San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

OCT 14 2014

Rosemarie Dowdle
Tri-City Growers, Inc
18897 Ave 96
Terra Bella, CA 93720

Re: Notice of Preliminary Decision – Emission Reduction Credits
Facility Number: C-517
Project Number: C-1142416

Dear Ms. Dowdle:

Enclosed for your review and comment is the District's analysis of Tri-City Growers, Inc's application for Emission Reduction Credits (ERCs) resulting from the shutdown of the cotton gin, at 18897 Ave 96, Terra Bella, CA 93720. The quantity of ERCs proposed for banking is 283 lb-NOx/yr, 8 lb-SOx/yr, 8,869 lb-PM10/yr, 57 lb-CO/yr, 17 lb-VOC/yr and 167 metric tons CO2e/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. George Heinen of Permit Services at (559) 230- 5811.

Sincerely,

Arnaud Marjollet
Director of Permit Services

AM:gh

Enclosures

cc: Mike Tollstrup, CARB (w/enclosure) via email
cc: Gerardo C. Rios, EPA (w/enclosure) via email

Seyed Sadredin
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Emission Reduction Credit Banking Application Review

Shutdown of a Cotton Ginning Operation

Facility Name:	Tri-City Growers, Inc.	**Processing Engineer:**	G. Heinen
Mailing Address:	18897 Ave 96 Terra Bella, CA 93270	**Lead Engineer:** **Date:**	Brian Clements August 25, 2014

Primary Contact: Rosemarie Dowdle, Manager
Phone: (559) 784-0142
Email: rosemarie@tri-citygrowers.com

Facility Location: 18897 Ave 96
Terra Bella, CA 93270

Deemed Complete Date: June 18, 2014
Facility: S-517
Project Number: S-1142416

I. Summary:

Tri-City Growers, Inc. operated a cotton ginning facility in Terra Bella, CA. The facility was inspected on October 17, 2013 and was processing the 2013 cotton harvest at that time. On May 27, 2014, the District received an application from the operator who surrendered the Permit to Operate, S-517-1-5, for the cotton gin and requested Emission Reduction Credits for VOC, NOx, CO, PM10, SOx, and CO2e. A copy of the surrendered Permit to Operate (PTO) is attached (Attachment A) and the permit has been cancelled.

Based on the historical operating data prior to the shutdown, the amounts of bankable Actual Emission Reductions (AER) for the emissions are as shown in the table below. These values were calculated, according to the provisions of District Rules 2201 and 2301, as detailed in Section V of this document:

Bankable Emissions Reductions Credits (ERC)				
Pollutant	1st Qtr. ERC (lb/qtr)	2nd Qtr. ERC (lb/qtr)	3rd Qtr. ERC (lb/qtr)	4th Qtr. ERC (lb/qtr)
NOx	54	0	0	229
VOC	11	0	0	46
CO	3	0	0	14
PM10	1,694	0	0	7,175
SOx	2	0	0	6

The District has also proposed to issue the Greenhouse Gas (GHG) ERC for Carbon Dioxide equivalent (CO2e). The amount of bankable CO2e emissions, shown in the table below, was calculated, according to the provisions of District Rules 2201 and 2301, as detailed in Section V of this document:

Bankable GHG Emissions	
Pollutant	ERC metric tons/year
CO2e	167

II. Applicable Rules:

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

III. Location of Reductions:

Physical Location of Equipment: 18897 Ave 96 in Terra Bella, 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:

S-517-1-5: 20 MMBTU/HR COTTON GIN INCLUDING TWO WAGON SUCTIONS, SIX INCLINE CLEANERS, SIX LINT CLEANERS, TWO IMPACT CLEANERS, THREE SAW GIN STANDS, OVERFLOW SYSTEM, BATTERY CONDENSER, MOTES SYSTEM, MOTE PRESS, FIVE TOWER DRYERS, SIX GAS-FIRED HEATERS (3 MMBTU/HR EACH) SERVING THE TOWER DRYERS, ONE GAS-FIRED HUMIDIFIER (2 MMBTU/ HR), AND TWENTY-SIX 1D-3D CYCLONES

The gin was limited by permit condition to a ginning rate of 550 bales per day and 36,135 bales per year. The applicant surrendered their PTO on May 27, 2014 as part of the banking application submittal.

V. Calculations:

A. Assumptions

Particulate Emissions from Ginning Operation:

- Annual emissions will be rounded to the nearest pound in accordance with the District Policy APR-1105. GHG emissions will be rounded to the nearest metric ton/year.
- Daily ginning rate was limited to 550 bales/day, assuming 500 lb/bale (permit limit).
- Annual ginning rate was limited to 36,135 bales per year (permit limit).

- Based on applicant information for the operations from 2009 to 2013, see below, the typical operating schedule is 24 hours/day, 75 days per 4th quarter, and 25 days per 1st quarter per year, for an average total of 100 days per season.

Cotton Gin Operation Dates					
Season	**2009**	**2010**	**2011**	**2012**	**2013**
Start date	10/13/09	10/15/10	10/19/11	10/15/12	10/15/13
End date	12/17/09	2/3/11	2/15/12	1/22/13	1/21/14
4th Quarter days	66	78	74	78	78
1st Quarter days	0	34	46	22	21
No of Bales*	10,585	15,407	19,293	16,248	12,966

* Based on 500 lb/bale.

Natural Gas Combustion from Cotton Dryers:

- The cotton gin included six, 3.0 MMBtu/hr burners for the tower dryers and one 2.0 MMBtu/hr burner for the humidifier. All burners were fired on PUC-regulated natural gas.
- Natural gas higher heating value is 1,000 Btu/scf (typical District value)
- The CO2e emission factor from the combustion of natural gas includes GHG emissions of CO_2, CH_4 and N_2O, where the total emission factor includes the summation of each of the compounds multiplied by their Global Warming Potential (GWP)
- Conversion: 1,000 kg = 1 metric ton
- Conversion: 10 therms = 1 MMBtu of heat output (conversion factor received from Pacific Gas and Electric Company)
- The applicant provided the production and fuel use data for the last ten years which is shown in the following table. The information matches the available Emission Inventory data for that period.

Production and Fuel Use Data		
Year	**Bales Ginned**	**Natural Gas (Therms)**
2004	15,507	49,835
2005	11,677	37,012
2006	9,346	31,301
2007	9,661	27,879
2008	6,145	16,466
2009	10,585	21,678
2010	15,407	41,177
2011	19,293	43,916
2012	16,248	38,645
2013	12,966	21,431
Average	**12,684**	**32,934**

B. Emission Factors (EF)

Cotton Ginning Emissions

The current PTO includes a condition limiting PM10 emissions to 0.77 lb-PM_{10}/bale, (see Appendix A; permit condition 15).

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 (ERC) 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 no facility-specific source test data for this facility, so the most accurate EF information that exists is the 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 EFs from the CCGAH and the PTO are shown in the following table:

Comparison of 2010 CCGAH Emission Factors for Saw Gins and the Permitted Emissions Factors

System	Cyclone Design	CCGAH EFs (lb-PM_{10}/bale)	PTO EFs[1] (lb-PM_{10}/bale)	EF Used for Calculations (lb-PM_{10}/bale)
Unloading	1D-3D	0.11	0.11	0.11
#1 Pre-cleaner	1D-3D	0.11	0.11	0.11
#2 Pre-cleaner	1D-3D	0.09	0.08	0.09
#3 Pre-cleaner	1D-3D	0.08	0.09	0.08
Overflow	1D-3D	0.04	0.04	0.04
Gin Stand	1D-3D	0.08	0.09	0.08
Lint Cleaner	1D-3D	0.10	0.11	0.10
Motes	1D-3D	0.07	0.07	0.07
Motes transfer	1D-3D	0.00	0.02[2]	0.02
Motes cleaner trash	1D-3D	0.03	0.02	0.03
Battery Condenser	1D-3D	0.03	0.03	0.03
Total		0.74	0.77	0.76

[1] There are no site-specific source tests for this facility. The PTO EFs were based on the 2000 version of the CCGAH (See Project S-1030394), which was the most current information at the time.

[2] This EF is from Project S-1030394 for this facility. The CCGAH does not have specific source test data for a "Motes Transfer" cyclone.

As shown above, the total emissions factor for this cotton gin is 0.76 lb-PM_{10}/bale, based on the use of the best data in the CCGAH and the PTO EF for the motes transfer emission point. The total, facility-wide EF is 0.01 lb/bale less than the total specified on the current PTO. Therefore, the calculated emissions, used to determine the amount of ERCs available for banking, will be within the permitted facility-wide emissions limit.

Natural Gas Fuel Combustion:

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

Combustion of Natural Gas[1]	
Pollutants	**Natural Gas Emission Factors lb/MMBtu**
NO_x	0.1
CO	0.02
VOC	0.006
PM_{10}	0[2]
SO_x	0.003

[1] Emission Factors for Natural Gas obtained from a District letter, dated February 26, 2001, to Roger Isom, California Cotton Ginners Association.
[2] Since the dryers' combustion is discharged through the cyclones, the dryer PM_{10} emissions will be included with the source tested ginning cyclone emission factors.

The following natural gas EF were taken from EPA 40 CFR Part 98, Subpart C, Tables C-1 and C-2:

EF_{CO} = 53.02 kg-CO_2/MMBtu
EF_{CH4} = 0.001 kg-CH_4/MMBtu
EF_{N2O} = 0.0001 kg-N_20MMBtu

Carbon dioxide equivalents (CO2e) are found by multiplying the mass emissions of a GHG by its Global Warming Potentials (GWP). For combustion sources, GHG's include the following three "well-mixed" compounds: carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O). The District has adopted the following GWP per District Rule 2301 (*Emission Reduction Credit Banking*):

CO_2 = 1
CH_4 = 21
N_20 = 310

The GWP of CO_2, CH_4, and N_20 will be combined with the combustion emission factors into a single CO2e emission factor using the following equation:

CO2e EF = [(53.02 kg-CO_2/MMBtu x 1 lb-CO2e/lb-CO_2) + (0.001 kg-CH_4/MMBtu × 21 lb-CO2e/lb-CH_4) + (0.0001 kg-N_20/MMBtu × 310 lb-CO2e/lb-N_2O)]

CO2e EF = 53.07 kg/MMBtu (equivalent to 116.8 lb/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 application to bank the Emission Reduction Credits (ERCs) from the shutdown of the operation was received on May 27, 2014. Although the gin was in place and operable, it is a seasonable operation which the operator reports was last used on January 21, 2014, as shown in the table "Cotton Gin Operation Dates", in Section V. The time period immediately before the application was a period of non-operation, therefore, we cannot consider this period representative of normal source operation. A representative period from January 2009 through January 2014 will be used to represent the normal operation within the five-year period immediately prior to submission of the complete application.

Baseline Period Determination Data:

The ginning operation was 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 will be used to determine the normal source operation (NSO). Cotton throughput and natural gas usage was provided by the operator and is shown below. This data matches the information provided in the annual emissions inventory surveys for this period.

The difference between the two-year average and NSO was calculated using the following equation:

Difference = ((Year 1 Rate + Year 2 Rate) / 2) – 10-year Average Rate

For the 2009 and 2010 period, the difference was calculated as follows:

Difference = ((10,585 + 15,407) / 2) – 12,684
= 25,992/2 – 12,684
= 312 bales/year

The calculation was repeated for each of the two-year periods in the last five years and the results are shown on the following table:

Production Data			
Year	**Throughput (Bales/Year)**	**Natural Gas (Therms)**	**Difference between two-year average and NSO (bales/yr)**
2004	15,507	49,835	
2005	11,677	37,012	
2006	9,346	31,301	
2007	9,661	27,879	
2008	6,145	16,466	
2009	10,585	21,678	312
2010	15,407	41,177	4,666
2011	19,293	43,916	5,086
2012	16,248	38,645	1,923
2013	12,966	21,431	
10-year Averages	**12,684**	**32,934**	

For the five-years immediately preceding the shutdown, the period most closely matching the normal source operation ten-year average is 2009 – 2010.

- Based on the data shown in the table above, the average annual throughput during this period was 12,966 bales and the average annual natural gas consumption was 31,428 Therms/year.
- The PTO limited the production 36,135 bales/year and the calculated average throughput does not exceed the permitted amount.
- Natural gas consumption was not limited by a permit condition, so the calculated average does not exceed the permitted amount.
- During this period, the gin was operated an average of 72 days in the 4th quarter and 17 days in the 1st quarter, which is equivalent to 80.9% in the 4th quarter and 19.1% in the 1st quarter.

D. Historical Actual Emissions (HAEs) Calculations

The Historical Actual Emissions (HAEs) are calculated using the following equation and the emission factors and throughputs which were discussed above. Results are shown in the following tables:

$$HAE_{natural\ gas} = EF \times 31{,}428\ (therms/year) \times 1\ MMBtu / 10\ therms$$

$$HAE_{ginning} = EF \times 12{,}966\ bales/year$$

$$HAE_{GHG} = EF \times 31{,}428\ (therms/year) \times 1\ MMBtu / 10\ therms$$

Historical Actual Emissions ($HAE_{natural\ gas}$)				
Pollutant	**EF lb/MMBtu**	**Throughput therms/year**	**Conversion MMBtu/therms**	**HAE lb/year**
NO_x	0.1	31,428	10	314
CO	0.02	31,428	10	63
VOC	0.006	31,428	10	19
PM_{10}	0	31,428	10	0
SO_x	0.003	31,428	10	9

Historical Actual Emissions ($HAE_{ginning}$)			
Pollutant	**EF (lb PM10/bale)**	**Throughput (bales/year)**	**HAE lb/year**
PM10	0.76	12,966	9,854

Historical Actual Emissions (HAE_{GHG})				
Pollutant	**EF kg/MMBtu**	**Throughput therms/year**	**Conversion MMBtu/therms**	**HAE kg/year (metric tons/yr)**
CO2e	53.07	31,428	10	166,788 (167)

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. The PTO indicated that 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 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 AER, before the AER is eligible for banking. The AQID were calculated according to the following formula and results are showing in the table below:

AQID = AER x 10%

AQID Calculations		
Pollutant	**AER lb/year**	**AQID lb/year**
NO_x	314	31
CO	63	6
VOC	19	2
PM_{10}	9,854	985
SO_x	9	1
Pollutant	**AER metric ton/year**	**AQID metric ton/year**
CO2e	167	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

The emission reductions eligible for banking are the difference between the historical actual emissions and the potential to emit after the project. Since the post-project emissions = 0 for all pollutants, the emission reductions eligible for banking equals the HAE, minus the AQID.

The amount of Bankable AER was calculated according to the following formula and results are showing in the table below:

Bankable AER = AER - AQID

Bankable AER			
Pollutant	**AER lb/year**	**AQID lb/year**	**Bankable AER lb/yr**
NO_x	314	31	283
CO	63	6	57
VOC	19	2	17
PM_{10}	9,854	985	8,869
SO_x	9	1	8
Pollutant	**AER metric tons /year**	**AQID metric tons/year**	**Bankable AER metric tons/yr**
CO2e	167	0	167

- During the baseline period, the gin was operated an average of 72 days in the 4th quarter and 18 days in the 1st quarter, which is equivalent to 80.9 % in the 4th quarter and 19.1% in the 1st quarter. Therefore, the bankable ERC will be distributed to the first and fourth quarters according to the following equations:

$$AER_{4th\ Qtr} = \text{Bankable AER} \times 80.9\%/100$$

$$AER_{1st\ Qtr} = \text{Bankable AER} \times 19.1\%/100$$

Bankable AER by quarter			
Pollutant	**Bankable AER lb/yr**	**4th Quarter lb/year**	**1st Quarter lb/year**
NO_x	283	229	54
CO	57	46	11
VOC	17	14	3
PM_{10}	8,869	7,175	1,694
SO_x	8	6	2
Pollutant	**Bankable AER metric tons/yr**		
CO2e	167		

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 May

27, 2014. 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, quantifiable, and enforceable

Real:

The emission reductions were generated by the shutdown of a 20 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 are real.

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 therefore surplus to the requirements of the District 2003 PM10 plan and District Rule 4204.
- According to the attached records, the gin did not exceed the permitted baling rates and there were no limits on natural gas 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.

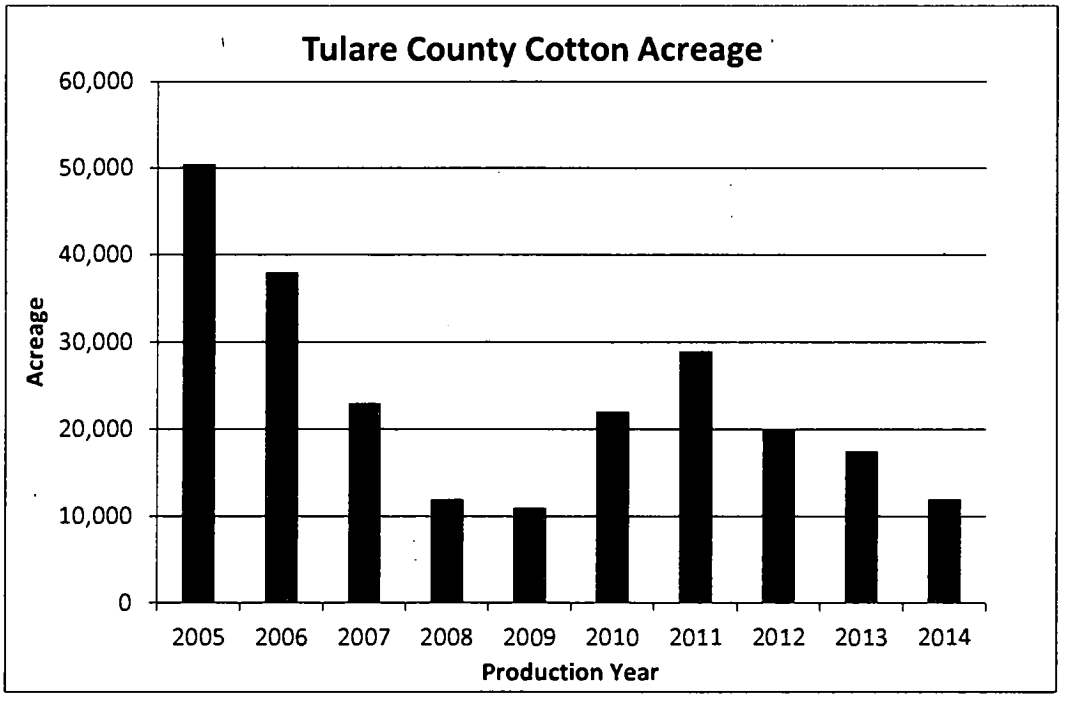
Therefore, the emission reductions satisfy the surplus requirement.

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, Tulare County cotton acreage 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.



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.

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 and the PTO was surrendered on May 27, 2014. 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 concurrently with the gin closure and is therefore considered timely.

Based on applicant information, the facility was last operated on January 21, 2014, so even if the last date of operation was considered to be the gin closure date, the application would still have been filed within 180 days.

Therefore, the emission reductions satisfy the timely submittal requirement of this section.

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 May 27, 2014, 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 18897 Ave 96 in Terra Bella, CA. This location is in Tulare County, which is 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 emission reductions must be real, surplus, permanent, quantifiable, and enforceable.

Real:

The emission reductions were generated by the shutdown of one 20 MMBtu/hr cotton gin. The 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 subsequently was subsequently surrendered to the District. The emissions reductions were calculated from actual historic production data and recognized emission factors. Therefore, the emission reductions are real.

Therefore, the emission reductions satisfy the real requirement.

Surplus:

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

- The 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 therefore surplus to the requirements of the District 2003 PM10 plan and District Rule 4204.
- According to the attached records, the gin did not exceed the permitted baling rates and there were no limits on natural gas 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 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.

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, Tulare County cotton acreage 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 emissions to a similar facility.

Therefore, the emission reductions satisfy the permanent requirement.

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.

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 4.5.4 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 processing 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 Authorities to Construct, as discussed above, the 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 application was received on May 27, 2014. The applicant surrendered the PTO and therefore permanently ceased operations at this location effective May 27, 2014. 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:

6.14 Greenhouse gas emission reductions shall be banked as metric tons of CO2E per year, rounded to the nearest metric ton.

The draft GHG ERC is identified as metric tons of CO2e 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 certificate to Tri-City Growers in accordance with the amounts specified on the draft ERC certificates in Attachment E.

Attachments:

Attachment A: Surrendered PTO S-517-1-5
Attachment B: ERC Application
Attachment C: Cotton Ginning Throughput and Natural Gas Usage Records
Attachment D: 40 CFR Part 98 GHG Emission Factors and Global Warming Potentials (GWP): Tables A-1, C-1 and C-2
Attachment E: Draft ERC Certificates

Attachment A

Surrendered PTO S-517-1-5

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-517-1-5 **EXPIRATION DATE:** 11/30/2014

SECTION: N 03 **TOWNSHIP:** 23S **RANGE:** 26E

EQUIPMENT DESCRIPTION:
20 MMBTU/HR COTTON GIN INCLUDING TWO WAGON SUCTIONS, SIX INCLINE CLEANERS, SIX LINT CLEANERS, TWO IMPACT CLEANERS, THREE SAW GIN STANDS, OVERFLOW SYSTEM, BATTERY CONDENSER, MOTES SYSTEM, MOTE PRESS, FIVE TOWER DRYERS, SIX GAS-FIRED HEATERS (3 MMBTU/HR EACH) SERVING THE TOWER DRYERS, ONE GAS-FIRED HUMIDIFIER (2 MMBTU/ HR), AND TWENTY-SIX 1D-3D CYCLONES

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. 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]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. All air pollution control equipment shall be maintained in good operating condition and shall be operated in accordance with the manufacturer's recommendations at all times. [District Rule 2201]
5. Unloading system shall be served by two 48 inch diameter 1D-3D cyclones. [District Rule 2201]
6. Incline cleaners shall be served by four 44 inch diameter 1D-3D cyclones (pre-cleaning #1) and eight 36 inch diameter 1D-3D cyclones (pre-cleaning #2 and #3). [District Rule 2201]
7. Overflow system shall be served by one 38 inch diameter 1D-3D cyclone. [District Rule 2201]
8. Gin stands shall be served by two 36 inch diameter 1D-3D cyclones. [District Rule 2201]
9. Lint cleaners shall be served by two 76 inch and one 80 inch diameter 1D-3D cyclones. [District Rule 2201]
10. Battery condenser and bale press shall be served by two 70 inch diameter 1D-3D cyclones. [District Rule 2201]
11. Motes system shall include four cyclones (two 70 inch 1D-3D diameter cyclones, one 28 inch diameter 1D-3D cyclone, and one 36 inch diameter 1D-3D cyclone), one motes cleaner, and one mote press. [District Rule 2201]
12. The District shall be notified of any breakdown conditions in accordance with Rule 1100 (Equipment Breakdown). [District Rule 1100]
13. Ginning production shall not exceed 550 bales/day. [District Rule 2201]
14. Ginning production shall not exceed 36,135 bales/season. [District Rule 2201]
15. PM10 emissions from entire gin shall not exceed 0.77 lb/bale. [District Rule 2201]
16. PM10 emissions from unloading stage shall not exceed 0.11 lb/bale. [District Rule 2201]
17. PM10 emissions from pre-cleaning #1 stage shall not exceed 0.11 lb/bale. [District Rule 2201]
18. PM10 emissions from pre-cleaning #2 stage shall not exceed 0.08 lb/bale. [District Rule 2201]
19. PM10 emissions from pre-cleaning #3 stage shall not exceed 0.09 lb/bale. [District Rule 2201]
20. PM10 emissions from overflow stage shall not exceed 0.04 lb/bale. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. PM10 emissions from gin stand stage shall not exceed 0.09 lb/bale. [District Rule 2201]
22. PM10 emissions from lint cleaning stage shall not exceed 0.11 lb/bale. [District Rule 2201]
23. PM10 emissions from motes stage (two 70" 1D-3D cyclones) shall not exceed 0.07 lb/bale. [District Rule 2201]
24. PM10 emissions from motes transfer stage (one 28" 1D-3D cyclone) shall not exceed 0.02 lb/bale. [District Rule 2201]
25. PM10 emissions from motes trash/cleaner stage (one 36" 1D-3D cyclone) shall not exceed 0.02 lb/bale. [District Rule 2201]
26. PM10 emissions from battery condenser and bale press stage shall not exceed 0.03 lb/bale. [District Rule 2201]
27. 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]
28. Permittee shall conduct daily visual inspections of the material handling systems for leaks, breaks, or other visible signs of equipment malfunctions. [District Rule 4204]
29. Permittee shall maintain a record of the daily inspections, including any equipment malfunctions discovered and corrective action taken to repair the malfunction, and any source test results. [District Rule 4204]
30. Permittee shall keep accurate records of operating schedule (in hours/day, days/week and weeks/year) and number of bales produced per day. [District Rule 1070]
31. Permittee shall keep accurate records of therms natural gas used and gallons of propane used. [District Rule 1070]
32. All records shall be retained on site for five years and made available to the District upon request. [District Rules 1070 and 4204]

Attachment B

ERC Application

Renewed

RECEIVED
MAY 27 2014
Permits Services
SJVAPCD

San Joaquin Valley Air Pollution Control District

Application for

[X] EMISSION REDUCTION CREDIT (ERC) [ ] CONSOLIDATION OF ERC CERTIFICATES

1. ERC TO BE ISSUED TO: TRI-CITY GROWERS, INC. Facility ID: S - 517-1-5 (if known)

2. MAILING ADDRESS: Street/P.O. Box: 18897 AVENUE 96

City: TERRA BELLA State: CA Zip Code: 93270

3. LOCATION OF REDUCTION:
Street: 18897 AVENUE 96
City: TERRA BELLA
____/4 SECTION N 03 TOWNSHIP 23S RANGE 26E

4. DATE OF REDUCTION: 1/21/2014

5. PERMIT NO(S): S-517-1-5 EXISTING ERC NO(S):

6. METHOD RESULTING IN EMISSION REDUCTION:

[X] SHUTDOWN [ ] RETROFIT [ ] PROCESS CHANGE [ ] OTHER

DESCRIPTION:

(Use additional sheets if necessary)

7. REQUESTED ERCs: (In pounds per calendar quarter except CO_2e)

	VOC	NOx	CO	PM_{10}	SOx	Other
1st Qtr						
2nd Qtr						
3rd Qtr						
4th Qtr	14.2	396.0	53.8	9006.2	9.9	

CO_2e 166.5 metric ton/yr

8. SIGNATURE OF APPLICANT: TYPE OR PRINT TITLE OF APPLICANT: MANAGER

9. TYPE OR PRINT NAME OF APPLICANT: ROSEMARIE DOWDLE

DATE: 5/21/14

PHONE #: 559-784-0142
CELL PHONE #:
FAX #: 559-784-1038
E-MAIL: rosemarie@tri-citygrowers.com

FOR APCD USE ONLY:

DATE STAMP RECEIVED MAY 29 2014 FINANCE SJVUAPCD

FILING FEE RECEIVED: $ 759.00 / chk # 22415
DATE PAID: 5/22/14
PROJECT NO.: S-1142416 FACILITY ID.: S-517

Attachment C

Cotton Ginning Throughput and Natural Gas 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: **Tri-City Growers, Inc.**
Gin Location: **18897 Avenue 96, Terra Bella, Tulare County, California**

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? **No**

   If "yes", please list the applicable Permit to Operate number(s): **PTO:S-517-1-5**

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: **1/21/14**

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	2009	2010	2011	2012	2013
Start MM/DD/YY	**10/13/09**	**10/15/10**	**10/19/11**	**10/15/12**	**10/15/13**
End MM/DD/YY	**12/17/09**	**2/3/11**	**2/15/12**	**1/22/13**	**1/21/14**
No. of Bales*	**10585**	**15407**	**19293**	**16248**	**12966**

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

(Please continue on other side)

Proposal for Emission Reduction Credits (ERCs) for the Shutdown of Tri-City Growers, Inc. located at 18897 Avenue 96, Terra Bella, California

Historical Production Data (Bales Ginned and Natural Gas Therms Used) -

PRODUCTION DATA		
Year	**Bales Ginned**	**Nat. Gas Therms**
2004	15507	49,835
2005	11677	37,012
2006	9346	31,301
2007	9661	27,879
2008	6145	16,466
2009	10585	21,678
2010	15407	41,177
2011	19293	43,916
2012	16248	38,645
2013	12966	21,431

Baseline Period –

Use the closest 2,3,4, or 5 year average that most closely matches the 10 year average to determine baseline bale production

2009-2010 = 12,996.0 bales/yr

Bales = (15,407 + 19,293)/2
Bales = 12,996.0

Therms Natural Gas consumed = 21,678 + 41,177)/2
Therms Natural Gas consumed = 31,427.5

Historical Actual Emissions (HAE) -

Cotton Gin Emission Factor -

As listed in permit condition No. 15 (PTO#: S-517-1-5), emissions from the saw portion of this gin are equal to 0.77 lbs. PM10/bale.

Attachment D

40 CFR Part 98 GHG Emission Factors and Global Warming Potentials (GWP): Tables A-1, C-1 and C-2

Title 40: Protection of Environment
PART 98—MANDATORY GREENHOUSE GAS REPORTING
Subpart A—General Provision

TABLE A-1 TO SUBPART A OF PART 98—GLOBAL WARMING POTENTIALS

GLOBAL WARMING POTENTIALS

[100-Year Time Horizon]

Name	CAS No.	Chemical formula	Global warming potential (100 yr.)
Carbon dioxide	124-38-9	CO_2	1
Methane	74-82-8	CH_4	[a]25
Nitrous oxide	10024-97-2	N_2O	[a]298
HFC-23	75-46-7	CHF_3	[a]14,800
HFC-32	75-10-5	CH_2F_2	[a]675
HFC-41	593-53-3	CH_3F	[a]92
HFC-125	354-33-6	C_2HF_5	[a]3,500
HFC-134	359-35-3	$C_2H_2F_4$	[a]1,100
HFC-134a	811-97-2	CH_2FCF_3	[a]1,430
HFC-143	430-66-0	$C_2H_3F_3$	[a]353
HFC-143a	420-46-2	$C_2H_3F_3$	[a]4,470
HFC-152	624-72-6	CH_2FCH_2F	53
HFC-152a	75-37-6	CH_3CHF_2	[a]124
HFC-161	353-36-6	CH_3CH_2F	12
HFC-227ea	431-89-0	C_3HF_7	[a]3,220
HFC-236cb	677-56-5	$CH_2FCF_2CF_3$	1,340
HFC-236ea	431-63-0	CHF_2CHFCF_3	1,370
HFC-236fa	690-39-1	$C_3H_2F_6$	[a]9,810
HFC-245ca	679-86-7	$C_3H_3F_5$	[a]693
HFC-245fa	460-73-1	$CHF_2CH_2CF_3$	1,030
HFC-365mfc	406-58-6	$CH_3CF_2CH_2CF_3$	794
HFC-43-10mee	138495-42-8	$CF_3CFHCFHCF_2CF_3$	[a]1,640
Sulfur hexafluoride	2551-62-4	SF_6	[a]22,800
Trifluoromethyl sulphur pentafluoride	373-80-8	SF_5CF_3	17,700

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 VALUES FOR VARIOUS TYPES OF FUEL

DEFAULT CO_2 EMISSION FACTORS AND HIGH HEAT VALUES FOR VARIOUS TYPES OF FUEL

Fuel type	Default high heat value	Default CO_2 emission factor
Coal and coke	mmBtu/short ton	kg CO_2/mmBtu
Anthracite	25.09	103.69
Bituminous	24.93	93.28
Subbituminous	17.25	97.17
Lignite	14.21	97.72
Coal Coke	24.80	113.67
Mixed (Commercial sector)	21.39	94.27
Mixed (Industrial coking)	26.28	93.90
Mixed (Industrial sector)	22.35	94.67
Mixed (Electric Power sector)	19.73	95.52
Natural gas	mmBtu/scf	kg CO_2/mmBtu
(Weighted U.S. Average)	1.026×10^{-3}	53.06
Petroleum products	mmBtu/gallon	kg CO_2/mmBtu
Distillate Fuel Oil No. 1	0.139	73.25
Distillate Fuel Oil No. 2	0.138	73.96
Distillate Fuel Oil No. 4	0.146	75.04
Residual Fuel Oil No. 5	0.140	72.93
Residual Fuel Oil No. 6	0.150	75.10
Used Oil	0.138	74.00
Kerosene	0.135	75.20
Liquefied petroleum gases (LPG)[1]	0.092	61.71
Propane[1]	0.091	62.87
Propylene[2]	0.091	67.77
Ethane[1]	0.068	59.60
Ethanol	0.084	68.44
Ethylene[2]	0.058	65.96
Isobutane[1]	0.099	64.94

Isobutylene[1]	0.103	68.86
Butane[1]	0.103	64.77
Butylene[1]	0.105	68.72
Naphtha (<401 deg F)	0.125	68.02
Natural Gasoline	0.110	66.88
Other Oil (>401 deg F)	0.139	76.22
Pentanes Plus	0.110	70.02
Petrochemical Feedstocks	0.125	71.02
Petroleum Coke	0.143	102.41
Special Naphtha	0.125	72.34
Unfinished Oils	0.139	74.54
Heavy Gas Oils	0.148	74.92
Lubricants	0.144	74.27
Motor Gasoline	0.125	70.22
Aviation Gasoline	0.120	69.25
Kerosene-Type Jet Fuel	0.135	72.22
Asphalt and Road Oil	0.158	75.36
Crude Oil	0.138	74.54
Other fuels—solid	mmBtu/short ton	kg CO_2/mmBtu
Municipal Solid Waste	9.95[3]	90.7
Tires	28.00	85.97
Plastics	38.00	75.00
Petroleum Coke	30.00	102.41
Other fuels—gaseous	mmBtu/scf	kg CO_2/mmBtu
Blast Furnace Gas	0.092×10^{-3}	274.32
Coke Oven Gas	0.599×10^{-3}	46.85
Propane Gas	2.516×10^{-3}	61.46
Fuel Gas[4]	1.388×10^{-3}	59.00
Biomass fuels—solid	mmBtu/short ton	kg CO_2/mmBtu
Wood and Wood Residuals (dry basis)[5]	17.48	93.80
Agricultural Byproducts	8.25	118.17
Peat	8.00	111.84
Solid Byproducts	10.39	105.51
Biomass fuels—gaseous	mmBtu/scf	kg CO_2/mmBtu
Landfill Gas	0.485×10^{-3}	52.07
Other Biomass Gases	0.655×10^{-3}	52.07
Biomass Fuels—Liquid	mmBtu/gallon	kg CO_2/mmBtu
Ethanol	0.084	68.44
Biodiesel (100%)	0.128	73.84
Rendered Animal Fat	0.125	71.06
Vegetable Oil	0.120	81.55

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

[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 steam, and are allowed to use Tier 1; (b) units that derive no more than 10 percent of their annual heat input from MSW and/or tires; and (c) small 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 of this part may only use the default HHV and the default CO_2 emission factor for fuel gas combustion under the conditions prescribed in §98.243(d)(2)(i) and (d)(2)(ii) and §98.252(a)(1) and (a)(2), respectively. Otherwise, reporters subject to subpart X or subpart Y shall 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: $HHV_w = ((100 - M)/100)*HHV_d$ where HHV_w = wet basis HHV, M = moisture content (percent) and HHV_d = dry basis HHV from Table C-1.

[78 FR 71950, Nov. 29, 2013]

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 VARIOUS TYPES OF FUEL

Fuel type	Default CH_4 emission factor (kg CH_4/mmBtu)	Default N_2O emission factor (kg N_2O/mmBtu)
Coal and Coke (All fuel types in Table C-1)	1.1×10^{-02}	1.6×10^{-03}
Natural Gas	1.0×10^{-03}	1.0×10^{-04}
Petroleum (All fuel types in Table C-1)	3.0×10^{-03}	6.0×10^{-04}
Fuel Gas	3.0×10^{-03}	6.0×10^{-04}
Municipal Solid Waste	3.2×10^{-02}	4.2×10^{-03}
Tires	3.2×10^{-02}	4.2×10^{-03}
Blast Furnace Gas	2.2×10^{-05}	1.0×10^{-04}
Coke Oven Gas	4.8×10^{-04}	1.0×10^{-04}
Biomass Fuels—Solid (All fuel types in Table C-1, except wood and wood residuals)	3.2×10^{-02}	4.2×10^{-03}
Wood and wood residuals	7.2×10^{-03}	3.6×10^{-03}
Biomass Fuels—Gaseous (All fuel types in Table C-1)	3.2×10^{-03}	6.3×10^{-04}
Biomass Fuels—Liquid (All fuel types in Table C-1)	1.1×10^{-03}	1.1×10^{-04}

Note: Those employing this table are assumed to fall under the IPCC definitions of the "Energy Industry" or "Manufacturing Industries and Construction". In all fuels except for coal the values for these two categories are identical. For coal combustion, those who fall within the IPCC "Energy Industry" category may employ a value of 1g of CH_4/mmBtu.

[78 FR 71952, Nov. 29, 2013]

Attachment E

Draft ERC Certificates

San Joaquin Valley
Air Pollution Control District

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate

S-4392-1

ISSUED TO: TRI-CITY GROWERS INC

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: 18897 AVENUE 96
TERRA BELLA, CA 93270

For VOC Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
3 lbs	None	None	14 lbs

[ ] Conditions Attached

Method Of Reduction

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

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

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate

S-4392-2

ISSUED TO: TRI-CITY GROWERS INC

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: 18897 AVENUE 96
TERRA BELLA, CA 93270

For NOx Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
54 lbs	None	None	229 lbs

[ ] Conditions Attached

Method Of Reduction

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

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

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate

DRAFT

S-4392-3

ISSUED TO: TRI-CITY GROWERS INC

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: 18897 AVENUE 96
TERRA BELLA, CA 93270

For CO Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
11 lbs	None	None	46 lbs

[ ] Conditions Attached

Method Of Reduction

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

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

San Joaquin Valley
Air Pollution Control District

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate

DRAFT

S-4392-4

ISSUED TO: TRI-CITY GROWERS INC

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: 18897 AVENUE 96
TERRA BELLA, CA 93270

For PM10 Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
1,694 lbs	None	None	7,175 lbs

[ ] Conditions Attached

Method Of Reduction

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

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

Sep 17 2014 3:30PM – HEINENG

San Joaquin Valley
Air Pollution Control District

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate

DRAFT

S-4392-5

ISSUED TO: TRI-CITY GROWERS INC

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: 18897 AVENUE 96
TERRA BELLA, CA 93270

For SOx Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
2 lbs	None	None	6 lbs

[ ] Conditions Attached

Method Of Reduction

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

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

Sep 17 2014 3:30PM – HEINENG

San Joaquin Valley
Air Pollution Control District

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate

S-4392-24

DRAFT

ISSUED TO: TRI-CITY GROWERS INC

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: 18897 AVENUE 96
TERRA BELLA, CA 93270

For CO2E Reduction In The Amount Of:

167 metric tons / year

[ ] Conditions Attached

Method Of Reduction

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

Shutdown of Cotton Gin.

Emission Reduction Qualification Criteria

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

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

Sep 17 2014 3:30PM – HEINENG