposed column is 16" diameter and 25' long implying that the volume = $\pi \times (16'/12)^2 \times 1/4 \times 25' = 34.9 \text{ cf.}$

Volume of existing col. =

Existing column is 12" diameter and 20' long implying that the volume = $\pi \times (12'/12)^2 \times 1/4 \times 20' = 15.7$ cf.

The increase by (34.9/15.7 x 100%) 222% is expected to translate into improved control efficiency.

While actual dimensions do not accurately reflect the capacity, the relative sizes do

approximate a larger contact

area.

Design check on hexane velocity:

The flow rate = 75 cfm = 75/60 cfs = 1.25 cubic feet per second. Hexane duct inlet diameter = 18" = 1.5' (per applicant)

Therefore, hexane velocity = flow rate/duct cross-sectional area

= $(1.25 \times 4)/\pi \times 1.5^2$ ft/sec = 0.9 ft/sec

According to Section 4-40 of EPA Course 415 (Control of Gaseous Emissions) the ideal velocity in the packed bed scrubbers is approximately 1 to 3 ft/sec. Since the calculated emission is close to that range, the tower column design is acceptable.

VI. EMISSIONS ESTIMATE:

A. Best Available Control Technology (BACT) calculation:

Assumptions:

- Hexane recovery operation is 24 hours per day, 365 days/year.
- All hexane losses from the solvent extraction unit are volatile organic compounds (VOC) emitted to the atmosphere. It is also assumed that the VOC retained in the meal are eventually emitted to the atmosphere.
- The VOC emitted per ton of seed crushed, shall be assumed to be equivalent to the average quantity of hexane lost

per ton of cottonseed crushed in 1991. Since we had 2200 lbs VOC/500 tons of seed per day, an emission factor (EF) of (2200/500) 4.4 lb VOC per ton of seed crushed was established and used on the existing Permit #C-41-9-1. Emission factor prior to this proposal, $\text{EF}_{\text{before}}$ = 4.4 #/t

- The VOC emissions from the seeds and nuts in this process shall be assumed to depend on the quantity of seed processed and not on the quantity of oil produced. Since VOC emissions is expected to remain at 2200 lbs/day for 600 tons of seeds, then an emission factor of (2200/600) 3.7 lb VOC per ton of seed crushed will be established for the proposed modified Permit #C-41-9-2. Emission factor based on this proposal, $EF_{after} = 3.7$ lbs/ton.
- The emissions from the extraction of seed oils and nuts shall be assumed to be equivalent to the emissions from the extraction of cottonseed oil.

The following acronyms which are fully defined in Section 6.2 of Rule 2201, stand for:

HAPE = Historical Adjusted Potential Emissions

IPE = Increase in Permitted Emissions

PE = Potential to Emit

PEPM = Potential to Emit Prior to Modification

SSPE = Stationary Source Potential to Emit

 Δ CE = Change in Control Efficiency

Hexane emissions will be limited to the previously established limit of 2200 lb VOC/day based on processing 500 tons of seed per day.

From Section 6.2.7 of Rule 2201,

HAPE = PEPM(1 - Δ CE) = 2200 lbs/day x (1 - Δ CE)

From Policy # NSR/ERC 5-1 dated 3/25/92,

 $\Delta CE = 1 - EF_{after}/EF_{before} = 1 - 3.67/4.4 = 0.17$

Therefore,

HAPE = 2200(1 - 0.17) = 1835

IPE = PE - HAPE = 2200 - 1835 = 365 lbs/day Since IPE is greater than 2 lbs/day, BACT is required.

IPE for BACT calculation exceeds 100 lbs/day, but we use true permitted emissions changes to determine offsets, SSPE, NSR balance and public noticing. So public noticing is not required since $PE_{before} = PE_{after} = 2200 \ lbs/day$.

VOC Source Test Results for Hexane Recovery and Oil Extraction Unit, Permit Unit C-41-9-1

ANDERSON CLAYTON 3325 Figarden Drive

Fresno, CA 93711

Attn: Steve White

VOLATILE ORGANIC COMPOUNDS TESTING MOS SCRUBBER SYSTEM

April 29, May 5, May 27 & June 11, 1998

Prepared by AIRx TESTING 2175 Goodyear Avenue Unit #105 Ventura, CA 93003

> Job Number 16031

Laboratory Report Number 397-010

Test Team Leader Cam Donnahoo

Results Verified By: Tom Porter Partner

> Submitted July 16, 1998



VOC's EMISSION SUMMARY

4/29/98	Run #1	Run #2	Run #3	- Average
Volatile Orgainic Compounds Ib/hr (Outlet) Ib/hr (inlet)	1.64 6.93	1.67 7.40	1.27 7.07	1.52 7.14
Reduction, %	-	-	-	78.7
Exhaust Flowrate, DSCFM	-	-	-	49
5/5/98 Volatile Orgainic Compounds				
lb/hr (Outlet) lb/hr (Inlet)		4.61 37.55		4.61 37.55
Reduction, %		-		87.8
Exhaust Flowrate, DSCFM				49
5/27/98 Volatile Orgainic Compounds Ib/hr (Outlet) Ib/hr (Inlet)	10.12	14.53	11.19	11.95
Reduction, %	11.30	15.04	7.10	11.15 0.0
Exhaust Flowrate, DSCFM				46
6/11/98 Volatile Orgainic Compounds Ib/hr (Outlet) Ib/hr (Inlet)	41.95 33.78	32.96 71.62		37.46 52.70
Reduction, %				
Exhaust Flowrate, DSCFM				* 28.9 46



Attachment E

Summary of PM10 Emission Factors for Cottonseed Oil Mills Prepared by Fresno County APCD, 4/10/1991

FRESNO COUNTY AIR POLLUTION CONTROL DISTRICT

ENGINEERING REVIEW

COP

OF

PRODUCERS COTTONSEED OIL MILL 2365 E. NORTH

FRESNO, CA 93721

SHUTDOWN OF COTTONSEED OIL MILL

repared by.	Λ Λ
Roger A. Isom Air Quality Engineer II	Maye 4. Den
Lighton I	
Reviewed By:	
Martin Keast	MC
Supervising Air Quality Er	ngineer

4/10/91

ATTACHMENT C

" L. Stern	From R. McVaral
Ca ARB	C. S.TUVAPCD
Dept.	Phone #
Fax# 1-916-445-50	77 Fex#

PM10 EMISSIONS

COPY

P/O#1030040101 - Unloading and Storage

Emissions from this process are mostly fugitive; and therefore, not verifiable. Hence, no credits will be granted for this operation.

P/O#1030040102 - Cleaning and Delinting

This is the largest source of PM10 emissions in the facility. Emissions will be calculated by using source test results (see attached) and applying them throughout the delinting stage.

Processes: Seed Cleaning

1st Cut Lint Cleaning 2nd Cut Lint Cleaning 1st Cut Lint Beaters 2nd Cut Lint Beaters

Motes

Bates Press Room

[Please note, that emissions from these processes are only from cottonseed,and not safflower.]

PM10 Emissions = (source test results) x (# cyclones) x (Tonnage) x (PM10 Fraction)

Seed Cleaning:

12-44 " "2D-2D" cyclones Test = .008 g/dscf > per cyclones = .012 lb/ton

Emissions = (.012 lb/ton) (12 cyclones)(245.9 tons/day)(0.5 lbPM10)

PM10 = 17.7 lb/day

1st Cut Lint Cleaning -

PM10 = 131.0 lb/day

2nd Cut Lint Cleaning -

32-364 "1D-3D" cyclones

Test = .021 g/dscf

> per cyclone

.022 lb/ton

Emissions = (.22 lb/ton) (32 cyclones) 245.9 tons/day) (0.5 lbPM10) lbPM

PM10 = 86.56 lb/day

1st Cut Lint Beaters -

4-30" "20-2D" cyclones

Test = .21 g/dscf

> per cyclone

.019 lb/ton

Emissions = (.019 lb/ton)(4 cyclones)(245.9 tons/day)(.5 lbPM10)

PM10 = 9.34 lb/day

2nd Cut Lint Beaters

8-26""10-30" Cyclones

Test = 0.41 g/dscf

> per cyclone

.039 lb/bale

Emissions = (.011 lb/ton) (8 cyclones) (245.9 tons/day) (0.5lbPM10) lbPM

PM10 = 10.82 lb/day

Bake Press Room

3-62" "1D-3D" 1-36" "2D-2D" 1-26 "2D-2D"

Test = .072 g/dscf > per cyclone ("20-2D") .24 lb/ton

PM10 = (.24lb/ton) (245.9tons) (3 cyclones) (0.5 lbPM10) lbPM10

PM10 = 92.21 lb/day

P/O#1030040103 - Hulling & Separating Room

Results from the RANCHERS COTTON OIL MILL will be used since no source test results exist from PRODUCERS.

Source Tests Results = 1.47 lb/hr = .098 lb/ton (TOTAL)

(Ranchers 8/24-8/25/76) Chronocology) 15 tons/hr

PM10 = (245.9tons/day)(.098lb/ton)(0.5<u>lbPM10</u>) lbPM10

PM10 = 12.05 lb/day For Cottonseed

PM10 = (136.7 tons)(.098 lb/day)(0.5 lbPM10) lbPM10

PM10 = 6.7 lb/day for Safflower

TOTAL = 18.75 lb/day

cort

For the rest of the plant, no actual source testing was performed. An average lb/ton emission factor from the source test results will be used since it was not documented if the tests were performed an "1D-3D" or "2D-2d" cyclones, the average lb/ton emission factor for "2D-2D" cyclones will be used for all cyclones. The average emission factor based on source test results (see attached summary) is 0.06 <u>lbPM</u> (per cyclone).

P/O# 1030040104 - Solvent Extraction

ton

PM10 emissions from meal handling

1-"1D-2D" cyclone @ 15415 cfm

 $PM10 = (.06 \frac{IbPM}{10})(245.9 \frac{tons}{10})(0.5 \frac{IbPM10}{10})$ ton day IbPM10

PM10 = 7.4 lb/day

P/O#1030040105 - Bulk Meal Storage

PM emissions are from meal loading for both cottonseed and safflower.

4-"2D-2D" cyclones

$$PM10 = (.06lbPM)(4 \text{ cyclones})(245.9 + 136.7tons)(0.5lbPM10)$$

ton day Pm10

P/O#1030040106 - Meal Processing

PM10 emissions from cotton seed and safflower

2 - Baghouses

5 - "1D-3D" cyclones

PM10 = (.06|bPM) (5 cyclones) (245.9 + 136.7tons) (|bpm10) ton day |bPM

Attachment F

Potential to Emit Calculations for the Chowchilla Oil Mill Facility (Project #930468)

Table 1. Potential to Emit (PE)

		1. Potent.	tar co bare	(PE)	
Operation (PTO#)	E.F. (1b PM /ton)	Thruput ton/day	PM10/PM	# of cyclones	lb/day (ton/yr)
Receiving C-41-4-0	1.0	500	0.5		250 (41.88)
Seed Cleaning C-41-6-1	0.012	500	0.5	15	45 (7.54)
1st Cut Linter C-41-5-0	0.08	500	0.5	7 ·	140 (23.45)
2nd Cut Linter C-41-7-0	0.022	500	0.5	17	93.5 (15.66)
Hulling C-41-8-1	0.09	500	0.5	5	112.5 (18.84)
Storage & Loading C-41-10-0 & C-41-13-0	0.01 gr/dscf	2664 scfm	34560 min/day	11b/ 7000 gr	131.5 (22.03)
Hull Storage C-41-14-0	0.06	500	0.5	1	15.0 (12.56)
Boiler PM10 C-41-12-0	0.005 lb/MMBtu	13.5 MMBtu/hr	24 hr/day		43.1 (7.22)
TOTAL PM10					830.6 (139.12)
Hexane Loss C-41-9-0 & C-41-11-0	5.58 lb VOC/ton	500			2,791 (467.5)
Boiler VOC	0.003 lb/MMBtu	13.5 MMBtu/hr	24 hr/day		0.96 (0.16)
TOTAL VOC		· 			2,792 (467.66)
Boiler NOx (PENOx)	0.133 lb/MMBtu	13.5 MMBtu/hr	24 hr/day		43.1 (7.22)
Boiler CO (PECO)	0.033 lb/MMBtu	13.5 MMBtu/hr	24 hr/day		10.7 (1.79)
Boiler SOx (PESOx)	0.001 lb/MMBtu	13.5 MMBtu/hr	24 hr/day		0.3 (0.05)

Attachment G

AP-42 Emission Factors for Natural Gas Combustion



	N	IO _x b	(00
Combustor Type (MMBtu/hr Heat Input) [SCC]	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating
Large Wall-Fired Boilers (>100) [1-01-006-01, 1-02-006-01, 1-03-006-01]				,
Uncontrolled (Pre-NSPS) ^c	280	Α	84	В
Uncontrolled (Post-NSPS) ^c	190	Λ.	84	B
Controlled - Low NO _x burners	140	٨	84	B
Controlled - Flue gas recirculation	100	D	84	В
Small Boilers (<100) [1-01-006-02, 1-02-006-02, 1-03-006-02, 1-03-006-03]	· ·			
Uncontrolled	100	В	84	В
Controlled - Low NO, burners	50 .	D	84	В
Controlled - Low NO _x burners/Flue gas recirculation	32	C .	84	В
Tangential-Fired Boilers (All Sizes) [1-01-006-04]				
Uncontrolled	170	٨	24	С
Controlled - Flue gas recirculation	76	D	98	D
Residential Furnaces (<0.3) [No SCC]	ł			
Uncontrolled	94	В	40	B

Reference 13. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. To convert from lb/10 6 scf to kg/106 m³, multiply by 16. Exission factors are based on an average natural gas higher heating value of 1,020 Btu/scf. To convert from 1b/10 6 scf to lb/MMBtu, divide by 1,020. The consision factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. SCC = Source Classification Code. ND = no data. NA = not applicable,

Excessed as NO₂. For large and small wall fired boilers with SNCR control, apply a 24 percent reduction to the appropriate NO x emission factor. For

intial-fired boilers with SNCR control, apply a 13 percent reduction to the appropriate NO x emission factor.

5=New Source Performance Standard as defined in 40 CFR 60 Subparts D and Db. Post-NSPS units are boilers with greater than 250 MMBtu/hr of input that commenced construction modification, or reconstruction after August 17, 1971, and units with heat input capacities between 100 and MMBtu/hr that commenced construction modification, or reconstruction after June 19, 1984.



TABLE 1.4-2. EMISSION FACTORS FOR CRITERIA POLLUTANTS AND GREENHOUSE GASES
FROM NATURAL GAS COMBUSTION²

Pollutant	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating
CO ₂ ^b	120,000	A
Lead	0.0005	D
N ₂ O (Uncontrolled)	2.2	. E
N ₂ O (Controlled-low-NO _X burner)	0.64	E
PM (Total) ^c	7.6	ם
PM (Condensable) ^c	5.7	D
PM (Filterable) ^c	1.9	В
SO ₂ d	0.6	A
тос	11	В
Methane	2.3	В
voc	5.5	С

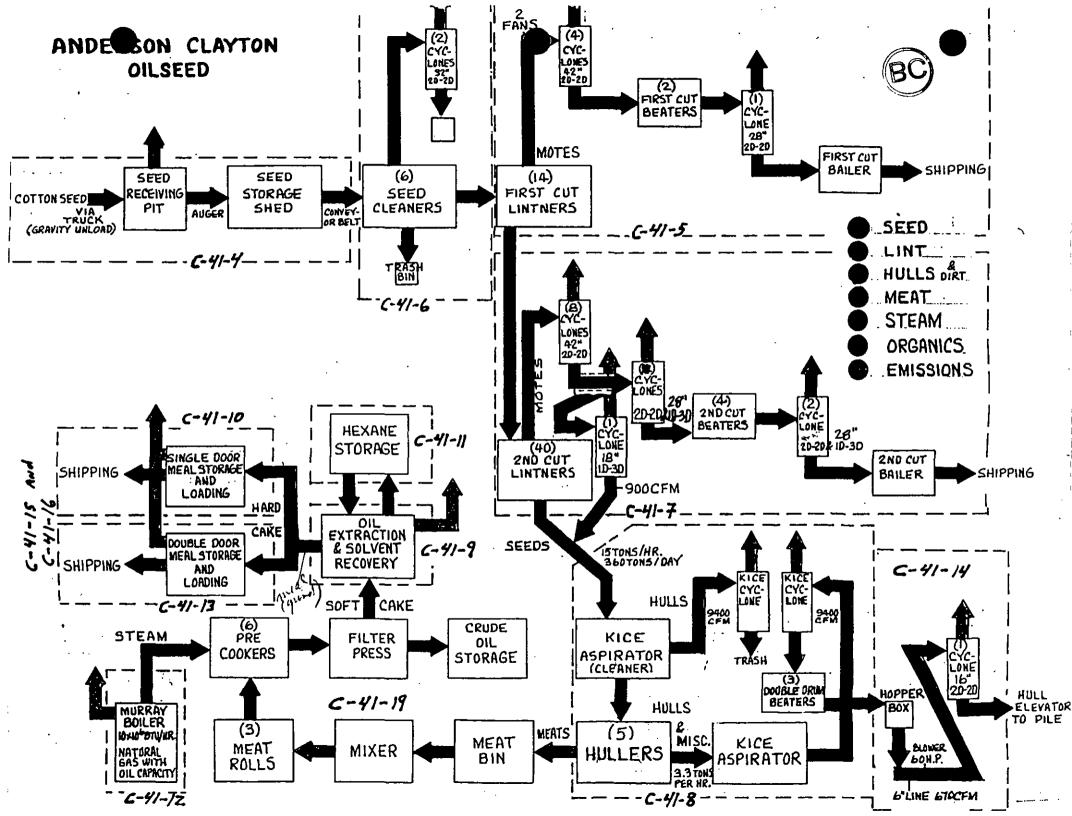
- * Reference 13. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. Data are for all natural gas combustion sources. To convert from lb/10⁶ scf to kg/10⁶ m³, multiply by 16. To convert from lb/10⁶ scf to 1b/MMBtu, divide by 1,020. The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. TOC = Total Organic Compounds. VOC = Volatile Organic Compounds.
- b Based on approximately 100% conversion of fuel carbon to CO₂. CO₂[lb/10⁶ scf] = (3.67) (CON) (C)(D), where CON = fractional conversion of fuel carbon to CO₂, C = carbon content of fuel by weight (0.76), and D = density of fuel, 4.2x10⁴ lb/10⁶ scf.
- ^c All PM (total, condensible, and filterable) is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors presented here may be used to estimate PM₁₀, PM_{2.5} or PM₁ emissions. Total PM is the sum of the filterable PM and condensible PM. Condensible PM is the particulate matter collected using EPA Method 202 (or equivalent). Filterable PM is the particulate matter collected on, or prior to, the filter of an EPA Method 5 (or equivalent) sampling train.
- ^d Based on 100% conversion of fuel sulfur to SO₂.

 Assumes sulfur content is natural gas of 2,000 grains/10⁶ scf. The SO₂ emission factor in this table can be converted to other natural gas sulfur contents by multiplying the SO₂ emission factor by the ratio of the site-specific sulfur content (grains/10⁶ scf) to 2,000 grains/10⁶ scf.

Attachment H

Facility and Process Flow Diagrams

74, 11



Attachment I

Permits to Operate for Equipment Remaining in Service at the Chowchilla Oil Mill

CONDITIONS FOR PERMIT C-41-4-0

Page 1 of 1

AILING ADDRESS:

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORPLOIL MILL

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

659 HP SEED RECEIVING OPERATION INCLUDING SEED RECEIVING PITS, STORAGE HOUSES AND PILES, AND RELATED CONVEYING EQUIPMENT.

- Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District NSR Rule]
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
- The District shall be notified of any breakdown conditions in accordance with Rule 1100 (Equipment Breakdown). [District Rule 1100]
- The APCO or any authorized representative, upon request, shall have access to inspect any equipment, operation, or method required in this permit, and to sample emissions from the source or require samples to be taken. [District Rule 1081]
- Records of daily cotton seed throughput shall be maintained, retained on the premises for at least two years and made available for District inspection upon request. [District Rule 1070]

CONDITIONS FOR PERMIT C-41-10-1

Page 1 of 1 E: 07/31/2003

VAILING ADDRESS:

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORPLOIL MILL

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

815 HP MEAL LOADING AND STORAGE OPERATION NORTH, INCLUDING FLOOR SCREW CONVEYOR IN MEAL HOUSE WITH THREE DOORS, SERVED BY ONE 32" 1D-3D CYCLONE AND A BAGHOUSE DUST COLLECTOR (THE CYCLONE AND BAGHOUSE ALSO SERVE PTO #C-41-13-1).

- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {118} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] 2.
- The meal house doors shall remain closed during receiving or shipping of meal at the meal house. [District Rule 3. 2201]
- Throughput of meal shall not exceed 270 tons per day. [District Rule 2201] 4.

. CONDITIONS FOR PERMIT C-41-11-0

Page 1 of 1 E: 07/31/2003

IAILING ADDRESS:

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORPLOIL MILL

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

30,000 GALLON CAPACITY ABOVEGROUND HEXANE STORAGE TANK.

CONDITIONS

- {271} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
- {234} The APCO or any authorized representative, upon request, shall have access to inspect any equipment, 2. operation, or method required in this permit, and to sample emissions from the source or require samples to be taken. [District Rule 1081]
- 3. Records of daily amount of solvent (hexane) throughput shall be maintained, retained on the premises for at least two years and made available for District inspection upon request. [District Rule 1070]

Nov 2 2000 10 21AM - VILLEGAE

- CONDITIONS FOR PERMIT C-41-13-1

Page 1 of 1 **TE:** 07/31/2003

MAILING ADDRESS:

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON CORPLOIL MILL

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

101 HP MEAL LOADING AND STORAGE OPERATION SOUTH, INCLUDING FLOOR SCREW CONVEYOR IN MEAL HOUSE WITH DOUBLE DOORS, SERVED BY ONE 32" 1D-3D CYCLONE AND A BAGHOUSE DUST COLLECTOR (CYCLONE AND BAGHOUSE ALSO SERVE PTO #C-41-10-1).

- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three 1. minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {118} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] 2.
- The meal house doors shall be closed during recieving or shipping of meal at the meal house. [District Rule 2201] 3.
- Throughput of meal shall not exceed 275 tons per day. [District Rule 2201] 4.

- CONDITIONS FOR PERMIT C-41-14-0

Page 1 of 1

MAILING ADDRESS:

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORPLOIL MILL

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

60 HP HULL STORAGE PILE SERVED BY 1-20" 2D-2D CYCLONE.

- {12} Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the 1. atmosphere. [District NSR Rule]
- {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 2.
- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity, [District Rule 4101]
- {271} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
- {234} The APCO or any authorized representative, upon request, shall have access to inspect any equipment, operation, or method required in this permit, and to sample emissions from the source or require samples to be taken. [District Rule 1081]
- Records of daily seed throughput shall be maintained, retained for at least two years and made available for District inspection upon request. [District Rule 1070]

CONDITIONS FOR PERMIT C-41-18-0

Page 1 of 1

AILING ADDRESS:

EGAL OWNER OR OPERATOR: ANDERSON CLAYTON GORPLOIL MILL

P.O. BOX 12506

FRESNO, CA 93778-2506

LOCATION:

25184 ROAD 16

CHOWCHILLA, CA 93610

EQUIPMENT DESCRIPTION:

208 HP DIESEL-FUELED CUMMINS ENGINE, WITH TURBOCHARGER AND AFTERCOOLER, POWERING AN EMERGENCY FIRE PROTECTION STANDBY PUMPING SYSTEM.

- {271} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- {118} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] 3.
- A daily log of operating hours shall be maintained on the premises, retained for at least two years, and made available to the District upon request. [District Rule 1070]
- Particulate matter emission concentration shall not exceed 0.10 grains per standard dry cubic foot. [District Rule 42011
- The engine shall be operated only for maintenance testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance and testing purposes shall not exceed 200 hrs per year. [District Rule 2201 and 47011
- {310} The engine shall be equipped with a turbocharger and with an aftercooler or intercooler. [District NSR Rule] 7.
- {313} The sulfur content of the diesel fuel used shall not exceed 0.05% by weight. [District NSR Rule] 8.
- If engine operates with visible emissions greater than 1/2 Ringelmann or 10% opacity, compliance with particulate matter emissions shall be conducted by District-witnessed sample collection within 60 days of District determination. [District Rule 1081]
- 10. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 11. {309} The engine shall be equipped with a non-resettable elapsed-time meter indicating total hours of operation. [District NSR Rule]



San Joaquin Valley Unified Air Pollution Control Edition

JAN 03 2001

APPLICATION FOR:

PERMIT SERVICES
SJVUAPCD

[X] EMISSION REI	DUCTION CREDIT (ERC)	
I 1 CONSOLIDAT	ION OF ERC CERTIFICATE	S

[] ERC WITHDRAWL

[] ERC TRANSFER OF OWNERSHIP

1.	1. ERC TO BE ISSUED TO: Anderson Clayton Corporation								
2.	MAILING ADDRESS	:							
	Street/P.O. Box: P.O. Box 12506								
<u> </u>	City:F	esno		State:	CA	Zip Code: 93	3778-2506		
3.	Street: 25184 Road 16 Cliy: Chowchilla, CA 93610								
5.	PERMIT NO(S): C12	41-5, -6-1, -7-0, - -1, 15-0, -16-0, a	-8-1, -9-1, E and – 19-2	XISTING ERC N	O(S):				
7.	[X] SHUTDOWN [] RETROFIT [] PROCESS CHANGE [X] OTHER DESCRIPTION: Actual emission reductions (AERs) generated by the permanent shutdown of cotton seed oil and meal production equipment at the Chowchilla Oil Mill (facility ID #C-41). This is an originating ERC banking action. (Use additional sheets if necessary)								
		voc	NOx	со	PM10	SOx	OTHER		
	1ST QUARTER	113,852	2,689	887	29,508	16			
	2ND QUARTER	105,834	2,254	743	27,355	13			
	3RD QUARTER	41,269	940	310	10,682	5			
	4TH QUARTER	69,593	2,584	852	18,113	15			
8.	8. SIGNATURE OF APPLICANT: TYPE OR PRINT TITLE OF APPLICANT: Manager – Technical Services								
9.	TYPE OR PRINT NA	ME OF APPLICA	NT:			DAȚE:	TELEPHONE NO:		
	Duncan McC	Cook				1/3/0/	Phone: (559) 446-6415 Fax: (559) 447-4425		

FOR APCD USE ONLY:

REPERMINED

JAN 04 2001

FINANCE SJVUAPCD FILING FEE RECEIVED: \$ 650.7 121205

DATE PAID: PM 1.3.0

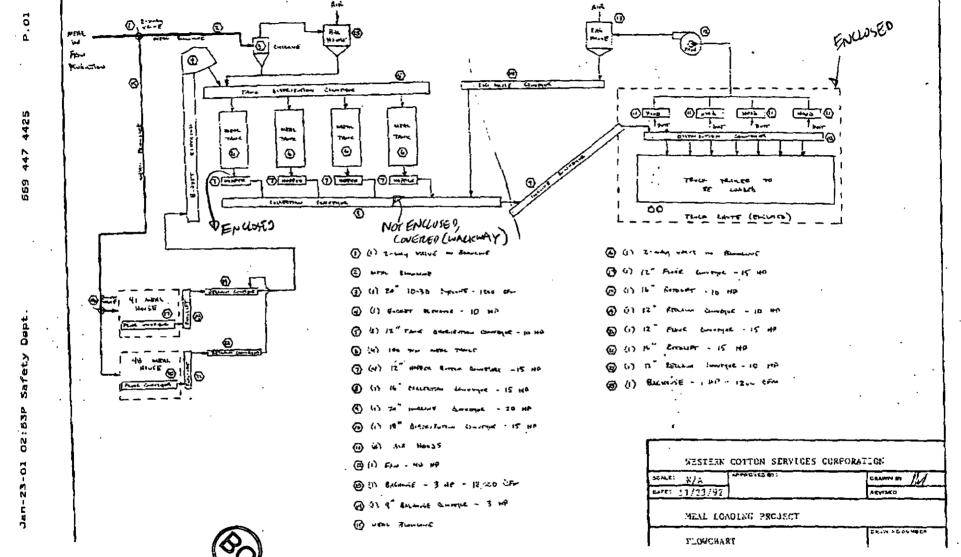
PROJECT NO.: C/O/OO/ FACILITY ID.: C4/

PARSONS

Parsons Engineering Science, Inc. - A Unit of Parsons Infrastructure & Technology Group Inc. 2520 Pegasus Drive • Bakersfield, California 93308 • (661) 393-0272 • Fax: (661) 393-8306

Fax

To: SA	Mir Sheik	From:	John	Gruber
	1) 230-6061	Pages	: 7	
Phone: (5.	59) 230-5897	Date:	1/23/2001	
Re: JiAj	ram	CC:		
Urgent	⊠ For Review	☐ Please Comment	⊠Please Repl	y 🗆 Please Recycle
• Comment	s:			





RECEIVED

JAN 0 3 2001

PERMIT SERVICES SJVUAPCD

January 2, 2001

Mr. Jovencio Refuerzo SJVUAPCD – Central Region 1990 East Gettysburg Avenue Fresno, California 93726

Re: ERC Application for Anderson Clayton Corp.'s Chowchilla Oil Mill (#C-41)

Dear Mr. Refuerzo,

Please find enclosed a completed Emission reduction Credit Application for our Chowchilla Oil Mill Facility. These ERC's reflect the permanent closure of a portion of the permitted processes at this facility.

As we discussed earlier, our company has some time constraints due to our upcoming fiscal year end. For this reason, I would like to request that "Reimbursable Overtime" processing be used to expedite processing. If possible, we would like the ERC's to go to public notice as soon as possible.

Thank you in advance for your help with this matter. If you have any questions, please contact me at 559/446-6415.

Sincerely,

Duncan McCook

Manager - Technical Services

Enclosure

San Joaquin Valley Unified Air Pollution Control Ecerceto

JAN 03 2001

APPLICATION FOR:

PERMIT SERVICES
SJVUAPCD

[X] EMISSION REDUCTION CREDIT (ERC)

[] CONSOLIDATION OF ERC CERTIFICATES

[] ERC WITHDRAWL
[] ERC TRANSFER OF OWNERSHIP



1.	ERC TO BE ISSUED	TO: Ander	rson Clayton (Corporation			
2.	MAILING ADDRESS	:					
	Street/P.O. Box: P	O. Box 1250	6				
	City: F	resno		State:	CA	Zip Code: 937	778-2506
3.	LOCATION OF RED	UCTION: Ch	owchilla Oil N	Aill (Facility #	C-41)	NATION 1	
		Road 16				DATE OF J REDUCTION:	July 17, 2000
	Cuy.	chilla, CA 930					
5.	PERMIT NO(S): C-	41-5, -6-1, -7-0, - 2-1, 15-0, -16-0, :	-8-1, -9-1, and -19-2	EXISTING ERC N	O(S):		
	[X] SHUTD	J NWO] RETROFIT	[] PROC	ESS CHANGE	[X] OT	HER
7.	cot	ton seed oil an #C-41). This i	reductions (And meal produits an origination of the contract o	ıction eguipm	ent at the Ch	owchilla Oil	
7.	Act cot ID	ton seed oil an #C-41). This i	nd meal produ is an originati	ıction eguipm	ent at the Ch	owchilla Oil	Mill (facility
7.	Act cot ID	ton seed oil an #C-41). This i In Pounds Per Cale	nd meal produ is an originati endar Quarter):	ection equipm	ent at the Ching action.	Owchilla Oil] (Use additional	Mill (facility sheets if necessary)
7.	Act cot ID REQUESTED ERCs (ton seed oil an #C-41). This i In Pounds Per Cale	nd meal produis an origination	ction eguipm	ent at the Ching action.	(Use additional	Mill (facility sheets if necessary)
7.	Act cot ID REQUESTED ERCs (ton seed oil an #C-41). This is In Pounds Per Cale VOC 113,852	nd meal produis an origination of the control of th	ction equipm ng ERC bank CO 887	PM10 29,508	(Use additional SOx 16	Mill (facility sheets if necessary)
7.	Act cot ID REQUESTED ERCs (1ST QUARTER 2ND QUARTER	ton seed oil an #C-41). This is In Pounds Per Cale VOC 113,852 105,834	nd meal produis an origination of the contract	ction equipm ng ERC bank CO 887 743	PM10 29,508 27,355	(Use additional SOx 16 13	Mill (facility sheets if necessary)
	Act cot ID REQUESTED ERCs (1ST QUARTER 2ND QUARTER 3RD QUARTER	ton seed oil an #C-41). This is In Pounds Per Cale VOC 113,852 105,834 41,269 69,593	nd meal produis an origination of the control of th	CO 887 743 310 852 TYPE OR	PM10 29,508 27,355 10,682	SOx 16 13 5 APPLICANT:	Mill (facility sheets if necessary)

FOR APCD USE ONLY:	
DATE STAMP	FILING FEE 150.00 ch # 121205 RECEIVED: \$ 1/3/01 PROJECT NO.: 01010002 FACILITY ID.: 04/



ERC Application fee 650.00 650.00 VENDOR NO. INVOICE NO. TOTAL

Anderson Clayton Corp.
California Account
P.O. BOX 12506 FRESNO, CALIFORNIA 93778-2506

PAY \$ ***650.00*** The sum of 650 dals 00cts

Anderson Clayin Corp.

Bank of America mercial Disbursement Acct Northbrook, IL

CHECK DATE

January 3, 2001

#121205# #071923284# B7659#01143#

San Joaquin Valley Unitied APCD Permit Services Division

Applications for Authority to Construct or Emission Reduction Credits Breakdown of Processing Time

Company Name:	ANDERYON	CLATTON	CORPO	RATION	_	(GC)	\
Facility Id: <u>C-4</u>]	Projec	et Numb	er: <u>/</u> /	0009			
Project Description:	AER'S	FROM Sty	MITDOWN	OF COTTON	SEED OIL	É MEN	PRODUCTION

EQUIPMENT.	 	
	 -	

Code	Date	Time Spent	Initials	Activity Code List
04	1/10/01	0.5	sqs	O1- Pre-Application Meeting (phone) O2- Pre-Application Meeting (in person)
ROT	1/15/01	6.0	5975	03- Application Log-in 04- Preliminary Review
06,1	1/6/21	1.8.	SUS	O5- Defficiency Letter O6- Verbal/telephone request for
DO T	1/20/01	8.0	595	information O7- Billing
06,11	1/23/01	1.5	765	O8- Completeness Letter
06,11,18	1/24/01	3.0	SQS	09- Post Application Meetings 10- BACT Determination
19	0 10/13		444	11- Emissions Calculations 12- Compliance Determination
20	3/8/01	1.5	sps	13- Project Description, Flow Digram, Equipment Listing
		<u> </u>		14- Risk Assessment 15- CEQA Review
 			 	16- Draft Conditions 17- Prepare ATC
 				18- Prepare ERC 19- Prepare Preliminary Notice
				20- Prepare Final Notice 99- Reworking of Engineering
,	}	 	-	Evaluation
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]
Т	TOTAL			

TOTAL BILLING HOURS	8.3	PUBLIC NOTICE
TOTAL BILLING HOURS	14.0	ROT

TABLE 6.4-6. TOTAL PARTICULATE EMISSION FACTORS FOR UNCONTROLLED GRAIN PROCESSING OPERATIONS⁸

EMISSION FACTOR RATING: D

·	Emission factor	
Type of Operation	kg/Mg	lb/ton
Feed mills		\$ 655
Receiving (2.5)(54)	1.3	
Shipping	0.5	2.5 1.0 30.60, 8 hrs
Handling	2.7	5.5
Grinding		_
Hammermilling ^b	0.1c,d	0.20,4
Flakingb	0.1c	0.2ď
Crackingb	0.010,4	0.02c,d
Pellet coolerb	0.2°	0.40
Carob kibble roasting	3.0	6.0
Wheat milling		
Receiving	0.5	1.0
Precleaning and handling	2.5	5.0
Cleaning house	_	-
Mill house	35.0	70.0
Ourum milling		
Receiving	0.5	1.0
Precleaning and handling	2.5	5.0
Cleaning house	_	⊸
Mill house	-	-
Rye milling Receiving	0.5	1.0
	0.5	5.0
Precleaning and handling Cleaning house	4.3	5.0
M111 house	35.0	70.0
	33.0	/0.0
e milling	1.25	2.5
ice milling Receiving	0.22	0.44
	0.32	0.64
Precleaning and handling	2.5	5.0
Drying ^f	0.15	0.30
Cleaning and mill house	- L	



TABLE 6.4-6 (concluded).

	Emission factor	
Type of Operation	kg/Mg	lb/ton
Souheen milling		
Soybean milling Receiving	0.8	1.6
Handling	2.5	5.0
Cleaning		-
Dryingg	3.6	7.2
Cracking and dehulling	1.7	3.3
Hull grinding	1.0	2.0
Bean conditioning	0.05	0.1
Flaking	0.29	0.57
Meal dryer	0.75	1.5
Meal cooler	0.9	1.8
Bulk loading	0.14	0.27
Ory corn milling		
Receiving	0.5	1.0
Dryingg	0.25	0.5
Precleaning and handling	2.5	5.0
Cleaning house	3.0	6.0
Degerming and milling	-	_
Wet corn milling		
Receiving	0.5	1.0
Handling	2.5	5.0
Cleaning	3.0	6.0
Dryingh	0.24	0.48
Bulk loading	-	! -

AMOST emission factors are expressed as weight of dust emitted/unit weight of grain entering the plant, not necessarily the same as amount of material processed by each operation. Dash = no data.

gDryer types unknown.

bExpressed as weight of dust emitted/unit weight of grain processed. CWith cyclones.

dMeasured on corn processing operations at feed mills.

eRepresents several sources at one plant, some controlled with cyclones and others with fabric filters.

fAverage for uncontrolled column dryers; see Table 6.4-2.

hFor rotary steam tube dryers.

(AC)

6.4 GRAIN ELEVATORS AND PROCESSING PLANTS

6.4.1 General 1-3

Grain elevators are facilities at which grains are received, stored, and then distributed for direct use, process manufacturing, or export. They can be classified as either "country" or "terminal" elevators, with terminal elevators further categorized as inland or export (marine) types. Operations other than storage often are performed at elevators, such as cleaning, drying and blending. The principal grains handled include wheat, milo, corn, oats, rice and soybeans.

Country elevators are generally smaller elevators that receive grain by truck directly from farms during the harvest season. These elevators sometimes clean or dry grain before it is transported to terminal elevators or processors. Terminal elevators dry, clean, blend and store grain for shipment to other terminals or processors, or for export. These elevators may receive grain by truck, rail or barge, and they have significantly greater grain handling and storage capacities than do country elevators. Export elevators are terminal elevators that load grain primarily onto ships for export.

The first step at a grain elevator is the unloading of the incoming truck, railcar or barge. A truck discharges its grain into a hopper, usually below grade, from which the grain is conveyed to the main part of the elevator. Barges are unloaded by a bucket elevator (marine leg) that is extended down into the hold. The main building at an elevator, where grain is elevated and distributed, is called the "headhouse". In the headhouse, grain is lifted on one of the elevator legs and discharged onto the gallery belt, which conveys the grain to the storage bins, or silos. A "tripper" diverts grain into the desired bin. Grain is often cleaned and/or dried before storage. When ready for shipping, grain is discharged from bins onto the tunnel belt below, which conveys it to the scale garner and on to the desired loadout location. Figure 6.4-1 illustrates the basic elements of an export terminal elevator.

A grain processing plant (mill) receives grain from an elevator and performs various manufacturing steps that produce a finished food product. Examples of these plants are flour mills, animal feed mills, and producers of edible oils, starch, corn syrup, and cereal products. The elevator operations of unloading, conveying and storing also are performed at mills.

6.4.2 Emissions And Controls 1

The only pollutant emitted in significant quantities from grain elevators and processing operations is particulate matter. Small amounts of combustion products from natural gas fired grain dryers also may be emitted. Grain elevators and grain processing operations can be considered separate categories of the industry when considering emissions.

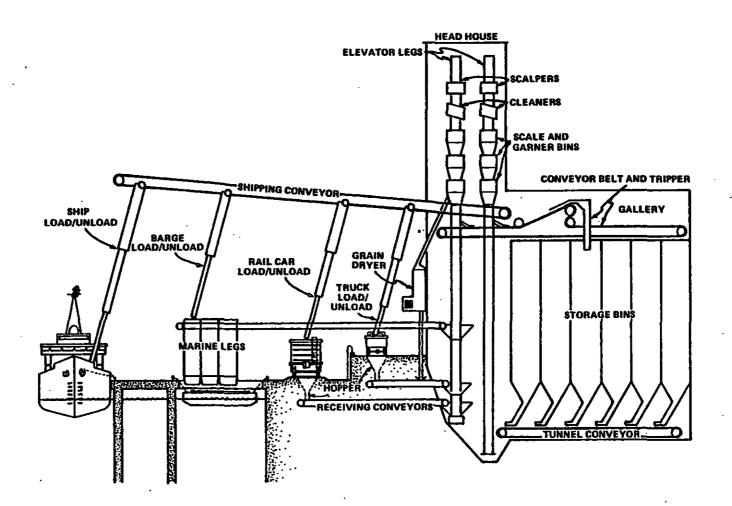


Figure 6.4-1. Typical export terminal grain elevator.



6.4.2.1 Grain Elevators - Emissions of fugitive dust occur whenever quantities of grain are set into motion during loading, conveying, transfer, drying or cleaning operations at a grain elevator. The emission rate can be affected by the quantity of foreign material in the grain (dirt, seeds, sticks, stones, etc., known as "dockage") and by the type of grain. While it is difficult to quantify the effect of dockage, observations indicate that soybeans, oats and sorghum are usually very dusty, whereas wheat and corn are comparatively clean. Total particulate emission factors for the principal operations at grain elevators are presented in Table 6.4-1. Since data differentiating these emission factors by grain type are sparse, all of these factors are approximate average values intended to apply to a variety of grains. Tables 6.4-2, 6.4-3 and 6.4-4, and Figures 6.4-2, 6.4-3 and 6.4-4, show particle size distributions and size specific emission factors for three operations at grain elevators.

The emission factors in Table 6.4-1 represent the amount of dust generated per unit weight of grain processed through each uncontrolled operation. Since the amount of grain passing through each individual operation is often difficult to determine, it is sometimes convenient to express the emission factors in terms of the quantity of grain received or shipped by the elevator. (It is assumed that the amounts shipped and received are equal over the long run.) Therefore, the factors in Table 6.4-1 have been modified and are expressed in Table 6.4-5 as a function of the amount of grain received or shipped. The ratios shown in Table 6.4-5 are approximate values based on averages for bin turning, cleaning and drying in each elevator category. However, because operating practices at individual elevators are different, these ratios, like the emission factors themselves, may lack precision when applied to an individual elevator.

The factors in Tables 6.4-1 and 6.4-5 should not be added together in order to obtain a single overall emission factor for a grain elevator because, in most elevators, the emissions from some operations are controlled and others are not. Therefore, emissions estimations generally should be undertaken for each operation and its associated control device.

Several methods are available to reduce or control dust emissions at grain elevators. Since most emissions are generated when air passes swiftly through a mass of grain, measures that slow down grain transfer (conveying) rates or that reduce free fall distances will reduce emissions. Bulk grain, especially when falling through the air, should be protected from significant air currents or wind sources. Many operations at elevators are partially or totally enclosed (e.g., screw conveyors, drag conveyors, elevator legs) to isolate generated dust from the atmosphere. Hooding in the vicinity of some operations (e.g., grain unloading, conveyor transfer points) collects generated dust by creating a negative pressure area (through suction, or air aspiration) near the center of activity and then ducting the dusty air to a control device. Recent developments in the control of ship and barge loading operations include the use of "dead boxes" and tent controls. The dead box is a baffled attachment on the loading spout that serves to reduce the speed of the falling grain before it reaches the open air and strikes the grain pile. Aspiration to a control device often accompanies the use of the dead box. Large flexible covers connected to the loading spout and aspiration ducting, called tents, are used to cover the holds of ships during most of a loading operation. The tent must be removed during topping off (usually

TABLE 6.4-1. TOTAL PARTICULATE EMISSION FACTORS FOR UNCONTROLLED GRAIN ELEVATORS^a

EMISSION FACTOR RATING: B

	Total particulate			
Type of Operation	kg/Mg	lb/ton		
Country elevators				
Unloading (receiving)	0.3	0.6		
Loading (shipping)	0.2	0.3		
Removal from bins (tunnel belt)	0.5	1.0		
Dryingb	0.4	0.7		
Cleaning ^C	1.5	3.0		
Headhouse (legs)	0.8	1.5		
inland terminal elevators		·		
Unloading (receiving)	0.5	1.0		
Loading (shipping)	0.2	0.3		
Removal from bins (tunnel belt)	0.7	1.4		
Dryingb	0.6	1.1		
CleaningC	1.5	3.0		
Headhouse (legs)	0.8	1.5		
Tripper (gallery belt)	0.5	1.0		
Export elevators				
Unloading (receiving)	0.5	1.0		
Loading (shipping)	0.5	1.0		
Removal from bins (tunnel belt)	0.7	1.4		
Dryingb	0.5	1.1		
CleaningC	1.5	3.0		
Headhouse (legs)	0.8	1.5		
Tripper (gallery belt)	0.5	1.0		

Expressed as weight of dust emitted/unit weight of grain handled by each operation. For inland terminal and export elevators, Reference 5; for drying, References 2, 6; for country elevators, Reference 5 and additional test data in References 7-10.

bReferences 6, 11. Based on 0.9 kg/Mg for uncontrolled rack dryers and 0.15 kg/Mg for uncontrolled column dryers, prorated on the basis of the distribution of these two types of dryers.

CReference 11. Average of values, from < 0.3 kg/Mg for wheat to 3.0 kg/Mg for corn.



TABLE 6.4-2. PARTICLE SIZE DISTRIBUTION AND EMISSION FACTORS FOR UNCONTROLLED RICE DRYERS^a

EMISSION FACTOR RATING: D

Aerodynamic particle diameter (um)	Cumulative weight % <a> <a< th=""><th>Emission factor^b (kg/Mg)</th></a<>	Emission factor ^b (kg/Mg)
2.5	0.8	0.0012
6.0	2.6	0.0039
10.0	7.7	0.012
15.0	24.5	0.037
Total particulate		0.15°

aReferences 1, 12.

CReference 11.

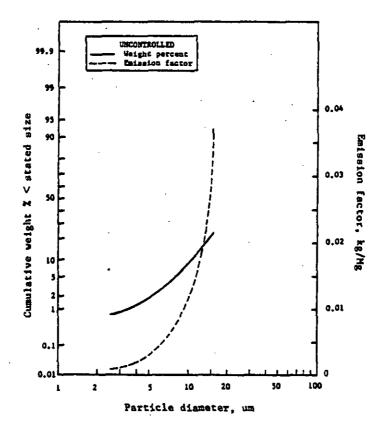


Figure 6.4-2. Cumulative size distribution and emission factors for uncontrolled rice dryers.

bExpressed as cumulative weight of particulate ≤ corresponding particle size/unit weight of rice dried.

TABLE 6.4-3. PARTICLE SIZE DISTRIBUTION AND EMISSION FACTORS FOR CONTROLLED BARGE UNLOADING/CONVEYING^a

EMISSION FACTOR RATING: D

Aerodynamic particle diameter (um)	Cumulative weight % <pre></pre>	Emission factor ^b (kg/Mg)
2.5	4.0	0.00013
6.0	11.0	0.00037
10.0	18.0	0.00054
Total particulate		0.003c

BReference 13. Control is by fabric filter.

bExpressed as cumulative weight of particulate ≤ corresponding particle size/unit weight of grain unloaded/conveyed.

CTotal mass emission factor is from Reference 1.

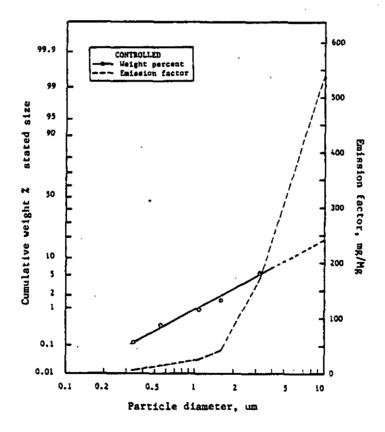


Figure 6.4-3. Cumulative size distribution and emission factors for controlled barge unloading/conveying.

TABLE 6.4-4. PARTICLE SIZE DISTRIBUTION AND EMISSION FACTORS FOR UNCONTROLLED SHIPLOADING^a

EMISSION FACTOR RATING: 0

Aerodynamic particle diameter (um)	Cumulative weight % <pre></pre> <pre><th colspan="3">Emission factor^b (kg/Mg)</th></pre>	Emission factor ^b (kg/Mg)		
2.5	10.4	0.05		
6.0	27.0	0.13		
10.0	42.0	0.21		
15.0	53.0	0.26	(B)	
Total particulate	. ,	0.50c		

EReferences 1, 14-15.

bExpressed as cumulative weight of particulate < corresponding particle size/unit weight of grain loaded onto ships. CReference 11.

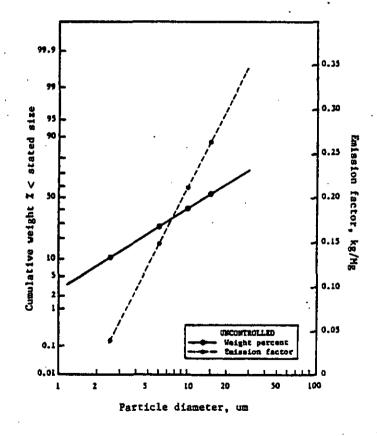


Figure 6.4-4. Cumulative size distribution and 'emission factors for uncontrolled shiploading.

TABLE 6.4-5. TOTAL PARTICULATE EMISSION FACTORS FOR GRAIN ELEVATORS, BASED ON AMOUNT OF GRAIN RECEIVED OR SHIPPEDa

EMISSION FACTOR RATING: C

Type of Operation	Emission factor, kg/Mg handled ^b	×	Typical ratio of grain processed to grain received or shipped ^C	-	Emission factor kg/Mg received or shipped
Country elevators					
Unloading (receiving)	0.3		1.0		0.3
Loading (shipping)	0.2	ł	1.0		0.2
Removal from bins (tunnel belt) .	0.5	1	2.1	l	1.0
Dryingd	0.4	l l	0.3	1	0.1
Cleaninge	1.5	i	0.1	1	0.2
Headhouse (legs)	0.8		3.1		2.5
Inland terminal elevators					
Unloading (receiving)	0.5		1.0	1	0.5
Loading (ahipping)	0.2	[1.0	1	0.2
Removal from bins (tunnel belt)	0.7	1	2.0	1	1.4
Drying ^d	0.6		0.1	l	0.1
Cleaninge	1.5	l	0.2	1	0.3
Headhouse (legs)	0.8		3.0		2.3
Tripper (gallery belt)	0.5		1.7		0.8
Export elevators					
Unloading (receiving)	0.5		1.0	Į	0.5
Loading (shipping)	0.5	l	1.0	1	0.5
Removal from bins (tunnel belt)	0.7	Į	1.2	i	0.8
Dryingd	0.5	1	0.01		0.01
Cleaninge	1.5	1	0.2	l	0.3
Headhouse (legs)	0.8		2.2	1	1.7
Tripper (gallery belt)	0.5		1.1	ĺ	0.6

Assumes amount received is approximately equal to the amount shipped.

bTo obtain units of 1b/ton, multiply factors by 2.0.

CReference 6. Average values from a survey of elevators across the U.S. Can be considerably different for any individual elevator or group of elevators in the same locale.

dSee Note b in Table 6.4-1. eSee Note c in Table 6.4-1.

about 25 percent of the total loading), allowing essentially uncontrolled emissions to escape.

Most elevators utilize particulate control devices on at least some of their operations. The traditional form of control at elevators has been mechanical collectors, or cyclones. Cyclones collect particles larger than about 10 microns with only 85 to 95 percent control efficiency, often producing visible emissions. Hence, fabric filters are usually selected in areas having more stringent control requirements. Typical efficiencies for well operated fabric filters exceed 99 percent, with no visible emissions. The air aspirated from enclosed equipment and hoods is ducted to a fabric filter or, in some cases, one or more cyclones. Rarely are other particulate control devices, such as wet scrubbers and electrostatic precipitators, applied at elevators. Grain dryers present a different sort of control problem because of the large volumes of warm, moist air exhausted. Most dryers are enclosed with a continuously vacuumed polyester or stainless steel screening to collect particulate, with the vacuum usually discharged to a cyclone. Two principal dryer configurations, rack and column, are in use. The majority of dryers manufactured today are of the column type, which has considerably lower emissions than the rack type.16

6.4.2.2 Grain Processing Plants - Several grain milling operations, such as receiving, conveying, cleaning and drying, are similar to those at grain elevators. In addition to these, breaking down (milling) the grain or grain by-products for processing through various types of grinding operations is a further source of emissions. The hammermill is the most widely used grinding device at feed mills. Product is recovered from the hammermill with a cyclone collector, which can be a major source of dust emissions. Again. like elevators, mills use a combination of cyclones and fabric filters to conserve product and to control emissions. Drying at a grain mill is accomplished using several types of dryers, including fluidized bed dryers (soybean processing) and flash fired or direct fired dryers (corn milling). These newer dryer types might have lower emissions than the traditional rack or column dryers, but data are insufficient at this time to quantify the difference. The grain pre-cleaning often performed before drying also likely serves to reduce emissions. Emission factors for various grain milling and other processing operations are presented in Table 6.4-6, and the particle size distribution and size specific emission factor for a roaster operation are shown in Table 6.4-7 and Figure 6.4-5. The origins of these emission factors are discussed below.

Emission factor data for feed mill operations are sparse. The factors for receiving, shipping and handling are based on estimates made by experts within the feed industry. The remaining feed mill factors are based on test data in References 2, 18 and 19.

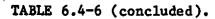
The roasting of carob kibble (or pods), which are ground and used as a chocolate substitute, is similar to coffee roasting. The emission factor and particle size distribution for this operation were derived from References 20 and 21.

Three emission areas for wheat mill processing operations are grain receiving and handling, cleaning house and milling operations. Data from Reference 5 were used to estimate emission factors for grain receiving and

TABLE 6.4-6. TOTAL PARTICULATE EMISSION FACTORS FOR UNCONTROLLED GRAIN PROCESSING OPERATIONS^a

EMISSION FACTOR RATING: D

·	Emission f	actor
Type of Operation	kg/Mg	lb/ton
Feed mills	1.2	2.5
Receiving	1.3	2.5
Shipping	2.7	1.0 5.5
Handling Grinding	2./	2.3
Hammermillingb	0,1c,d	0.20,4
Flakingb	0.1c	0.2d
Cracking ^b	0.01c,d	0.020,d
Pellet coolerb	0.20	0.40
retter conter.	0.2	V.4-
arob kibble roasting	3.0	6.0
heat milling Receiving	0.5	
	0.5	1.0
Precleaning and handling	2.5	5.0
Cleaning house Mill house	35.0	70.0
MIII nouse	33.0	70.0
urum milling Receiving	0.5	1.0
Precleaning and handling	2.5	5.0
Cleaning house	1 2.3	J.0 -
Mill house	-	-
ve milling		
ye milling Receiving	0.5	1.0
Precleaning and handling	[2.5	5.0
Cleaning house	-	-
M111 house	35.0	70.0
e at milling	1.25	2.5
ice milling Receiving	0.32	0.64
-	2.5	5.0
Precleaning and handling Dryingf	0.15	0.30
Cleaning and mill house	0.13	0.30
ATECHTING OWN WITH HOUSE	- J	





	Emission factor				
Type of Operation	kg/Mg	1b/ton			
Soybean milling					
Receiving	0.8	1.6			
Handling	2.5	5.0			
Cleaning	_	_			
Dryingg	3.6	7.2			
Cracking and dehulling	1.7	. 3.3			
Hull grinding	1.0	2.0			
Bean conditioning	0.05	0.1			
Flaking	0.29	0.57			
Meal dryer	0.75	1.5			
Meal cooler	0.9	1.8			
Bulk loading	0.14	0.27			
Ory corn milling					
Receiving	0.5	1.0			
Dryingg	0.25	0.5			
Precleaning and handling	2.5	5.0			
Cleaning house	3.0	6.0			
Degerming and milling	-	-			
Vet corn milling		,			
Receiving	0.5	1.0			
Handling	2.5	5.0			
Cleaning	3.0	6.0			
Dryingh	0.24	0.48			
Bulk loading	-	-			

AMOST emission factors are expressed as weight of dust emitted/unit weight of grain entering the plant, not necessarily the same as amount of material processed by each operation. Dash = no data.

SDryer types unknown.

bExpressed as weight of dust emitted/unit weight of grain processed. CWith cyclones.

dMeasured on corn processing operations at feed mills.

eRepresents several sources at one plant, some controlled with cyclones and others with fabric filters.

fAverage for uncontrolled column dryers; see Table 6.4-2.

hFor rotary steam tube dryers.

TABLE 6.4-7. PARTICLE SIZE DISTRIBUTION AND EMISSION FACTORS FOR UNCONTROLLED CAROB KIBBLE ROASTERS²

EMISSION FACTOR RATING: E

Aerodynamic particle diameter (um)	Cumulative weight %	Emission factor ^b (kg/Mg)
2.5	0.6	0.018
6.0	0.7	0.021
10.0	2.0	0.060
15.0	11.5	0.35
Total particulate		3.0°

aReference 18.

bExpressed as cumulative weight of particulate < corresponding particle size/unit weight of carob kibble roasted. CReference 21.

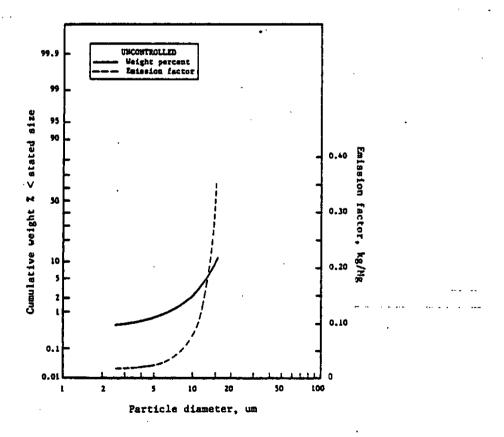


Figure 6.4-5. Cumulative size distribution and emission factors for uncontrolled carob kibble roasters.

handling. Data for the cleaning house are insufficient to estimate an emission factor, and information contained in Reference 2 was used to estimate the emission factor for milling operations. The large emission factor for the milling operation applies to uncontrolled operations. Almost all of the sources involved, however, are equipped with control devices to prevent product losses. Fabric filters are widely used for this purpose.

Durum and rye milling operations are similar to those for wheat milling. Therefore, most of these emission factors are assumed equal to those for wheat mill operations.

The grain unloading, handling and cleaning operations for dry corn milling are similar to those in other grain mills, but the subsequent operations are somewhat different. Also, some drying of corn received at the mill may be necessary before storage. An estimate of the emission factor for drying was obtained from Reference 2. Insufficient information is available to estimate emission factors for degerming and milling.

Information necessary to estimate emissions from oat milling is unavailable, and no emission factors for other grains are considered applicable because oats are reported to be dustier than many other grains. The only emission factor data available are for controlled emissions.

Emission factors for rice milling are based on those for similar operations in other grain handling facilities. Insufficient information is available to estimate emission factors for drying, cleaning and mill house operations.

Information contained in Reference 2 is used to estimate emission factors for soybean mills.

Emissions information on wet corn milling is generally unavailable, in part because of the wide variety of products and the diversity of operations. Receiving, handling and cleaning operations emission factors are assumed to be similar to those for dry corn milling. The drying emission factor is from tests at a wet corn milling plant producing animal feed.²²

Due to operational similarities between grain milling and processing plants and grain elevators, the control methods used are similar. Both often use cyclones or fabric filters to control emissions from the grain handling operations (e.g., unloading, legs, cleaners, etc.). These same devices are also often used to control emissions from other processing operations. A good example of this is the extensive use of fabric filters in flour mills. However, there are also certain operations within some milling operations that are not amenable to the use of these devices. Therefore, wet scrubbers have found some application, particularly where the effluent gas stream has a high moisture content. Certain other operations have been found to be especially difficult to control, such as rotary dryers in wet corn mills. The various emission control systems that have been applied to operations within the grain milling and processing industry are described in Reference 2



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Comments:



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Monthly Fuel Use	1996	96,812	70,248	99,436	104,620	95,980	97,189	100,755	29,069	79,144	113,924	111,494	116,296
Therms/Month)	1997	108,212	111,045	1 11,848	118,092	83,385	1,532	0	0	0	25,047	103,256	104,09
Avg Monthly Fuel U	se	102,512	90,647	105,642	111,356	89,683	49,361	50,378	14,535	39,572	69,486	107,375	110,19
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PROJECT ROUTING FORM

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[] PROJECTS NOT REQUIRIN	G PUBLIC NOTIFICATION			;		
[] PRELIMINARY DISPOSITIO	N: [] Mail Imminent Denial Letter	to the Applicant (Certified Ma	il).		
[] FINAL DISPOSITION:	Mail ATC(s) to Distribution. Mail Denial Letter to the App	plicant (Certified	Mail).			
[] PROJECTS REQUIRING PU	BLIC NOTIFICATION					
[] PRELIMINARY DECISION:	Deliver Ad to the Newspape Mail copies of Cover Letter a	er NOT LATER TI and Engineering E	HAN valuation to D	istribution.		
[] FINAL DECISION:	Deliver Ad to the Newspape Mail copies of Cover Letter a Mail copies of Cover Letter t	and ATC(s) to Dist		,		
DISTRIBUTION						
[] APPLICANT [] ENGINEER [] COMPLIANC [] PREMISE FIL	E [] ARB - Stationary SJVUAPCD - 1999 Tuolumn	Source Div. Chief	, PO Box 281:	5, Sacramento	o, CA 95812 in	
[]BLDG DEPT	OTHE	R				
[]FIRE DEPT_		OL				

ce dated to 3/15/01



SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT AVAILABLE EMISSION REDUCTION CREDITS BY SOURCE (lbs/qtr) CENTRAL REGION

Report date: 03/13/01

Page #1

Facility id: 41 Company Name: ANDERSON CLAYTON CORP/OIL MILL

Mailing address: P.O. BOX 12506

FRESNO, CA 93778-2506

Phone: (209) 446-6416

CERTIFICATE	POLLUTANT	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Reduction Site
C-398-1	VOC	112,929	104,976	40,935	69,030	25184 ROAD 16, CHOWCHILLA, CA 93610
C-398-2	NOx	968	811	338	930	25184 ROAD 16, CHOWCHILLA, CA 93610
C-398-3	co	887	743	310	852	25184 ROAD 16, CHOWCHILLA, CA 93610
C-398-4	PM10	27,222	25,285	9,864	16,707	25184 ROAD 16, CHOWCHILLA, CA 93610
C-398-5	SOx	16	13	5	15	25184 ROAD 16, CHOWCHILLA, CA 93610



San Joaquin Valley Air Pollution Control District

Fax Transmittal

1990 E. Gettysburg Avenue Fresno, California 93726-0244 Phone (559) 230-6000 Fax (559) 230-6061

Date :		May 02, 2001				
To:		JOS MARGOLIS		mber :	415-296-9582	
From :	JOVEN REFUERZO		Number	of pages (incl	uding cover sheet):	6
Description :	COPIES	DF ERCS C-398-1 THROUGH -5				
	X	Per Your Request	X	For Your In	formation	
	X	Per Our Conversation		For Your Ap	pproval ·	
		Take Appropriate Action		Review & C	omment	
		Please Answer		Review & R	eturn	
		Original transmittal will f	ollow via m	ail		
Remarks / Re	sponse:					
					Francis -	
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