San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

NOV 0 2 2017

Gary Stowe
Stratford Growers, LLC
P O Box 220355
El Paso, TX 79913

Re: Notice of Preliminary Decision – Emission Reduction Credits
Facility Number: C-1191
Project Number: C-1171039

Dear Mr. Stowe:

Enclosed for your review and comment is the District's analysis of Stratford Growers, LLC's application for Emission Reduction Credits (ERCs) resulting from the shut down of the cotton gin, at 19813 Madison Ave in Stratford. The quantity of ERCs proposed for banking is 1st quarter: 107 lb-NOx, 12 lb-SOx, 828 lb-PM_{10}, 15 lb-CO, and 4 lb-VOC; and 4th quarter: 1,195 lb-NOx, 130 lb-SOx, 9,223 lb-PM_{10}, 168 lb-CO, and 44 lb-VOC; and 598 metric tons-CO_2e/yr.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice comment period, the District intends to the issue the ERCs. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Robert Gilles of Permit Services at (559) 230-5804.

Sincerely,

Arnaud Marjollet
Director of Permit Services

AM:RPG

Enclosures

cc: Chris McGlothlin, CCGGA via email
cc: Tung Le, CARB (w/enclosure) via email
cc: Gerardo C. Rios, EPA (w/enclosure) via email

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Emission Reduction Credit Banking Application Review

Shutdown of a Cotton Ginning Operation

Facility Name:	Stratford Growers, Inc.	**Processing Engineer:**	Robert Gilles
Mailing Address:	19813 Madison Ave Stratford, CA 93622	**Lead Engineer:** **Date:**	Joven Refuerzo Nov. 2, 2017
Primary Contact:	Chris McGlothlin, CCGGA		
Phone:	(559) 252-0684		
Facility Location:	19813 Madison Ave Stratford, CA 93622		
Deemed Complete:	April 25, 2017		
Facility:	C-1191		
Project Number:	C-1171039		

I. Summary

Stratford Growers, Inc. operated a cotton ginning facility in Stratford, CA. On March 28, 2017, the District received an application from the operator who surrendered the Permit to Operate, C-1191-3-5, for the cotton gin and requested Emission Reduction Credits (ERCs) for VOC, NOx, CO, PM_{10}, SOx, and CO_2e. A copy of the surrendered Permit to Operate (PTO) is attached (Attachment A) and the permit has been cancelled. During the last season of operation in 2014, the facility processed 5,131 bales of cotton.

Based on the historical operating data prior to the shutdown, the amounts of bankable ERCs (as calculated in Section V of this document) are shown in the table below. The calculations in Section V are according to the provisions of District Rules 2201 and 2301.

Bankable Emissions Reductions Credits (ERCs)				
Pollutant	1st Qtr ERC (lb/qtr)	2nd Qtr ERC (lb/qtr)	3rd Qtr ERC (lb/qtr)	4th Qtr ERC (lb/qtr)
NOx	107	0	0	1,195
SOx	12	0	0	130
PM_{10}	828	0	0	9,223
CO	15	0	0	168
VOC	4	0	0	44

The District is also proposing to issue the Greenhouse Gas (GHG) ERCs for carbon dioxide equivalent (CO_2e). The amount of bankable CO_2e emissions, shown in the table below, are calculated in Section V of this document according to the provisions of District Rules 2201 and 2301.

Bankable GHG Emissions	
Pollutant	ERC (metric tons/year)
CO_2e	598

II. Applicable Rules

Rule 2301 - Emission Reduction Credit Banking (Last amended 1/19/12)

III. Location of Reductions

Physical location of equipment: 19813 Madison Ave in Stratford, Kings County, CA.

IV. Method of Generating Reductions

The AER's were generated by shutting down a cotton gin. The equipment description for the unit is as follows:

C-1191-3-5: COTTON GIN (COMBO) CONSISTING OF THREE LUMMUS 158 SAW GIN STANDS, FOUR HOT AIR CLEANERS, OVERFLOW SEPARATOR, THREE SUPER JET LINT CLEANERS AND SIX LINT CLEANERS (1ST, 2ND STAGE), MOTE SYSTEM, BATTERY CONDENSER ALL SERVED BY 26 EACH 1D-3D ENHANCED CYCLONE COLLECTORS; AND 15 ROLLER GIN STANDS AND GIN STAND FEEDERS WITH ONE 0.5 MMBTU/HR BURNER, FOUR HOT AIR CLEANERS, OVERFLOW SEPARATOR, A SEED RECLAIMERS, #1 LINT CLEANING SYSTEM, #2 LINT CLEANING SYSTEM, A LINT CLEANER TRASH/FEEDER TRASH SYSTEM ALL SERVED BY 30 EACH 1D-3D ENHANCED CYCLONE COLLECTORS; AND UNLOADING SYSTEM SERVED BY 3 EACH 1D-3D CYCLONE COLLECTORS, FOUR NATURAL GAS-FIRED 3.0 MMBTU/HR DRYERS AND PERMIT-EXEMPT NATURAL GAS-FIRED HUMIDIFIERS UNDER 5.0 MMBTU/HR RATING

Note that the permit identifies the burners as natural gas-fired but the emission inventories report gallons of LPG. The correct fuel that was actually used in this equipment was LPG. Identifying the fuel as natural gas was a mistake by the District carried over from the processing/review of the application for ATC C-1191-3-4. In the application for that ATC (project C-1060848), the applicant provided a document that shows their fuel is LPG. Therefore, the emission reductions from the shut-down of the fuel-burning equipment are calculated based on LPG fuel.

The gin was limited by permit condition to a ginning rate of not to exceed 720 bales per day for saw gin operation and not to exceed 720 bales per day for roller gin operation. Saw gin and roller gin operations were limited by permit condition to not operate simultaneously. PTO C-1191-3-5 was surrendered on October 27, 2016.

V. Calculations

A. Assumptions

Particulate Emissions from Ginning Operation:

- Annual criteria pollutant emissions are rounded to the nearest pound and annual GHG emissions are rounded to the nearest metric ton (District practice).
- Saw ginning rate not to exceed 720 bales, corrected to 500 lb-bales (permit limit).
- Roller ginning rate not to exceed 720 bales, corrected to 500 lb-bales (permit limit).
- Saw gin and roller gin could not operate simultaneously (permit limit).
- Based on applicant information for the operating seasons prior to the shutdown (from 2011 to 2015), shown below, the typical operating schedule is 24 hours per day, 46 days average per year in the fourth quarter, and 7 days average per year in the first quarter.
- $PM_{2.5}$ fraction (% of the PM_{10} that is also $PM_{2.5}$) = 1.9% (Attachment F).

Cotton Gin Operating Dates					
Season	2011	2012	2013	2014	2015
Start date	Oct 20, 2011	Oct 16,2012	Oct 29, 2013	Nov 6, 2014	No Operation
End date	Jan 18, 2012	Jan 15, 2013	Dec 9, 2013	Dec 16, 2014	No Operation
4th Quarter days	72	76	41	40	0
1st Quarter days	18	15	0	0	0
No of Bales	21,441	21,712	10,916	5,131	0

LPG Combustion from Cotton Dryers:

- The cotton gin included one 0.5 MMBtu/hr burner and four 3.0 MMBtu/hr burners for a total maximum input heat rating of 12.5 MMBtu/hr. All burners were fired on LPG.
- The GHG emission factor for fuel combustion includes emissions of CO_2, CH_4, and N_2O
- Conversion: 1,000 kg = 1 metric ton.
- Conversion: 0.094 MMBtu/gal (AP-42, Appendix A, pg. 5, dated 9/85).

The applicant provided production and fuel usage records for the last ten years. In instances where the applicant-provided production rate or fuel quantity does not match the emissions inventory submitted for that year, the most conservative (lowest) values will be used in calculations. The following table shows the most conservative (lowest) cotton production and fuel usage data from either the applicant or the emission inventory.

Production and Fuel Use Data				
Year	Saw Gin Production (Bales)	Roller Gin Production (Bales)	Total Production (Bales)	LPG Used (Gallons)
2006	N/A	N/A	18,943	103,000
2007	N/A	N/A	8,806	26,325
2008	N/A	N/A	8,828	52,882
2009	N/A	N/A	6,803	30,880
2010	6,553	10,827	17,380	104,106
2011	5,007	16,434	21,441	94,170
2012	4,322	17,390	21,712	130,250
2013	566	10,350	10,916	75,017
2014	427	4879	5,131	30,734
2015	0	0	1,710	10,243
Average	**2,813**	**9,980**	**12,167**	**65,761**

B. Emission Factors (EF)

Cotton Ginning Emissions

The PTO allowed the operation of either a saw-type cotton gin or a roller-type cotton gin and included emission limits for each type of ginning. The overall emission limit on the PTO for saw-type gin operation was 0.55 lb-PM_{10}/bale (see Attachment A, permit condition # 8) and the overall emission limit for roller-type gin operation was 0.958 lb-PM_{10}/bale (see Attachment A, permit condition # 10). The permit also limited the facility to not operate the saw-type and roller-type gins simultaneously.

District Policy APR 1110 *Use of Revised Generally Accepted Emission Factors* establishes "criteria for the use of emission factors and to address New Source Review (NSR) and Emission Reduction Credits (ERCs) issues when using revised Generally Accepted Emission Factors". Basically, the policy directs the use of emission factors (EF) that reflect "best data" when estimating emissions. For example, where facility-specific Continuous Emissions Monitoring or source test data is available, it will be used (unless it is in violation of permit conditions or other requirements).

There are source test results available for some emissions units in the roller-gin operation at this facility but there are not source test results for all of the roller-gin equipment and there are no source test results for operation of the saw-gin equipment. For equipment where there are no facility-specific source test data, the most accurate EF information is data from the California Cotton Ginners Association Handbook (CCGAH) which is based on a compilation of EFs from source tests on Valley cotton gins.

The source test results and the EFs from the CCGAH and the PTO are shown in the following tables for each gin type. The following tables also summarize the best emission factor for use in calculations. Note that no emission factor that is higher than the permit limit will be used for calculating emissions for the operations.

Saw Gin

Comparison of 2010 CCGAH Emission Factors and the Permitted Emissions Factors Saw Gin					
System	Cyclone Design	Source Test Result (lb-PM_{10}/bale)	CCGAH EFs (lb-PM_{10}/bale)	PTO EFs (lb-PM_{10}/bale)	EF Used for Calculations (lb-PM_{10}/bale)
Unloading	1D-3D	No Data	0.11	0.05	0.05
#1 Pre-cleaner	1D-3D	No Data	0.11	0.124	0.11
#2 Pre-cleaner	1D-3D	No Data	0.09	0.055	0.055
Overflow	1D-3D	No Data	0.04	0.04	0.04
Feeder Dust System	1D-3D	No Data	0.08	0.02	0.02
Gin Stand / Feeder Trash System	1D-3D	No Data	0.08	0.01	0.01
Lint Cleaning	1D-3D	No Data	0.09	0.041	0.041
Battery Condenser	1D-3D	No Data	0.03	0.03	0.03
Lint Trash / Robber	1D-3D	No Data	0.06	0.06	0.06
Motes	1D-3D	No Data	0.07	0.06	0.06
Motes Transfer	1D-3D	No Data	0.07	0.04	0.04
Motes Cleaner Trash	1D-3D	No Data	0.03	0.02	0.02
Total		No Data	0.86	0.55	0.54

As shown above, the total emissions factor for the saw gin operation is 0.54 lb-PM_{10}/bale based on the use of the best data in the CCGAH and the PTO EFs.

Roller Gin

Comparison of 2010 CCGAH Emission Factors and the Permitted Emissions Factors Roller Gin					
System	Cyclone Design	Source Test Result (lb-PM_{10}/bale)	CCGAH EFs (lb-PM_{10}/bale)	PTO EFs (lb-PM_{10}/bale)	EF Used for Calculations (lb-PM_{10}/bale)
#1 Pre-cleaner	1D-3D	No Data	0.22	0.27	0.22
#2 Pre-cleaner	1D-3D	0.132	0.12	0.138	0.132
Overflow	1D-3D	0.076	0.02	0.1	0.076
Gin Stand / Feeder Trash	1D-3D	No Data	0.04	0.1	0.04
#1 Lint Cleaning	1D-3D	No Data	0.02	0.03	0.02
#2 Lint Cleaning	1D-3D	0.06	0.04	0.06	0.06
Lint Cleaner Trash	1D-3D	No Data	0.05	0.06	0.05
Lint Trash / Robber	1D-3D	No Data	0.02	0.04	0.02
Battery Condenser	1D-3D	No Data	0.07	0.08	0.07
Robber	1D-3D	No Data	0.02	0.08	0.02
Total		Incomplete Data	0.62	0.96	0.71

As shown above, the total emissions factor for roller gin operation is 0.71 lb-PM_{10}/bale based on the use of the best data from the source test results, the CCGAH, and the PTO EFs.

Summary of Total EFs for Saw and Roller Gins

As stated previously, there are two sets of emission factors since there were two gins permitted to operate at this facility (saw gin and roller gin). The following table summarizes the emission factors for the two gin types for use in calculations.

Determine EF for Calculations	
	Total EF, lb-PM_{10}/ton
Saw Gin	0.54
Roller Gin	0.71

LPG Combustion:

The cotton gin included burners that provided heated air to control the moisture content of the cotton. These burners were fired on LPG and ERCs are requested from their shutdown. The PTO does not indicate LPG combustion emission factors, so the EFs for uncontrolled LPG combustion shall be used.

Burner Emission Factors		
Operation	Emission Rate	Source
LPG combustion in the heater	0.15 lb-NO_x/MMBtu	AP-42, Table 1.5-1 (10/96)
	0.0164 lb-SO_x/MMBtu	AP-42, Table 1.5-1 (10/96), see calculation below
	0[2]	AP-42, Table 1.5-1 (10/96)
	0.021 lb-CO/MMBtu	AP-42, Table 1.5-1 (10/96)
	0.0055 lb-VOC/MMBtu	AP-42, Table 1.5-1 (10/96)

[2] Since combustion emissions from the dryers are discharged through the cyclones, the dryer PM_{10} emissions are included with the ginning cyclone emission factors.

For combustion sources, GHGs include the following three "well-mixed" compounds: carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). The following greenhouse gas (GHG) EFs are from 40 CFR Part 98, Subpart C, Tables C-1 and C-2:

Greenhouse Gas Emission Factors for LPG		
GHG	EF, kg/MMBtu	EF, lb/MMBtu
CO_2	61.71	136.04
CH_4	0.003	0.0066
N_2O	0.0006	0.0013

Carbon dioxide equivalents (CO_2e) are determined by multiplying the mass emission factor by the Global Warming Potential (GWP) for the GHG pollutant. The following GWPs are from District Rule 2301 (*Emission Reduction Credit Banking*):

GHG GWP	
GHG	GWP, lb-CO_2e/lb-GHG
CO_2	1
CH_4	21
N_2O	310

An overall CO_2e emission factor is determined by combining the GHG EFs with the GWP for the respective pollutant as follows:

CO_2e EF = (136.04 lb-CO_2/MMBtu x 1 lb-CO_2e/lb-CO_2) + (0.0066 lb-CH_4/MMBtu × 21 lb-CO_2e/lb-CH_4) + (0.0013 lb-N_2O/MMBtu × 310 lb-CO_2e/lb-N_2O)
= 136.58 lb-CO_2e/MMBtu
= 136.58 lb-CO_2e/MMBtu × kg/2.2046 lb × metric ton/1,000 kg
= 0.0620 metric tons-CO_2e/MMBtu

C. Baseline Period Determination and Data

Baseline Period Determination

In accordance with District Rule 2201, Section 3.8, the baseline period is the two consecutive years of operation immediately prior to the submission of the complete application, or another period of at least two consecutive years within the five years immediately prior to the submission of the complete application, if it is more representative of normal source operations.

The PTO for the cotton ginning operation was surrendered by the facility on October 27, 2016, and the application to bank the ERCs from the shutdown of the operation was received on March 28, 2017. The applicant provided Ginning Summary records from the Visalia Classing Office of the United States Department of Agriculture (USDA), Agricultural Marketing Service, Cotton Program (see Appendix C this document) that show the last production season ended in 2014 (December 16, 2014 was the end of the last production season for this site per the applicant's records).

Since cotton ginning is a seasonal operation, as shown previously in Section V.A of this document in the table "Cotton Gin Operation Dates", the periods in between operating seasons cannot be used to determine normal source operation. Therefore, the period from October 2011 through the end of 2015 will be used as the five year period of normal operation from which the baseline period will be determined.

Baseline Period Determination Data

The ginning operations were seasonal with the actual annual throughput depending on the size of the cotton harvest. Because the harvest can vary significantly from year to year, a ten-year average is used in this evaluation to determine the normal source operation (NSO). Cotton throughput and LPG usage was provided by the operator or gathered from the emissions inventories submitted by the facility for the specific year, whichever is more conservative (as previously discussed). Note the District emission inventories show only the total cotton production for each season and not the split between cotton produced with

the saw gin or roller gin. For the split, the applicant provided records from the USDA. The USDA records of total production for each year match the most stringent value from either the applicant provided data or the District emission inventories. The appropriate cotton throughput and fuel usage values are shown in the table below.

The difference between the two-year average and NSO is calculated using the following formula:

Difference = [(Year 1 Rate + Year 2 Rate) ÷ 2] – (5-year Average Rate)

An example calculation of the difference (absolute value) is shown below for the 2011 and 2012 period.

Difference = [(21,441 bales + 21,712 bales) ÷ 2] – 12,167 bales
= 21,576.5 bales – 12,167 bales
= 9,410 bales/year

The calculation is repeated in the following table for cotton production and fuel usage for each two-year period in the five year period from 2011 to 2015. Note that, as previously discussed in Section V.A, production records for the past 10 years are shown for the purpose of determining the normal source operation (NSO).

Historical Production and Fuel Use Data

Year	Throughput (bales/year)	Fuel Used (gal-LPG/year)	Difference between two-year average and NSO (bales/year)	Difference between two-year average and NSO (gal-LPG/year)
2006	18,943	103,000		
2007	8,806	26,325		
2008	8,828	52,880		
2009	6,803	30,880		
2010	17,380	104,106		
2011	21,441	94,170		
			9,410	45,505
2012	21,712	130,250		
			4,147	40,765
2013	10,916	75,017		
			-4,144	-10,002
2014	5,131	30,734		
			-8,747	-47,226
2015	1,710	10,243		
10-year Average	12,167	65,761		

For the five years immediately preceding the shutdown (2011-2015), the period matching the normal source operation (NSO) ten-year average is 2012-2013. Therefore, the baseline period is 2012-2013.

- During the basline period of 2012-2013, the facility was operated in the fourth and first quarters.
- The average annual cotton throughput during the baseline period of 2012-2013 was 16,314 bales [(21,712 + 10,916) ÷ 2] with the average production for the saw gin and roller gin as follows:
  - Saw gin average production: 2,444 bales [(4,322 + 566) ÷ 2]
  - Roller gin average production: 13,870 bales [(17,390 + 10,350) ÷ 2]
- The calcualted average throughput for the baseline period of 2012-2013 resulted in PM_{10} emissions that were less than the annual limit for PM_{10} emissions for the saw gin and the roller gin and both gins combined. The following calculations demonstrate that the permitted emissions limits were not exceeded. For the purpose of this demonstration, the following calculations show the annual emissions for roller and saw type gin operations using the emission limits from the PTO.

Saw gin emissions, lb/year = 0.55 lb-PM_{10}/bale × 16,314 bales/year
= 8,973 lb-PM_{10}/year < 52,668 lb-PM_{10}/year (PTO condition #11)

Roller gin emissions, lb/year = 0.958 lb-PM_{10}/bale × 16,314 bales/year
= 15,629 lb-PM_{10}/year < 52,668 lb-PM_{10}/year (PTO condition #12)

Combined emissions, lb/year = Saw gin emissions + Roller gin emissions
= 8,973 lb-PM_{10}/year + 15,629 lb-PM_{10}/year
= 24,602 < 52,668 lb-PM_{10}/year (PTO condition #12)

- The average annual LPG consumption during the baseline period of 2012-2013 was 102,634 gallons [(130,250 + 75,017) ÷ 2].
- LPG consumption was not limited by a permit condition (either a daily or annual limit).

D. Historical Actual Emission (HAE) Calculations

The Historical Actual Emissions (HAE) are calculated using the following formulas and the emission factors and throughputs as discussed above. Results are shown in the following tables:

Cotton Ginning HAE – Saw Gin

$HAE_{saw\ ginning}$ = EF, lb/bale × 16,314 bales/year

Historical Actual Emissions ($HAE_{saw\ ginning}$)			
Pollutant	EF (lb-PM_{10}/bale)	Throughput (bales/year)	HAE lb/year
PM_{10}	0.54	2,444	1,320

Cotton Ginning HAE – Roller Gin

$HAE_{roller\ ginning}$ = EF, lb/bale × 16,314 bales/year

Historical Actual Emissions ($HAE_{roller\ ginning}$)			
Pollutant	EF (lb-PM_{10}/bale)	Throughput (bales/year)	HAE lb/year
PM_{10}	0.71	13,870	9,848

Cotton Ginning HAE – Total

$HAE_{ginning}$ = $HAE_{saw\ ginning}$ + $HAE_{roller\ ginning}$

Historical Actual Emissions ($HAE_{total\ ginning}$)			
Pollutant	$HAE_{saw\ ginning}$ (lb/year)	$HAE_{roller\ ginning}$ (lb/year)	$HAE_{total\ ginning}$ (lb/year)
PM_{10}	1,320	9,848	11,168

LPG Combustion HAE

HAE_{LPG} = EF, lb/MMBtu × 0.094 MMBtu/gallon × 102,634 gallon/year

Historical Actual Emissions (HAE_{LPG})				
Pollutant	EF lb/MMBtu	Throughput gal/year	Conversion MMBtu/gal	HAE lb/year
NO_x	0.15	102,634	0.094	1,447
SO_x	0.0164	102,634	0.094	158
PM_{10}	0	102,634	0.094	0
CO	0.021	102,634	0.094	203
VOC	0.0055	102,634	0.094	53

Greenhouse Gases (GHG) HAE

HAE_{GHG} = EF, lb/MMBtu × 0.094 MMBtu/gallon × 102,634 gallon/year

Historical Actual Emissions (HAE_{GHG})				
Pollutant	EF metric tons-CO_2e/MMBtu	Throughput gal/year	Conversion MMBtu/gal	HAE metric tons-CO_2e/year
CO_2e	0.062	102,634	0.094	598

E. Adjustment to Historical Actual Emissions (HAE)

Emissions Adjusted for Rule 4204 - Cotton Gins

Rule 4204 (Cotton Gins) requires cotton gins to use 1D-3D cyclones, with emissions equivalent to the emission factors from the latest revision of the CCGA handbook, by July

1, 2008. Pursuant to Section 3.22 of Rule 2201, Historical Actual Emissions must be discounted for any emissions reduction which is: required or encumbered by any laws, rules, regulations, agreements, orders, or, proposed in the District Air Quality Plan for attaining the annual reductions required by the California Clean Air Act. The cotton gin was in compliance with this rule at the time of the ERC application submittal. All the cotton gin's systems were controlled by 1D-3D cyclones. Therefore, no adjustments are needed for these systems.

Emissions Adjusted for Rule 4309 - Dryers, Dehydrators, and Ovens

District Rule 4309 (Dryers, Dehydrators, and Ovens), Section 4.1.6 specifically exempts units used to dry lint cotton or cotton at cotton gins. The dryers at this facility are used to dry cotton; therefore, the dryers in this operation are exempt from requirements of this rule and no adjustment is necessary.

Total Adjusted Historical Actual Emissions (HAE)

The total adjustment is equal to the sum of the adjusted parts. There were no adjustments made to the Historical Actual Emissions for NO_x, SO_x, PM_{10}, CO, or VOC. Therefore the HAE will be equal to the values calculated in Section V.C of this evaluation.

F. Post Project Potential to Emit (PE2)

As discussed above, the subject equipment has been permanently shut down and the PTO was surrendered to the District. Therefore, the PE2 = 0 for all emissions.

G. Air Quality Improvement Deduction

The air quality improvement deduction (AQID), per Rule 2201, Section 3.6, is 10% of the Actual Emission Reductions (AER), before the AER is eligible for banking. The criteria pollutant AER are adjusted for the AQID in the following table:

$$AQID = AER \times 10\%$$

AER Calculations		
Pollutant	AER lb/year	AQID lb/year
NO_x	1,447	145
SO_x	158	16
PM_{10}	11,168	1,117
CO	203	20
VOC	53	5
Pollutant	HAE metric ton/year	AQID metric ton/year
CO_2e	598	0[1]

[1] The AQID requirement is part of Rule 2201 and therefore only applies to criteria pollutants that are governed by that rule. Calculations for GHG emission reductions are detailed in Rule 2301, Section 4.5, which does not include a provision for an AQID.

H. Emission Reductions Eligible for Banking

As shown previously in Section V.A of this evaluation, for the 2012 and 2013 operating seasons, the facility operated for 76 days in the 4th quarter 2012 and 15 days in the 1st quarter 2013 and 41 days in the 4th quarter 2013 and 0 days in the 1st quarter 2014. Since there were actual emissions in the 1st and 4th quarters of the baseline period, the AER will be split between the two operating quarters. Since the facility does not have operating records of bales and fuel used per quarter, the following formula will be used to determine the quantity of 1st quarter AER as a percentage of the total AER. Calculations are shown in the table below.

1st Qtr AER = (# of 1st Qtr Days ÷ Total # of days) × 100

Determine 1st Quarter % of Total Operation			
Operating Year	1st Qtr Days	Total Days	% Operation of Total in the 1st Qtr
2012	15	91	16.48
2013	0	41	0.00
Average	7.5	66	8.24

As calculated in the table above, 8.24% of the bankable AER will be distributed to the first quarter and the remaining 91.76% (100% - 8.24% = 91.76%) will be distributed to the fourth quarter. The bankable ERCs for criteria pollutants are presented in lb/quarter in the following tables while the bankable ERCs for GHG are expressed in metric-tons/year.

First Quarter (Criteria Pollutants)

Bankable AER 1st Quarter				
Pollutant	AER lb/year	AQID lb/year	1st Qtr Operation %	Bankable AER 1st Qtr lb/quarter
NO_x	1,447	145	8.24	107
SO_x	158	16	8.24	12
PM_{10}	11,168	1,117	8.24	828
CO	203	20	8.24	15
VOC	53	5	8.24	4

Fourth Quarter (Criteria Pollutants)

Bankable ERCs 4th Quarter				
Pollutant	AER lb/year	AQID lb/year	4th Qtr Operation %	Bankable AER 4th Qtr lb/quarter
NO_x	1,447	145	91.76	1,195
SO_x	158	16	91.76	130
PM_{10}	11,168	1,117	91.76	9,223
CO	203	20	91.76	168
VOC	53	5	91.76	44

Greenhouse Gases

Bankable GHG AER		
Pollutant	AER metric tons/year	Bankable AER metric tons/year
CO_2e	598	598

VI. Compliance

Rule 2301 - Emission Reduction Credit Banking

Section 4.0 - Eligibility of Emission Reductions

Section 4.2, specifies the criteria by which emission reductions, that have occurred after September 19, 1991, are eligible for banking. The emission reductions in this project occurred when the PTO for the cotton ginning equipment was surrendered, effective October 27, 2016. As these emission reductions occurred after September 19, 1991, the criteria in Section 4.2 must been satisfied.

Section 4.2.1 requires that the emission reductions are real, surplus, permanent, quantifiable, and enforceable. The following is a discussion of compliance with Section 4.2.1 requirements for criteria pollutant emissions.

Criteria Pollutant Emissions

Emission Reductions are Real

The emission reductions were generated by the shutdown of a 12.5 MMBtu/hr cotton gin. The real emissions were calculated from actual historic production throughput and fuel-use data and recognized emission factors. The ginning equipment has been removed from service and the permit was subsequently surrendered to the District. Therefore, the emission reductions satisfy the real requirement.

Emission Reductions are Surplus

There are no laws, rules, regulations, agreements, orders, or permits requiring any of the emission reductions which generated the ERC:

- Shutdown of the gin was voluntary and not required by any law, rule, agreement, or regulation.
- These ERCs are not needed for their current or proposed operations.
- The emission factors are not subject to additional adjustments and are therefore surplus to the requirements of the District's 2007 PM_{10} Maintenance Plan, 2008, 2012, 2015, and 2016 $PM_{2.5}$ Attainment Plans, and District Rule 4204.
- According to the attached records, the gin did not exceed the permitted baling rates and there were no limits on LPG consumption, so no adjustments are necessary on that basis.

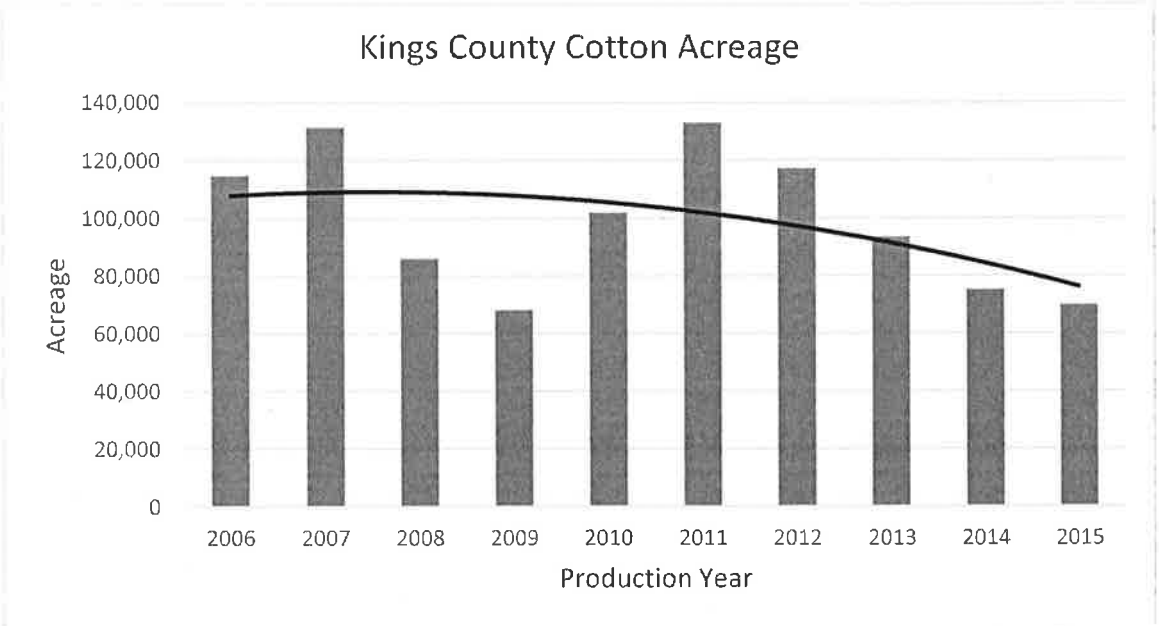
- There are no laws, rules, regulations, agreements, orders, or permits requiring any GHG emission reductions from cotton ginning operations.
- The emission reductions are not the result of an action taken by the permittee to comply with any requirement of Rule 4204 Cotton Gins.

Therefore, the emission reductions satisfy the surplus requirement.

Emission Reductions are Permanent

The gin has been shut down and the PTO has been surrendered. Further operation requires an application to the District for a new operating permit.

Due to the high transportation costs, it is not cost effective to ship field cotton to other locations for processing. As such, the cotton processed at this facility was produced in the surrounding area. As shown in the following table, cotton acreage in Kings County dropped significantly in the last 10 years. According to the applicant, this decline in cotton production led the closure of this facility. Because of the decline in cotton production in the county, it is expected that there will be no shifting of the past emissions to a similar facility. Therefore, the emission reductions satisfy the surplus requirement.



Cotton acreage provided by the applicant as reported in the Kings County Annual Crop Report

Emission Reductions are Quantifiable

Actual Emission Reductions (AER) amounts were calculated from historic process throughput data, source test results from similar operations, California Cotton Ginners Association emission factors, and methods according to District Rule 2201. Therefore, the reductions are quantifiable. Therefore, the emission reductions satisfy the quantifiable requirement.

Emission Reductions are Enforceable

The PTO for this facility has been surrendered and the gins cannot be operated without a valid PTO. Due to the size and complexity of the operation, the large bulk of the material processed, and the amount of lint, seeds, and waste material generated, it would be readily apparent if it were to be operated in the future. Therefore, the emission reductions satisfy the enforceable requirement.

Section 4.2.2 requires that AER be calculated in accordance with the procedure in Rule 2201 (New and Modified Stationary Source Review Rule), including any adjustments for use of Community Bank offsets. As detailed in Section V - Calculations, the AER were calculated according to the procedure in Rule 2201 and the past permitting of the facility did not include Community Bank ERC. Therefore, the emission reductions satisfy the requirements of this section.

Section 4.2.3 requires that an application be filed no later than 180 days after the reduction occurred. The ERC banking application was filed on March 28, 2017, and the PTO was surrendered on October 27, 2016. According to District Policy APR 1805, the date of the shutdown is considered to be the date on which the PTO is surrendered, unless the equipment was removed or the District determines the owner did not intend to operate again. Since the District has no evidence that either of these were the case, the gin is considered to be operational at time of permit surrender. The application was filed 152 days after the gin closure and is therefore considered timely and the requirement of this section is satisfied.

Section 4.2.4 applies to emissions from non-permitted units. The gin was permitted so this section is not applicable.

Section 4.3 applies to banking offsets which were provided for cancelled Authorities to Construct. These emissions were not previously banked so this section is not applicable.

Section 4.4 refers to source categories which are not eligible for ERC. The categories do not include gin shutdowns, so this section is not applicable.

Section 4.5 details criteria for determining eligibility of Green House Gas (GHG) emissions for banking. The applicant has requested to bank the GHG AER so this section is applicable.

Section 4.5.1 requires that the GHG emission reductions must have occurred after January 1, 2005. As stated above, the gin was shutdown effective October 27, 2016, so the GHG emission reductions satisfy the requirements of this section.

Section 4.5.2 requires that the reductions must have occurred within the San Joaquin Valley Air Pollution Control District. The emissions occurred at 19813 Madison Ave in Stratford, CA. This location is in Kings County located within the San Joaquin Valley Air Pollution Control District boundaries. Therefore, the GHG emission reductions satisfy the location requirement of this section.

Section 4.5.3 requires that the GHG emission reductions must be real, surplus, permanent, quantifiable, and enforceable. The following is a discussion of compliance with Section 4.5.3 requirements for greenhouse gas emissions

GHG Emissions:

Emission Reductions are Real

The GHG emission reductions were generated by the shutdown of one 12.5 MMBtu/hr cotton gin. The GHG emissions were calculated from actual historic production throughput and fuel-use data and recognized GHG emission factors. The ginning equipment has been removed from service and the permit was subsequently surrendered to the District. Therefore, the GHG emission reductions satisfy the real requirement.

Emission Reductions are Surplus

There are no laws, rules, regulations, agreements, orders, or permits requiring any of the GHG emission reductions which generated the ERC:

- The shutdown of the gin was voluntary and not required by any law, rule, agreement, or regulation.
- These GHG ERCs are not needed for their current or proposed operations.
- The GHG emission factors are not subject to additional adjustments and are therefore surplus to the requirements of the District's 2007 PM_{10} Maintenance Plan, 2008, 2012, 2015, and 2016 $PM_{2.5}$ Attainment Plans, and District Rule 4204.
- According to the attached records, the gin did not exceed the permitted baling rates and there were no limits on LPG consumption, so no adjustments are necessary on that basis.
- The facility is not in one of the categories subject to CARB GHG cap and trade regulations and there are no other laws, rules, regulations, agreements, orders, or permits requiring any GHG emission reductions from cotton ginning operations.
- The GHG emission reductions are not the result of an action taken by the permittee to comply with any requirement of Rule 4204 Cotton Gins.

Therefore, the GHG emission reductions satisfy the surplus requirement.

Emission Reductions are Permanent

The gin has been shut down, and the PTO has been surrendered. Further operation requires an application to the District.

Due to the high transportation costs, it is not cost effective to ship field cotton to other locations for processing. As such, the cotton processed at this facility was produced in the surrounding area. As was shown in the earlier section, cotton acreage in Kings County dropped significantly in the last 10 years. According to the applicant, this decline in cotton production led the closure of this facility. Because of the decline in

production, it is expected that there will be no shifting of the past GHG emissions to a similar facility. Therefore, the GHG emission reductions satisfy the permanent requirement.

Emission Reductions are Quantifiable

Actual Emission Reductions (AER) amounts were calculated from historic process throughput data, EPA and District emission factors, and methods according to District Rules. Therefore, the GHG emission reductions satisfy the quantifiable requirement.

Emission Reductions are Enforceable

The PTO for this facility has been surrendered and the gins cannot be operated without a valid PTO. Due to the size and complexity of the operation, the large bulk of the material processed, and the amount of lint, seeds, and waste material generated, it would be readily apparent if it were to be operated in the future. Therefore, the GHG emission reductions satisfy the enforceable requirement.

Section 4.5.4 requires that GHG emission reductions be calculated as the difference between the historic annual average GHG emissions (as CO_2e) and the PE2 after the reduction is complete. The historical GHG emissions must be calculated using the consecutive 24 month period immediately prior to the date the emission reductions occurred, or another consecutive 24 month period in the 60 months prior to the date the emission reduction occurred if determined by the APCO as being more representative of normal operations.

The GHG emission reductions were calculated according to the baseline period identified above. Since this is a permanent shutdown of the cotton ginning operation and its associated equipment, with none of the load being shifted to any other cotton gin within the boundaries of the San Joaquin Valley Air Pollution Control District jurisdiction, there is no post-project potential to emit GHG.

Section 4.5.5 requires that GHG emission reductions be quantified using CARB-approved emission reduction project protocols. Since the GHG emission reductions are not subject to an applicable CARB-approved emission reduction project protocol, this section is not applicable.

Section 4.5.6 requires that ERCs shall be made enforceable through permit conditions or legally binding contract. The cotton gin operators held a legal District operating permit. That permit has been surrendered to the District. Since the operation of the equipment would require new ATCs, as discussed above, the GHG emission reduction is enforceable.

Section 5.0 - ERC Application Procedures

Section 5.5 of Rule 2301 states that ERC certificate applications for reductions shall be submitted within 180 days after the emission reduction occurs. The ERC banking application was filed on March 28, 2017, 152 days after the PTO was surrendered the and the operations at this location were permanently ceased effective October 27, 2016. Therefore, the application was submitted in a timely fashion.

Section 6.0 - Registration of ERC Certificates

The APCO may only grant an ERC Certificate after the emission reductions have actually occurred upon satisfaction of the following applicable provisions:

Section 6.14 GHG emission reductions shall be banked as metric tons of CO_2e per year, rounded to the nearest metric ton.

The draft GHG ERC is identified as metric tons of CO_2e per year, rounded to the nearest metric ton.

Section 6.15 specifies the registration requirements for GHG ERCs.

This emission reduction is surplus and additional of all requirements pursuant to Section 4.5.3.4. Therefore the ERC certificate shall include the following notation:

"This emission reduction is surplus and additional to all applicable regulatory requirements."

Compliance with Rule 2301 has been demonstrated and no adjustments are required under this rule.

VII. Recommendation

Pending a successful Public Noticing period, issue Emission Reduction Credit (ERC) certificate to Stratford Growers, LLC. in accordance with the amounts specified on the draft ERC certificates in Attachment E.

Attachments:

Attachment A: Surrendered PTO C-1191-3-5
Attachment B: ERC Application
Attachment C: Cotton Ginning Throughput and LPG Usage Records
Attachment D: GHG Emission Factors (40 CFR Part 98, Tables A-1, C-1 and C-2) and Global Warming Potentials (GWP) (Rule 2301, Table 1)
Attachment E: Draft ERC Certificates
Attachment F: $PM_{2.5}$ Fraction

Attachment A

Surrendered PTO C-1191-3-5

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1191-3-5 **EXPIRATION DATE:** 10/31/2017

EQUIPMENT DESCRIPTION:
COTTON GIN (COMBO) CONSISTING OF THREE LUMMUS 158 SAW GIN STANDS, FOUR HOT AIR CLEANERS, OVERFLOW SEPARATOR, THREE SUPER JET LINT CLEANERS AND SIX LINT CLEANERS (1ST, 2ND STAGE), MOTE SYSTEM, BATTERY CONDENSER ALL SERVED BY 26 EACH 1D-3D ENHANCED CYCLONE COLLECTORS; AND 15 ROLLER GIN STANDS AND GIN STAND FEEDERS WITH ONE 0.5 MMBTU/HR BURNER, FOUR HOT AIR CLEANERS, OVERFLOW SEPARATOR, A SEED RECLAIMERS, #1 LINT CLEANING SYSTEM, #2 LINT CLEANING SYSTEM, A LINT CLEANER TRASH/FEEDER TRASH SYSTEM ALL SERVED BY 30 EACH 1D-3D ENHANCED CYCLONE COLLECTORS; AND UNLOADING SYSTEM SERVED BY 3 EACH 1D-3D CYCLONE COLLECTORS, FOUR NATURAL GAS-FIRED 3.0 MMBTU/HR DRYERS AND PERMIT-EXEMPT NATURAL GAS-FIRED HUMIDIFIERS UNDER 5.0 MMBTU/HR RATING

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. 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]
4. 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]
5. Material removed from cyclones shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201]
6. Saw-type ginning and roller-type ginning operations shall not be operated simultaneously. [District Rule 2201]
7. Daily ginning rate of the saw gin shall not exceed 180 tons of baled cotton per day (720 bales per day, corrected to 500-pound bales). [District Rule 2201]
8. Total PM10 emissions from the saw cotton gin operation shall not exceed 2.20 pounds per ton of baled cotton (0.55 pounds per bale, corrected to 500-pound bales). [District Rule 2201]
9. Daily ginning rate of the roller gin stand shall not exceed 180 tons of baled cotton per day (720 bales per day, corrected to 500-pound bales). [District Rule 2201]
10. Total PM10 emissions from the roller cotton gin operation shall not exceed 3.83 pounds per ton of baled cotton (0.958 pounds per bale, corrected to 500-pound bales). [District Rule 2201]
11. PM10 emissions from the saw gin operation shall not exceed 52,668 pounds in any year. This annual PM10 emission limit is to enforce the PM10 emission reductions granted by Emission Reduction Certificate C-0059-4 [District Rule 2201]
12. Combined PM10 emissions from the roller and saw gin operations shall not exceed 52,668 pounds in any year. [District Rule 2201]
13. Combined PM10 emissions from the roller and saw gin operations shall be calculated as follows: Annual PM10 Emissions = [(0.55 x Annual Throughput (saw bales per year)) + (0.958 x Annual Throughput (roller bales per year))]. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. PM10 emissions from the cyclone system serving the unloading separator/module feeder shall not exceed 0.05 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
15. PM10 emissions from the cyclone system serving the #1 pre-cleaning system for the saw gin shall not exceed 0.124 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
16. PM10 emissions from the cyclone system serving the #2 pre-cleaning system for the saw gin shall not exceed 0.055 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
17. PM10 emissions from the cyclone system serving the overflow system for the saw gin shall not exceed 0.04 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
18. PM10 emissions from the cyclone system serving the feeder dust system for the saw gin shall not exceed 0.02 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
19. PM10 emissions from the cyclone system serving the gin stand/feeder trash system for the saw gin shall not exceed 0.01 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
20. PM10 emissions from the cyclone system serving the lint cleaning system for the saw gin shall not exceed 0.041 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
21. PM10 emissions from the cyclone system serving the battery condenser condenser system for the saw gin shall not exceed 0.03 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
22. PM10 emissions from the cyclone system serving the lint trash/robber system for the saw gin shall not exceed 0.06 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
23. PM10 emissions from the cyclone system serving the motes system for the saw gin shall not exceed 0.06 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
24. PM10 emissions from the cyclone system serving the motes transfer system for the saw gin shall not exceed 0.04 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
25. PM10 emissions from the cyclone system serving the motes cleaner trash system for the saw gin shall not exceed 0.02 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
26. PM10 emissions from the cyclone system serving the module feeder/#1pre-cleaning system for the roller gin shall not exceed 0.27 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
27. PM10 emissions from the cyclone system serving the #2 pre-cleaning system for the roller gin shall not exceed 0.138 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
28. PM10 emissions from the cyclone system serving the overflow system for the roller gin shall not exceed 0.10 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
29. PM10 emissions from the cyclone system serving the gin stand/feeder trash system for the roller gin shall not exceed 0.10 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
30. PM10 emissions from the cyclone system serving the #1 lint cleaning system for the roller gin shall not exceed 0.03 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
31. PM10 emissions from the cyclone system serving the #2 lint cleaning system for the roller gin shall not exceed 0.06 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
32. PM10 emissions from the cyclone system serving the lint cleaner trash system for the roller gin shall not exceed 0.06 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
33. PM10 emissions from the cyclone system serving the lint trash/robber system for the roller gin shall not exceed 0.04 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
34. PM10 emissions from the cyclone system serving the battery condenser system for the roller gin shall not exceed 0.08 pounds per bale, corrected to 500 pound bales. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. PM10 emissions from the cyclone system serving the robber system off the overflow and feeder dust system for the roller gin shall not exceed 0.08 pounds per bale, corrected to 500 pound bales. [District Rule 2201]
36. Emissions from the natural gas-fired burners serving the hot air drying and cleaning system shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 0.02 lb-CO/MMBtu, 0.006 lb-VOC/MMBtu or 0.003 lb-SOx/MMBtu. [District Rule 2201]
37. All 1D-3D cyclones shall operate at a cyclone inlet air velocity of 3200 ñ 400 ft/min. [District Rule 4204]
38. The unloading system of the saw/roller ginning operations shall be controlled by three 42-inch 1D-3D cyclone collectors, operating at a cyclone inlet air velocity of 3200 ñ 400 ft/min. [District Rules 2201 and 4204]
39. The #1 pre-cleaning system of the saw/roller ginning operations shall be controlled by four 42-inch 1D-3D cyclone collectors with expansion chambers, each operating at a cyclone inlet air velocity of 3200ñ 400 ft/min. [District Rules 2201 and 4204]
40. The #2 pre-cleaning system of the saw/roller ginning operations shall be controlled by four 42-inch 1D-3D cyclone collectors with expansion chambers, each operating at a cyclone inlet air velocity of 3200 ñ 400 ft/min. [District Rules 2201 and 4204]
41. The gin stand/feeder trash system of the saw ginning operation shall be controlled by one 48-inch 1D-3D cyclone with an expansion chamber, operating at a cyclone inlet air velocity of 3200ñ 400 ft/min. [District Rules 2201 and 4204]
42. The overflow separator system of the saw ginning operation shall be controlled by one 44-inch 1D-3D cyclone collector with an expansion chamber, operating at a cyclone inlet air velocity of 3200 ñ 400 ft/min. [District Rules 2201 and 4204]
43. The motes cleaner system of the saw ginning operation shall be controlled by one 36-inch 1D-3D cyclone collector and one 28-inch 1D-3D cyclone collector, operating at a cyclone inlet air velocity of 3200 ñ 400 ft/min. [District Rule 2201]
44. The lint cleaning system of the saw ginning operations shall be controlled by six 56-inch 1D-3D cyclone collectors, operating at a cyclone inlet air velocity of 3200 ñ 400 ft/min. [District Rule 2201]
45. The battery condenser system of the saw/roller ginning operations shall be controlled by three 68-inch 1D-3D enhanced cyclone collectors, each operating at a cyclone inlet air velocity of 3200 ñ 400 ft/min. [District Rules 2201 and 4204]
46. The lint trash/robber system of the saw/roller ginning operations shall be controlled by two 46-inch 1D-3D cyclone collectors, operating at a cyclone inlet air velocity of 3200 ñ 400 ft/min. [District Rules 2201 and 4204]
47. The lint cleaner motes system of the saw ginning operation shall be controlled by two 56-inch 1D-3D cyclone collectors, operating at a cyclone inlet air velocity of 3200 ñ 400 ft/min. [District Rule 2201]
48. The robber system off the overflow and feeder dust collectors of the roller ginning operation shall be controlled by one 48-inch 1D-3D cyclone collector including bottom cone with expansion chamber, operating at a cyclone inlet air velocity of 3200 ñ 400 ft/min. [District Rules 2201 and 4204]
49. The overflow separator system of the roller gin operation shall be controlled by two 48-inch 1D-3D cyclone collectors with expansion chambers, each operating at a cyclone inlet air velocity of 3200 ñ 400 ft/min. [District Rules 2201 and 4204]
50. The gin stand/feeder trash system of the roller gin operation shall be served by two 36-inch 1D-3D cyclone collectors with expansion chambers, operating at a cyclone inlet air velocity of 3200 ñ 400 ft/min. [District Rules 2201 and 4204]
51. The #1 lint cleaning system of the roller gin operation shall be served by two 52-inch and two 56-inch 1D-3D cyclone collectors with expansion chambers, operating at a cyclone inlet air velocity of 3200 ñ 400 ft/min. [District Rules 2201 and 4204]
52. The #2 lint cleaning system of the roller gin operation shall be served by four 52-inch 1D-3D cyclone collectors with expansion chambers, operating at a cyclone inlet air velocity of 3200 ñ 400 ft/min. [District Rules 2201 and 4204]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

53. Permittee shall conduct daily visual inspections of the material handling system for leaks, breaks, or other visible signs of equipment malfunctions. [District Rule 4204]

54. The trash loading area shall be enclosed with four sides that are higher than the trash auger. Two sides shall be solid. The remaining sides shall have flexible wind barriers that extend below the top of the trash trailer sides. [District Rule 4204]

55. Permittee shall maintain a record of the daily inspections of the material handling systems, including any equipment malfunctions discovered and corrective action taken to repair the malfunction, and any source test results. [District Rule 4204]

56. Permittee shall maintain daily and annual records of the number and weight of bales produced by the saw gin and roller gin, corrected to 500 pound bales. [District Rule 2201]

57. Permittee shall maintain an annual record of the combined PM10 emissions from the saw and roller gin operations. This record shall be updated on a daily basis. [District Rule 2201]

58. All records shall be retained on site for at least five years and made available to the District upon request. [District Rules 1070, 2201, and 4204]

Attachment B

ERC Application

RECEIVED

San Joaquin Valley Air Pollution Control District

MAR 28 2017

Permits Services
SJVAPCD

Application for

☒ EMISSION REDUCTION CREDIT (ERC) ☐ CONSOLIDATION OF ERC CERTIFICATES

1. ERC TO BE ISSUED TO: Stratford Growers, LLC. Facility ID: C - 1191 (if known)

2. MAILING ADDRESS: Street/P.O. Box: 19813 Madison Ave.
City: Stratford State: CA Zip Code: 93622

3. LOCATION OF REDUCTION:
Street: 19813 Madison Ave.
City: Stratford, CA
____/4 SECTION ____ TOWNSHIP ____ RANGE ____

4. DATE OF REDUCTION:
11/01/2015

5. PERMIT NO(S): C-1191-3-1 EXISTING ERC NO(S):

6. METHOD RESULTING IN EMISSION REDUCTION:

☒ SHUTDOWN ☐ RETROFIT ☐ PROCESS CHANGE ☐ OTHER

DESCRIPTION: Shutdown of existing cotton gin.

(Use additional sheets if necessary)

7. REQUESTED ERCs (In Pounds Per Calendar Quarter):

	VOC	NOx	CO	PM10	SOx	OTHER
1ST QUARTER						
2ND QUARTER						
3RD QUARTER						CO2e
4TH QUARTER	513.2	1,436.9	1950	16,402	359.2	646.6 (tons/yr)

8. SIGNATURE OF APPLICANT:

TYPE OR PRINT TITLE OF APPLICANT:
Owner

9. TYPE OR PRINT NAME OF APPLICANT:
Don Heskett

DATE:
03-22-2017

TELEPHONE NO:
559-584-3391

FOR APCD USE ONLY:

DATE STAMP
RECEIVED
MAR 28 2017
FINANCE
SJVUAPCD

FILING FEE RECEIVED: $ 832.00 / Check# 52
DATE PAID: 3/28/17
PROJECT NO.: C-1171039 FACILITY ID.: C-1191

May 25th, 2017

Mr. Dave Warner
Deputy APCO
San Joaquin Valley Unified Air Pollution Control District
1990 E. Gettysburg
Fresno, CA 93726

Re: **Change of Credit Ownership**

Dear Mr. Warner,

We previously submitted an ERC Application for the facility formerly titled Stratford Growers LLC., (C – 1911). The credits associated with the facility were previously to be issued to Don Heskett, of Heskett Real Properties LLC.,. Due to contractual agreements previously established during the purchase of the facility, we would like to split the credit issuances based on these percentages.

100% of credits are to go to Gary Stowe, Owner – CCC Inc.,.
If you have any questions, please feel free to contact Gary Stowe at (229-886-4801).

Thank you,

Gary Stowe
Owner – CCC Inc.

Jimmy Heskett
Owner – Heskett Real Properties, LLC

Attachment C

Cotton Ginning Throughput and LPG Usage Records

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT
SUPPLEMENTAL APPLICATION FORM

COTTON GINS
Emission Reduction Credit (ERC)

(This form must be accompanied by a completed Application for Emission Reduction Credit form.)

Certificate to be Issued to:	**Stratford Growers Inc.**
Gin Location:	**19813 Madison Ave., Stratford, CA 93266**

1. Are the emission reductions due to the installation of control equipment at an existing cotton gin? **n/a**

   If "yes", please list the Authority (-ies) to Construct authorizing the installation: **n/a**

2. Are the emission reductions due to the shut-down of a cotton gin? **Yes**

   If "yes", please list the applicable Permit to Operate number(s): **C-1191-3-1**

3. What date did the emission reductions occur? (if #1 above applies, when was the gin first operated after control equipment was installed? If #2 applies, when was the gin last operated, or when was the Permit to Operate surrendered?)

   MM/DD/YY: **11/01/2015**

4. Submit operational data for the five consecutive seasons prior to the reduction (if the emission reductions are result of the installation of control equipment, submit for the five years prior to the issuance of the applicable ATC):

Season	2011	2012	2013	2014	2015
Start MM/DD/YY					
End MM/DD/YY					
No. of Bales*	**21,441**	**21,712**	10,916 per E.I. **11,092**	**5,131**	**1,710**

*Number of bales after correcting to 500 pounds per bale.

(Please continue on other side)

saw gin per Greg Townsend USDA 1/20/17

Gin Number 5627 HVT
STRATFORD GROWERS, INC
19813 MADISON AVE
STRATFORD CA 93266

United States Department of Agriculture
Agricultural Marketing Service
Cotton Program
VISALIA CLASSING OFFICE
GINNER SUMMARY REPORT
Upland Cotton

Page Number 1
Report Date 07/05/2011
Report Period 07/01/2010 - 06/30/2011
2010 - 2011

MIKE DISTRIBUTION			OFFICIAL COLOR DIST			LENGTH(32ND) DISTRIB			EXT MATT/REMARKS DISTRIBUTION	
3.3-3.4	75	1.14%	11	1151	17.56%	34	1	0.01%	1 BARK LEVEL 1	0.01%
3.5-4.9	6197	94.41%	12	4	0.06%	35	789	12.04%	1 SPINDLE TWIST LEVEL 1	0.01%
5.0-5.2	291	4.44%	21	3910	59.64%	36	2081	31.75%	5 OTHER SIDE 2 OR MORE COLOR GRADES HIGHER	0.07%
			22	66	0.94%	37	3094	47.21%	6551 NO EXTRANEP	99.96%
			23	1	0.01%	38	582	8.88%		
			31	1354	20.66%	39	2	0.03%		
			32	72	1.09%	40	2	0.03%		
			33	44	0.67%	42	2	0.03%		
			41	18	0.27%					
			42	13	0.19%					
			43	3	0.04%					
			51	3	0.04%					
			52	9	0.12%					
			53	1	0.01%					
			54	7	0.10%					
			85	2	0.03%					

AVERAGE MIKE 4.39 AVG LEN(32ND) 36.53

6,553

TOTAL ORIGINAL BALES NOT REVIEWED OR REWORKED	6,553
TOTAL REVIEWED, NOT REWORKED	0
TOTAL REWORKED	0
TOTAL ORIGINAL BALES CLASSED	6,553
** AVERAGE LOAN	.0424

- roller gin per Grady Townsend, VSDA 7/20/17

Gin Number 926 HVI
STRATFORD GROWERS, INC.
P O, BOX 68
STRATFORD CA 93266

United States Department of Agriculture
Agricultural Marketing Service
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VISALIA CLASSING OFFICE
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Upland Cotton

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2010-2011

MIKE DISTRIBUTION		
2.7-2.9	1	0.06%
3.0-3.2	10	0.66%
3.3-3.4	28	1.86%
3.5-4.9	1452	97.14%

OFFICIAL COLOR DIST		
11	23	1.52%
12	11	0.73%
13	1	0.06%
21	683	45.38%
22	208	13.82%
23	11	0.73%
31	258	17.14%
32	169	11.22%
33	17	1.12%
41	54	3.58%
42	32	2.12%
43	11	0.73%
52	12	0.79%
53	15	0.99%

LENGTH(32ND) DISTRIB		
37	65	4.31%
38	584	38.80%
39	472	31.36%
40	189	12.55%
41	145	9.63%
42	50	3.32%

EXT MATT/REMARKS DISTRIBUTION	
1 BARK LEVEL 1	0.06%
3 GRASS LEVEL 1	0.19%
9 SPINDLE TWIST LEVEL 1	0.59%
3 OTHER SIDE @ GR MARK COLOR GRADES HIGHER	0.19%
1492 NO EXTRMATTER	99.13%

AVERAGE MIKE 4.33

AVG LEN(32ND) 38.94

TOTAL ORIGINAL BALES NOT REVIEWED OR REWORKED	1,505	1,505
TOTAL REVIEWED, NOT REWORKED	0	
TOTAL REWORKED	0	
TOTAL ORIGINAL BALES CLASSED	1,505	
** AVERAGE LOAN	.0400	

roller gin per Greg Townsend, USDA 7/20/17

Gin Number 7021 HVI
STRATFORD GROWERS, INC.
P O BOX 68
STRATFORD CA 93266

United States Department of Agriculture
Agricultural Marketing Service
Cotton Program
VISALIA CLASSING OFFICE
GINNER SUMMARY REPORT
Pima Cotton

Report Date 07/06/2011
Report Period 07/01/2010 - 06/30/2011
2010-2011

MIKE DISTRIBUTION			OFFICIAL COLOR DIST			LENGTH(2END) DISTRIB			EXT MATT/REMARKS DISTRIBUTION	
2.4-2.6	76	0.81%	01	4689	50.03%	44	44	0.47%	51 PREP LEVEL 1	0.54%
2.7-2.9	305	3.27%	02	4646	46.54%	46	1363	14.62%	82 BARK LEVEL 1	0.83%
3.0-3.2	676	7.25%	03	377	4.04%	48	6866	73.65%	36 GRASS LEVEL 1	0.38%
3.3-3.4	254	2.72%	04	82	0.83%	50	1044	11.19%	1 OTHER LEVEL 1	0.01%
3.5-4.5	6011	85.93%	05	2	0.02%				1 OTHER G10% 2 OR MORE COLOR GRADES HIGHER	0.01%
			06	6	0.06%				9812 NO EXTMATTER	98.01%

AVERAGE MIKE 3.73 AVG LEN(2END) 47.60

TOTAL ORIGINAL BALES NOT REVIEWED OR REWORKED	9,322 9,322
TOTAL REVIEWED, NOT REWORKED	0
TOTAL REWORKED	0
TOTAL ORIGINAL BALES CLASSED	9,322
## AVERAGE LOAN	+8054

saw gin per Greg Townsend USDA 7/20/17

United States Department of Agriculture
Agricultural Marketing Service
Cotton Program
VISALIA CLASSING OFFICE
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Upland Cotton

Gin Number 322 IVI
STRATFORD GROWERS, INC
19813 MADISON AVE
STRATFORD CA 93266

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2011-2012

MIKE DISTRIBUTION			OFFICIAL COLOR DIST			LENGTH(32ND) DISTRIB			EXT MATT/REMARKS DISTRIBUTION	
3.0-3.2	22	0.43%	11	1311	26.18%	34	160	3.19%	5007 NO EXTMATTER	100.00%
3.3-3.4	27	0.53%	21	2170	43.33%	35	1517	30.29%		
3.5-4.9	4293	85.73%	22	11	0.21%	36	2798	55.88%		
5.0-5.2	576	11.50%	23	1	0.01%	37	363	7.24%		
> 5.2	89	1.77%	31	1313	26.22%	38	161	3.21%		
			32	10	0.19%	39	2	0.03%		
			41	154	3.07%	40	4	0.07%		
			42	5	0.09%	41	1	0.01%		
			43	5	0.09%	42	1	0.01%		
			51	7	0.13%					
			52	20	0.39%					

AVERAGE MIKE 4.36 AVG LEN(32ND) 35.77

TOTAL ORIGINAL BALES NOT REVIEWED OR REWORKED	5,007
TOTAL REVIEWED, NOT REWORKED	0
TOTAL REWORKED	0
TOTAL ORIGINAL BALES CLASSED	5,007
** AVERAGE LOAN	+0366

5,007

roller gin per Greg Townsend, USDA 7/20/17

United States Department of Agriculture
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Upland Cotton

Gin Number 722 HVI
STRATFORD GROWERS, INC.
19813 MADISON AVE.
STRATFORD CA 93266

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2011-2012

MIKE DISTRIBUTION			OFFICIAL COLOR DIST			LENGTH(32ND) DISTRIB			EXT MATT/REMARKS DISTRIBUTION	
3.5-4.9	896	100.00%	21	398	44.41%	39	15	1.67%	896 NO EXTMATTER	100.00%
			31	478	53.34%	40	113	12.61%		
			32	11	1.22%	41	710	79.24%		
			33	1	0.11%	42	58	6.47%		
			41	8	0.89%					

AVERAGE MIKE 4.22 AVG LEN(32ND) 40.90

TOTAL ORIGINAL BALES NOT REVIEWED OR REWORKED	896
TOTAL REVIEWED, NOT REWORKED	0
TOTAL REWORKED	0
TOTAL ORIGINAL BALES CLASSED	896
** AVERAGE LOAN	+0501

896

rollergin per Greg Townsend, USDA 7/20/17

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Gin Number 722 HVI
STRATFORD GROWERS, INC.
19813 MADISON AVE.
STRATFORD CA 93266

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2011 - 2012

MIKE DISTRIBUTION			OFFICIAL COLOR DIST			LENGTH(32ND) DISTRIB			EXT MATT/REMARKS DISTRIBUTION	
2.7-2.9	86	0.55%	01	6681	42.99%	44	9	0.05%	324 PREP LEVEL 1	2.08%
3.0-3.2	276	1.77%	02	7154	46.04%	46	1665	10.71%	50 BARK LEVEL 1	0.32%
3.3-3.4	414	2.66%	03	1285	8.27%	48	12385	79.70%	11 GRASS LEVEL 1	0.07%
3.5-4.9	14761	94.99%	04	310	1.99%	50	1476	9.49%	33 SPINDLE TWIST LEVEL 1	0.21%
5.0-5.2	1	0.00%	05	88	0.56%				14 REDDER THAN NORMAL	0.09%
			06	20	0.12%				15120 NO EXTMATTER	97.30%

AVERAGE MIKE 3.91

AVG LEN(32ND) 47.96

TOTAL ORIGINAL BALES NOT REVIEWED OR REWORKED	15,538	15,538
TOTAL REVIEWED, NOT REWORKED	0	
TOTAL REWORKED	0	
TOTAL ORIGINAL BALES CLASSED	15,538	
** AVERAGE LOAN	+8008	

saw gin per Greg Townsend, USDA 7/20/17

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2012 - 2013

Gin Number 322 HVI
STRATFORD GROWERS, INC
19813 MADISON AVE
STRATFORD CA 93266

MIKE DISTRIBUTION			OFFICIAL COLOR DIST			LENGTH(32ND) DISTRIB			EXT MATT/REMARKS DISTRIBUTION	
< 2.4	2	0.04%	11	2266	52.42%	34	363	8.39%	17 BARK LEVEL 1	0.39%
2.4-2.6	14	0.32%	12	38	0.87%	35	1240	28.69%	4305 NO EXTMATTER	99.60%
3.0-3.2	1	0.02%	13	2	0.04%	36	1234	28.55%		
3.5-4.9	3740	86.53%	21	1320	30.54%	37	1024	23.69%		
5.0-5.2	550	12.72%	22	89	2.05%	38	460	10.64%		
> 5.2	15	0.34%	23	3	0.06%	39	1	0.02%		
			31	473	10.94%					
			32	77	1.78%					
			33	13	0.30%					
			41	20	0.46%					
			42	17	0.39%					
			43	1	0.02%					
			44	1	0.02%					
			54	2	0.04%					

AVERAGE MIKE 4.51 AVG LEN(32ND) 35.99

TOTAL ORIGINAL BALES NOT REVIEWED OR REWORKED	4,322	4,322
TOTAL REVIEWED, NOT REWORKED	0	
TOTAL REWORKED	0	
TOTAL ORIGINAL BALES CLASSED	4,322	
** AVERAGE LOAN	+0425	

roller gin per Greg Townsend, USDA 7/20/2017

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Gin Number 722 HVI
STRATFORD GROWERS, INC.
19813 MADISON AVE.
STRATFORD CA 93266

Report Date 07/01/2013
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2012 - 2013

MIKE DISTRIBUTION			OFFICIAL COLOR DIST			LENGTH(32ND) DISTRIB			EXT MATT/REMARKS DISTRIBUTION		
3.5-4.9	937	97.60%	11	356	37.08%	36	1	0.10%	1 PREP LEVEL 1		0.10%
5.0-5.2	23	2.39%	12	2	0.20%	37	27	2.81%	1 OTHER SIDE 2 OR MORE COLOR GRADES HIGHER		0.10%
			13	1	0.10%	38	41	4.27%	959 NO EXTMATTER		99.80%
			21	514	53.54%	39	1	0.10%			
			22	16	1.66%	40	506	52.70%			
			31	57	5.93%	41	380	39.58%			
			32	2	0.20%	42	3	0.31%			
			41	6	0.62%	44	1	0.10%			
			43	4	0.41%						
			52	1	0.10%						
			53	1	0.10%						

AVERAGE MIKE 4.07

AVG LEN(32ND) 40.23

TOTAL ORIGINAL BALES NOT REVIEWED OR REWORKED	960 960
TOTAL REVIEWED, NOT REWORKED	0
TOTAL REWORKED	0
TOTAL ORIGINAL BALES CLASSED	960
** AVERAGE LOAN	+0594

roller gin per Greg Townsend, USDA 7/20/17

United States Department of Agriculture
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VISALIA CLASSING OFFICE
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Pima Cotton

Gin Number 722 HVI
STRATFORD GROWERS, INC.
19813 MADISON AVE.
STRATFORD CA 93266

Report Date 07/01/2013
Report Period 07/01/2012 - 06/30/2013
2012 - 2013

MIKE DISTRIBUTION			OFFICIAL COLOR DIST			LENGTH(32ND) DISTRIB			EXT MATT/REMARKS DISTRIBUTION		
2.7-2.9	85	0.51%	01	12912	78.58%	44	229	1.39%	168	PREP LEVEL 1	1.02%
3.0-3.2	318	1.93%	02	3227	19.64%	46	2034	12.37%	3	BARK LEVEL 1	0.01%
3.3-3.4	355	2.16%	03	213	1.29%	48	12131	73.83%	160	GRASS LEVEL 1	0.97%
3.5-4.9	15672	95.38%	04	27	0.16%	50	2031	12.36%	22	SPINDLE TWIST LEVEL 1	0.13%
			05	29	0.17%				1	OTHER SIDE 2 OR MORE COLOR GRADES HIGHER	0.00%
			06	17	0.10%				16077	NO EXTMATTER	97.85%
			07	5	0.03%						

AVERAGE MIKE 3.89 AVG LEN(32ND) 47.92

TOTAL ORIGINAL BALES NOT REVIEWED OR REWORKED	16,430
TOTAL REVIEWED, NOT REWORKED	0
TOTAL REWORKED	0
TOTAL ORIGINAL BALES CLASSED	16,430
** AVERAGE LOAN	+8078

16,430

STRATFORD GROWERS, INC.
19813 MADISON AVE
STRATFORD CA 93266

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2013-2014

MIKE DISTRIBUTION			OFFICIAL COLOR DIST			LENGTH(32ND) DISTRIB			EXT MATT/REMARKS DISTRIBUTION	
3.5-4.9	322	58.54%	11	373	67.81%	34	143	26.00%	550 NO EXTMATTER	100.00%
5.0-5.8	228	41.45%	12	22	4.00%	35	332	60.36%		
			21	151	27.45%	36	75	13.63%		
			22	2	0.36%					
			31	2	0.36%					

AVERAGE MIKE 4.88 AVG LEN(32ND) 34.87

TOTAL ORIGINAL BALES NOT REVIEWED OR REWORKED	550
TOTAL REVIEWED, NOT REWORKED	0
TOTAL REWORKED	0
TOTAL ORIGINAL BALES CLASSED	550
** AVERAGE LOAN	+0274

550

saw ginner
Greg Townsend, USDA
7/20/2017

Gin Number 322 HVI

United States Department of Agriculture
Agricultural Marketing Service

Saw gin per Greg Townsend, USDA 7/20/2017

Gin Number 322 HVI
STRATFORD GROWERS, INC.
19813 MADISON AVE
STRATFORD CA 93266

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2013 - 2014

MIKE DISTRIBUTION			OFFICIAL COLOR DIST			LENGTH(32ND) DISTRIB			EXT MATT/REMARKS DISTRIBUTION		
3.5-4.9	16	100.00%	01	16	100.00%	46	16	100.00%	16 NO EXTMATTER		100.00%
AVERAGE MIKE 3.66						AVG LEN(32ND) 46.00					

TOTAL ORIGINAL BALES NOT REVIEWED OR REWORKED	16
TOTAL REVIEWED, NOT REWORKED	0
TOTAL REWORKED	0
TOTAL ORIGINAL BALES CLASSED	16
** AVERAGE LOAN	+8240

16

roller gin, per Greg Townsend, VSOM 7/30/2014

Gin Number 722 HVI
STRATFORD GROWERS, INC.
19813 MADISON AVE.
STRATFORD CA 93266

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2013 - 2014

MIKE DISTRIBUTION			OFFICIAL COLOR DIST			LENGTH(32ND) DISTRIB			EXT MATT/REMARKS DISTRIBUTION		
3.0-3.2	184	1.77%	01	6642	64.17%	44	46	0.44%	42	GRASS LEVEL 1	0.40%
3.3-3.4	214	2.06%	02	3466	33.48%	46	1741	16.82%	1	SEED COAT FRAGMENTS LEVEL1	0.00%
3.5-4.9	9952	96.15%	03	230	2.22%	48	8417	81.32%	8	SPINDLE TWIST LEVEL 1	0.07%
			04	12	0.11%	50	146	1.41%	1	OTHER LEVEL 1	0.00%
									10298	NO EXTMATTER	99.49%

AVERAGE MIKE 3.84 AVG LEN(32ND) 47.67

TOTAL ORIGINAL BALES NOT REVIEWED OR REWORKED	10,350 10,350
TOTAL REVIEWED, NOT REWORKED	0
TOTAL REWORKED	0
TOTAL ORIGINAL BALES CLASSED	10,350
** AVERAGE LOAN	+8187

saw gin per Greg Townsend, USDA 7/20/17

United States Department of Agriculture
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Gin Number 38[illegible] -VI
STRATFORD GROWERS, INC.
19813 MADISON AVE
STRATFORD CA 93266

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2014-2015

MIKE DISTRIBUTION				OFFICIAL COLOR DIST				LENGTH(32ND) DISTRIB				EXT MATT/REMARKS DISTRIBUTION		
3 5-4 9	249	85	56%	11	275	94	84%	34	0	0	0%	291 NO EXTRANEOUS	100 00%	
5 0-5 2	42	14	43%	21	12	4	12%	38	139	47	76%			
				31	1	0	34%	40	93	31	72%			
				41	1	0	34%	37	57	19	58%			
				43	1	0	34%							

AVERAGE MIKE 4 48 AVG LEN(32ND) 35 70

TOTAL ORIGINAL BALES NOT REVIEWED OR REWORKED	291
TOTAL REVIEWED, NOT REWORKED	0
TOTAL REWORKED	0
TOTAL ORIGINAL BALES CLASSED	291
** AVERAGE LOAN	+0430

saw gin per Greg Townsend, VSalt 7/20/2017

United States Department of Agriculture
Agricultural Marketing Service
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Gin Number 345 HVJ
STRATFORD GROWERS INC
19813 MADISON AVE
STRATFORD CA 93266

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Report Date 07/06/2015
Report Period 07/01/2014 - 06/30/2015
2014-2015

MIKE DISTRIBUTION			OFFICIAL COLOR DIST			LENGTH(32ND) DISTRIB			EXT MATT/REMARKS DISTRIBUTION		
3.5-4.5	136	100.00%	01	132	97.05%	44	100	73.53%	871 NO EXTMATTER	197	26%
			02	4	2.94%	46	36	26.47%			
AVERAGE MIKE 3.97						AVG LEN(32ND) 44.52					

TOTAL ORIGINAL BALES NOT REVIEWED OR REWORKED	136
TOTAL REVIEWED, NOT REWORKED	0
TOTAL REWORKED	0
TOTAL ORIGINAL BALES CLASSED	136
AF AVERAGE LOAN	0.00

136

roller gin per Greg Townsend, USDA 7/20/17

United States Department of Agriculture
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Pima Cotton

Gin Number 774 Hot
STRATFORD GROWERS, INC
19613 MADISON AVE
STRATFORD CA 93266

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Report Date 07/06/2015
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2014-2015

MIKE DISTRIBUTION			OFFICIAL COLOR DIST			LENGTH(32ND) DISTRIB			EXT MATT/REMARKS DISTRIBUTION	
3 OR 3 2	20	0.67%	01	3604	73.66%	36	1	0.02%	1 PREP LEVEL 1	0.08%
3 3-3 4	111	2.27%	02	920	18.85%	44	5	0.10%	4 GRASS LEVEL 1	0.08%
3 5-4 9	4740	97.15%	03	169	3.45%	48	600	12.29%	22 SPINDLE TWIST LEVEL 1	0.45%
			04	94	1.92%	48	3815	78.19%	19 OTHER LEVEL 1	0.38%
			05	71	1.45%	50	456	9.38%	2 OTHER SIDE 2 OR MORE COLOR GRADED HIGHER	0.04%
			06	20	0.40%				4833 NO EXTMATTER	99.05%
			07	1	0.02%					
AVERAGE MIKE 3.84						AVG LEN(32ND) 47.93				

TOTAL ORIGINAL BALES NOT REVIEWED OR REWORKED	4,878	4,878
TOTAL REVIEWED, NOT REWORKED	1	
TOTAL REWORKED	0	
TOTAL ORIGINAL BALES CLASSED	4,879	
** AVERAGE LOAN	+8060	

Stratford Growers, Inc.

Year	Bales	Start Date	End Date	Propane Gal
2006	18,943	11/13/2006	4/5/2007	113,469
2007	22,579	10/13/2007	1/29/2008	135,248
2008	8,828	11/3/2008	12/4/2008	52,880
2009	6,803	11/2/2009	12/3/2009	46,750
2010	17,380	10/29/2010	2/3/2011	104,106
2011	21,441	10/20/2011	1/18/2012	128,432
2012	21,712	10/16/2012	1/15/2013	130,250
2013	~~11,092~~ 10,916	10/29/2013	12/9/2013	75,017
2014	5,131	11/6/2014	12/16/2014	30,734
2015	0 ~~1,710~~	11/2/2015	11/8/2015	10,243

Attachment D

GHG Emission Factors (EFs) and Global Warming Potentials (GWP)

ELECTRONIC CODE OF FEDERAL REGULATIONS

e-CFR data is current as of June 28, 2017

Title 40 → Chapter I → Subchapter C → Part 98 → Subpart C → Appendix

Title 40: Protection of Environment
PART 98—MANDATORY GREENHOUSE GAS REPORTING
Subpart C—General Stationary Fuel Combustion Sources

TABLE C-1 TO SUBPART C OF PART 98—DEFAULT CO_2 EMISSION FACTORS AND HIGH HEAT VALU OF FUEL

Link to an amendment published at 81 FR 89252, Dec. 9, 2016.

DEFAULT CO_2 EMISSION FACTORS AND HIGH HEAT VALUES FOR VARIOUS TYPE

Fuel type	Default high heat value
Coal and coke	mmBtu/short ton
Anthracite	25.09
Bituminous	24.93
Subbituminous	17.25
Lignite	14.21
Coal Coke	24.80
Mixed (Commercial sector)	21.39
Mixed (Industrial coking)	26.28
Mixed (Industrial sector)	22.35
Mixed (Electric Power sector)	19.73
Natural gas	mmBtu/scf
(Weighted U.S. Average)	1.026×10^{-3}
Petroleum products	mmBtu/gallon
Distillate Fuel Oil No. 1	0.139
Distillate Fuel Oil No. 2	0.138
Distillate Fuel Oil No. 4	0.146
Residual Fuel Oil No. 5	0.140
Residual Fuel Oil No. 6	0.150
Used Oil	0.138
Kerosene	0.135
Liquefied petroleum gases (LPG)[1]	0.092
Propane[1]	0.091
Propylene[2]	0.091

Ethane[1]	0.068
Ethanol	0.084
Ethylene[2]	0.058
Isobutane[1]	0.099
Isobutylene[1]	0.103
Butane[1]	0.103
Butylene[1]	0.105
Naphtha (<401 deg F)	0.125
Natural Gasoline	0.110
Other Oil (>401 deg F)	0.139
Pentanes Plus	0.110
Petrochemical Feedstocks	0.125
Petroleum Coke	0.143
Special Naphtha	0.125
Unfinished Oils	0.139
Heavy Gas Oils	0.148
Lubricants	0.144
Motor Gasoline	0.125
Aviation Gasoline	0.120
Kerosene-Type Jet Fuel	0.135
Asphalt and Road Oil	0.158
Crude Oil	0.138
Other fuels—solid	mmBtu/short ton
Municipal Solid Waste	9.95[3]
Tires	28.00
Plastics	38.00
Petroleum Coke	30.00
Other fuels—gaseous	mmBtu/scf
Blast Furnace Gas	0.092×10^{-3}
Coke Oven Gas	0.599×10^{-3}
Propane Gas	2.516×10^{-3}
Fuel Gas[4]	1.388×10^{-3}
Biomass fuels—solid	mmBtu/short ton
Wood and Wood Residuals (dry basis)[5]	17.48
Agricultural Byproducts	8.25
Peat	8.00
Solid Byproducts	10.39
Biomass fuels—gaseous	mmBtu/scf
Landfill Gas	0.485×10^{-3}
Other Biomass Gases	0.655×10^{-3}
Biomass Fuels—Liquid	mmBtu/gallon
Ethanol	0.084
Biodiesel (100%)	0.128
Rendered Animal Fat	0.125
Vegetable Oil	0.120

[1]The HHV for components of LPG determined at 60 °F and saturation pressure with the exce

[2]Ethylene HHV determined at 41 °F (5 °C) and saturation pressure.

[3]Use of this default HHV is allowed only for: (a) Units that combust MSW, do not generate ste use Tier 1; (b) units that derive no more than 10 percent of their annual heat input from MSW and batch incinerators that combust no more than 1,000 tons of MSW per year.

[4]Reporters subject to subpart X of this part that are complying with §98.243(d) or subpart Y o the default HHV and the default CO_2 emission factor for fuel gas combustion under the conditions (2)(i) and (d)(2)(ii) and §98.252(a)(1) and (a)(2), respectively. Otherwise, reporters subject to subp use either Tier 3 (Equation C-5) or Tier 4.

[5]Use the following formula to calculate a wet basis HHV for use in Equation C-1: $HHV_w = ((1C$ where HHV_w = wet basis HHV, M = moisture content (percent) and HHV_d = dry basis HHV from T

[78 FR 71950, Nov. 29, 2013]

ELECTRONIC CODE OF FEDERAL REGULATIONS

e-CFR data is current as of June 28, 2017

Title 40 → Chapter I → Subchapter C → Part 98 → Subpart C → Appendix

Title 40: Protection of Environment
PART 98—MANDATORY GREENHOUSE GAS REPORTING
Subpart C—General Stationary Fuel Combustion Sources

TABLE C-2 TO SUBPART C OF PART 98—DEFAULT CH_4 AND N_2O EMISSION FACTORS FOR VAR

Link to an amendment published at 81 FR 89252, Dec. 9, 2016.

Fuel type	Default CH_4 emission factor (kg CH_4/mmBtu)	Defau
Coal and Coke (All fuel types in Table C-1)	1.1×10^{-02}	1.6×10^{-0}
Natural Gas	1.0×10^{-03}	1.0×10^{-0}
Petroleum (All fuel types in Table C-1)	3.0×10^{-03}	6.0×10^{-0}
Fuel Gas	3.0×10^{-03}	6.0×10^{-0}
Municipal Solid Waste	3.2×10^{-02}	4.2×10^{-0}
Tires	3.2×10^{-02}	4.2×10^{-0}
Blast Furnace Gas	2.2×10^{-05}	1.0×10^{-0}
Coke Oven Gas	4.8×10^{-04}	1.0×10^{-0}
Biomass Fuels—Solid (All fuel types in Table C-1, except wood and wood residuals)	3.2×10^{-02}	4.2×10^{-0}
Wood and wood residuals	7.2×10^{-03}	3.6×10^{-0}
Biomass Fuels—Gaseous (All fuel types in Table C-1)	3.2×10^{-03}	6.3×10^{-0}
Biomass Fuels—Liquid (All fuel types in Table C-1)	1.1×10^{-03}	1.1×10^{-0}

Note: Those employing this table are assumed to fall under the IPCC definitions of the "Energ "Manufacturing Industries and Construction". In all fuels except for coal the values for these two c For coal combustion, those who fall within the IPCC "Energy Industry" category may employ a val

[78 FR 71952, Nov. 29, 2013]

Need assistance?

Attachment E

Draft ERC Certificates

San Joaquin Valley
Air Pollution Control District

Central Regional Office • 1990 E. Gettysburg Ave. • Fresno, CA 93726

Emission Reduction Credit Certificate

C1171039-90-1

ISSUED TO: STRATFORD GROWERS INC.

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: 19813 MADISON AVE
STRATFORD, CA 93266

For VOC Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
4 lbs	None	None	44 lbs

Method Of Reduction

[X] Shutdown of Entire Stationary Source
[ ] Shutdown of Emissions Units
[ ] Other

The shutdown of cotton gin

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

San Joaquin Valley
Air Pollution Control District

Central Regional Office • 1990 E. Gettysburg Ave. • Fresno, CA 93726

Emission Reduction Credit Certificate

C1171039-90-2

DRAFT

ISSUED TO: STRATFORD GROWERS INC.

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: 19813 MADISON AVE
STRATFORD, CA 93266

For NOx Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
107 lbs	None	None	1,195 lbs

Method Of Reduction

[X] Shutdown of Entire Stationary Source
[ ] Shutdown of Emissions Units
[ ] Other

The shutdown of cotton gin

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

Jul 26 2017 5:09PM – GILLESR

San Joaquin Valley
Air Pollution Control District

Central Regional Office • 1990 E. Gettysburg Ave. • Fresno, CA 93726

Emission Reduction Credit Certificate

C1171039-90-3

ISSUED TO: STRATFORD GROWERS INC.

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: 19813 MADISON AVE
STRATFORD, CA 93266

For CO Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
15 lbs	None	None	168 lbs

Method Of Reduction

[X] Shutdown of Entire Stationary Source
[ ] Shutdown of Emissions Units
[ ] Other

The shutdown of cotton gin

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

San Joaquin Valley
Air Pollution Control District

Central Regional Office • 1990 E. Gettysburg Ave. • Fresno, CA 93726

Emission Reduction Credit Certificate

C1171039-90-4

DRAFT

ISSUED TO: STRATFORD GROWERS INC.

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: 19813 MADISON AVE
STRATFORD, CA 93266

For PM10 Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
828 lbs	None	None	9,223 lbs

Portion of above PM10 Reductions that is PM2.5:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
1.9%	1.9%	1.9%	1.9%
16 lbs	None	None	175 lbs

Method Of Reduction

[X] Shutdown of Entire Stationary Source
[ ] Shutdown of Emissions Units
[ ] Other

The shutdown of cotton gin

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

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Emission Reduction Credit Certificate

C1171039-90-5

ISSUED TO: STRATFORD GROWERS INC.

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: 19813 MADISON AVE
STRATFORD, CA 93266

For SOx Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
12 lbs	None	None	130 lbs

Method Of Reduction

[X] Shutdown of Entire Stationary Source
[ ] Shutdown of Emissions Units
[ ] Other

The shutdown of cotton gin

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

San Joaquin Valley
Air Pollution Control District

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Emission Reduction Credit Certificate

C1171039-90-24

DRAFT

ISSUED TO: STRATFORD GROWERS INC.

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: 19813 MADISON AVE
STRATFORD, CA 93266

For CO2E Reductions In The Amount Of:

598 metric tons / year

Method Of Reduction

[X] Shutdown of Entire Stationary Source
[ ] Shutdown of Emissions Units
[ ] Other

The shutdown of cotton gin

Emission Reduction Qualification Criteria

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

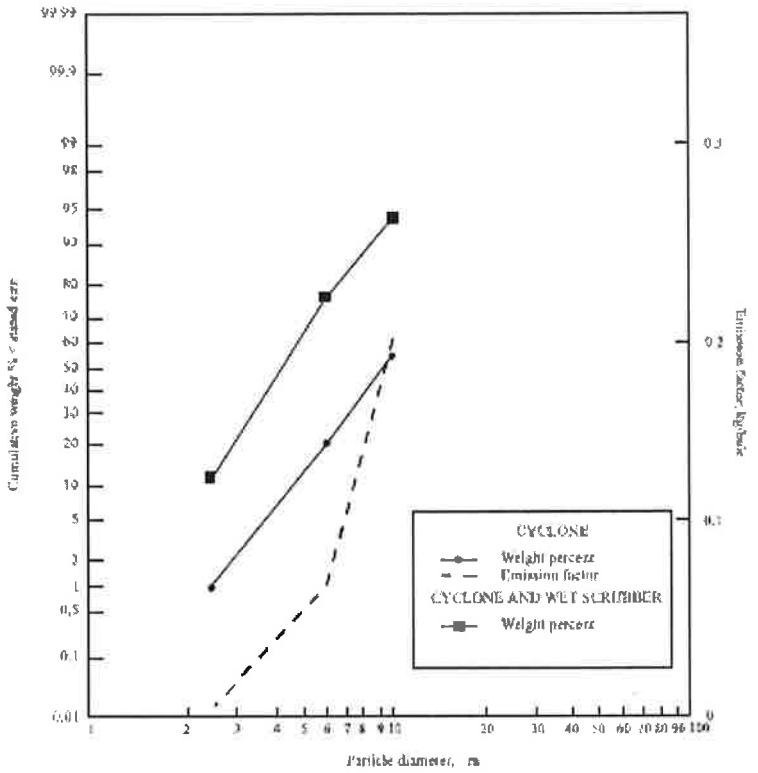
Jul 26 2017 5:09PM – GILLESR

Attachment F

$PM_{2.5}$ Fraction

$PM_{2.5}$ Fraction from EPA AP-42 Section 9.7 Appendix B-1

9.7 COTTON GINNING: LINT CLEANER AIR EXHAUST



Aerodynamic particle diameter, m	Cumulative wt. % < stated size		Emission factor, kg/bale
	After cyclone	After cyclone & wet scrubber	Controlled with fabric filter
2.5	1	11	0.004
6.0	20	74	0.07
10.0	54	92	0.20

Lint cleaners are the largest source of emissions from the cotton ginning process. Therefore, the $PM_{2.5}$ fraction of the PM_{10} from lint cleaners is representative of the $PM_{2.5}$ fraction from the entire cotton gin. Based on the data in the chart above, the final $PM_{2.5}$ fraction is calculated to be:

$$PM_{2.5}Fraction = \frac{\frac{1\ lb\ PM_{2.5}}{lb\ PM}}{\frac{54\ lb\ PM_{10}}{lb\ PM}} x\ 100\% = 1.851\ \rightarrow 1.9\% \frac{PM_{2.5}}{PM_{10}}$$