



DEC 01 2015

Russell Paterson
Butttonwillow Ginning Co.
P O Box 666
Butttonwillow, CA 93206

Re: Notice of Preliminary Decision – Emission Reduction Credits
Facility Number: S-709
Project Number: S-1151623

Dear Mr. Paterson:

Enclosed for your review and comment is the District's analysis of Butttonwillow Ginning Co.'s application for Emission Reduction Credits (ERCs) resulting from shutdown of cotton ginning operation, at 860 Corn Camp Road, Butttonwillow. The quantity of ERCs proposed for banking is 520 lb-NOx/yr, 20 lb-SOx/yr, 13,495 lb-PM10/yr, 28 lb-CO/yr, 105 lb-VOC/yr and 356 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 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. Kamaljit Sran of Permit Services at (559) 230-5889.

Sincerely,



Arnaud Marjollet
Director of Permit Services

AM:KS

Enclosures

cc: Mike Tollstrup, 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: Buttonwillow Ginning Co. **Processing Engineer:** Kamaljit Sran
Mailing Address: P O Box 666 **Lead Engineer:** Joven Refuerzo
Buttonwillow, CA 93206 **Date:** November 20, 2015

Primary Contact: Russell Patterson, Manager
Phone: (661) 323-1001

Facility Location: 860 Corn Camp Road
Buttonwillow, CA 93206

Deemed Complete Date: May 22, 2015

Facility: S-709

Project Number: S-1151623

I. Summary:

Buttonwillow Ginning Co. operated a cotton ginning facility in Buttonwillow, CA. The facility was inspected on December 4, 2014 and was done processing the 2014 cotton harvest at that time. Last day of operation was November 25, 2014. On March 31, 2015, the District received an application from the operator who surrendered the Permit to Operate, S-709-1-6 & -2-7, for the cotton gin and requested Emission Reduction Credits for VOC, NOx, CO, PM₁₀, SOx, and CO_{2e}. 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	1 st Qtr. ERC (lb/qtr)	2 nd Qtr. ERC (lb/qtr)	3 rd Qtr. ERC (lb/qtr)	4 th Qtr. ERC (lb/qtr)
NOx	0	0	0	520
VOC	0	0	0	105
CO	0	0	0	28
PM ₁₀	0	0	0	13,495
SOx	0	0	0	20

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
CO ₂ e	356

II. Applicable Rules:

- Rule 2201 New and Modified Stationary Source Review Rule (4/21/11)
- Rule 2301 Emission Reduction Credit Banking (Last amended 1/19/12)
- Rule 4204 Cotton Gins ((2/17/05)
- Rule 4309 Dryers, Dehydrators, and Ovens (12/15/05)

III. Location of Reductions:

Physical Location of Equipment: 860 Corn Camp Road in Buttonwillow, 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-709-1-6: COTTON GIN # 4

This gin was not operated since year 2004. Therefore no Actual Emission Reductions occurred during Baseline Period as defined in section 3.9 of District Rule 2201. The applicant surrendered their PTO on March 31, 2015 as part of the banking application submittal.

S-709-2-7: COTTON GIN # 6

The gin was limited by permit condition to a ginning rate of 576 bales per day and 68,000 bales per year. The applicant surrendered their PTO on March 31, 2015 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 576 bales/day, assuming 500 lb/bale (permit limit).
- Annual ginning rate was limited to 68,000 bales per year (permit limit).

- Based on Emissions Inventory submittals for the operations from 2010 to 2014, see below, the typical operating schedule is 24 hours/day, for an average total of 57 days per season in 4th quarter.

Cotton Gin Operation Dates					
Season	2010	2011	2012	2013	2014
4 th Quarter days	47	73	66	60	39
No of Bales*	12,829	21,390	21,930	17,441	10,851

* Based on 500 lb/bale.

LPG Combustion from Cotton Dryers:

- The cotton gin included four, 3.0 MMBtu/hr burners stage two & three and one 6.0 MMBtu/hr burner for Stage one. All burners were fired on LPG.
- LPG higher heating value is 94,000 Btu/gal (AP-42, Appendix A)
- The CO_{2e} emission factor from the combustion of natural gas includes GHG emissions of CO₂, CH₄ and N₂O, 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
- The production and fuel use data from Emission Inventory submittals for five year period.

Production and Fuel Use Data		
Year	Bales Ginned	LPG (gal)
2010	12,829	79,367
2011	21,390	142,962
2012	21,930	109,594
2013	17,441	83,272
2014	10,851	39,623
Average	16,888	90,964

B. Emission Factors (EF)

Cotton Ginning Emissions

The current PTO includes a condition limiting PM₁₀ emissions to 1.22 lb-PM₁₀/bale, (see Appendix A; permit condition 16).

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 Roller Gins and the Permitted Emissions Factors				
System	Cyclone Design	CCGAH EFs (lb-PM₁₀/bale)	PTO EFs¹ (lb-PM₁₀/bale)	EF Used for Calculations (lb-PM₁₀/bale)
Unloading	1D-3D	0.23	1.12	0.23
#1 Precleaning	1D-3D	0.24		0.24
#2 Precleaning	1D-3D	0.14		0.14
#3 Precleaning	1D-3D	0.17		0.17
Overflow	1D-3D	0.03		0.03
Gin Stand/Trash Feeder	1D-3D	0.04		0.04
#1 Lint Cleaning	1D-3D	0.02		0.02
#2 Lint Cleaning	1D-3D	0.04		0.04
Lint Cleaning	1D-3D	0.05		0.05
Lint Trash/Robber	1D-3D	0.02		0.02
Battery Condenser	1D-3D	0.08		0.08
Motes	1D-3D	N/A		N/A
Motes Cleaner Trash	1D-3D	N/A		N/A
Stockpiler	1D-3D	0.006		0.006
Total		1.06	1.12	1.06

¹ There are no site-specific source tests for this facility.

As shown above, the total emissions factor for this cotton gin is 1.06 lb-PM₁₀/bale, based on the use of the best data in the CCGAH. The total, facility-wide EF is 0.06 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.

LPG Fuel 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 indicate LPG combustion emission factors, and are listed below.

Combustion of LPG	
Pollutants	LPG Emission Factors - lb/10³ gal
NO _x	9.4 (0.1 lb/MMBtu ⁽¹⁾)
CO	1.9
VOC	0.5
PM ₁₀	0.0 ⁽²⁾
SO _x	0.35

⁽¹⁾ LPG hhv = 94,000 Btu/gal => 1000 gal = 94 MMBtu

⁽²⁾ Since the dryers' combustion is discharged through the cyclones, the dryer PM₁₀ emissions will be included with the source tested ginning cyclone emission factors.

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

$$\begin{aligned}EF_{CO_2} &= 61.71 \text{ kg-CO}_2/\text{MMBtu} \\EF_{CH_4} &= 0.003 \text{ kg-CH}_4/\text{MMBtu} \\EF_{N_2O} &= 0.0006 \text{ kg-N}_2\text{O}/\text{MMBtu}\end{aligned}$$

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*):

$$\begin{aligned}CO_2 &= 1 \\CH_4 &= 21 \\N_2O &= 310\end{aligned}$$

The GWP of CO₂, CH₄, and N₂O will be combined with the combustion emission factors into a single CO₂e emission factor using the following equation:

$$CO_2e \text{ EF} = [(61.71 \text{ kg-CO}_2/\text{MMBtu} \times 1 \text{ lb-CO}_2e/\text{lb-CO}_2) + (0.003 \text{ kg-CH}_4/\text{MMBtu} \times 21 \text{ lb-CO}_2e/\text{lb-CH}_4) + (0.0006 \text{ kg-N}_2\text{O}/\text{MMBtu} \times 310 \text{ lb-CO}_2e/\text{lb-N}_2\text{O})]$$

$$CO_2e \text{ EF} = 61.959 \text{ kg/MMBtu (equivalent to 136.6 lb/MMBtu)}$$

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 March 31, 2015. Although the gin was in place and operable, it is a seasonal operation which the operator reports was last used on November 25, 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 2009 through 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:

$$\text{Difference} = ((\text{Year 1 Rate} + \text{Year 2 Rate}) / 2) - 10\text{-year Average Rate}$$

For the 2010 and 2011 period, the difference was calculated as follows:

$$\begin{aligned} \text{Difference} &= ((12,829 + 21,390) / 2) - 14,837 \\ &= 34,219/2 - 14,837 = 2,272 \text{ bales/year} \end{aligned}$$

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)
2005	6,558	39,007	
2006	14,550	68,991	
2007	14,941	69,379	
2008	13,773	74,855	
2009	14,112	84,703	
2010	12,829	79,367	2,272
2011	21,390	142,962	6,823
2012	21,930	109,594	4,848
2013	17,441	83,272	-691
2014	10,851	39,623	
10-year Averages	14,837	79,175	

For the five-years immediately preceding the shutdown, the period most closely matching the normal source operation ten-year average is 2013 – 2014.

- Based on the data shown in the table above, the average annual throughput during this period was 14,146 bales and the average annual LPG consumption was 61,448 gallons/year.

- The PTO limited the production to 68,000 bales/year and the calculated average throughput does not exceed the permitted amount.
- LPG consumption was limited to 2,210,000 gallons/year for both S-709-1 and '2 by a permit condition, the calculated average is equivalent to 2.7% of the permitted amount.
- During this period, the gin was operated an average of 49.5 days in the 4th quarter, which is equivalent to 53.8% in the 4th 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:

$$HAE_{LPG} = EF \times 61.448 (10^3 \text{ gallons/year})$$

$$HAE_{ginning} = EF \times 14,146 \text{ bales/year}$$

$$HAE_{GHG} = EF \times 61.448 (10^3 \text{ gallons/year}) \times 94 \text{ MMBtu}/10^3 \text{ Gallons}$$

Historical Actual Emissions (HAE _{natural gas})			
Pollutant	EF lb/10 ³ Gal	Throughput 10 ³ Gal/year	HAE lb/year
NO _x	9.4	61.448	578
CO	1.9	61.448	117
VOC	0.5	61.448	31
PM ₁₀	0	61.448	0
SO _x	0.35	61.448	22

Historical Actual Emissions (HAE _{ginning})			
Pollutant	EF (lb PM ₁₀ /bale)	Throughput (bales/year)	HAE lb/year
PM ₁₀	1.06	14,146	14,995

Historical Actual Emissions (HAE _{GHG})				
Pollutant	EF kg/MMBtu	Throughput 10 ³ Gal/year	Conversion MMBtu/10 ³ Gal	HAE kg/year (metric tons/yr)
CO _{2e}	61.595	61.448	94	355,780 (356)

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, PM₁₀, 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:

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

Pollutant	AER (lb/year)	AQID (lb/year)
NO _x	578	58
CO	117	12
VOC	31	3
PM ₁₀	14,995	1,500
SO _x	22	2
Pollutant	AER (metric ton/year)	AQID (metric ton/year)
CO _{2e}	356	0 ¹

¹The 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			
Pollutant	AER lb/year	AQID lb/year	Bankable AER lb/yr
NO _x	578	58	520
CO	117	12	105
VOC	31	3	28
PM ₁₀	14,995	1,500	13,495
SO _x	22	2	20
Pollutant	AER metric tons /year	AQID metric tons/year	Bankable AER metric tons/yr
CO ₂ e	356	0	356

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 be 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 18 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.

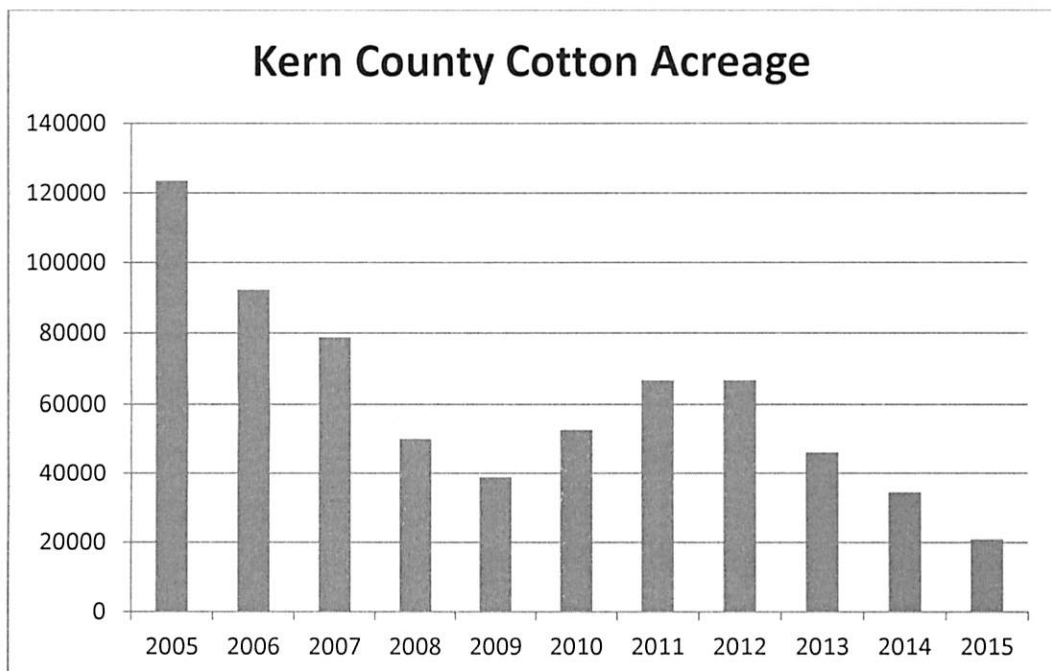
Therefore, the emission reductions satisfy the surplus requirement.

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, Kern 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 March 31, 2015. 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 November 25, 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 March 31, 2015, 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 860 Corn Camp Road in Buttonwillow, CA. This location is in Kern 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 18 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.

When determining the geographical boundary in which the emission reduction is determined to be permanent the applicant may consider how the GHG ERC may likely be used.

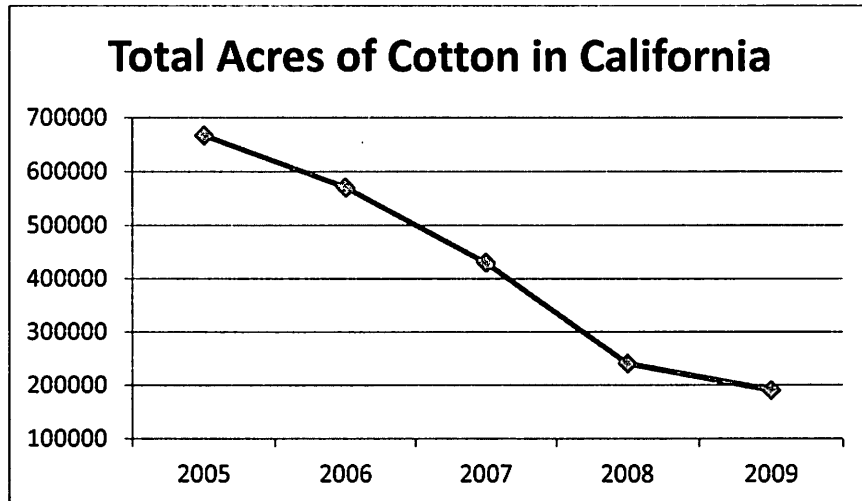
Please note that while Rule 2301 allows facilities to receive ERCs for GHG emission reductions, the District does not have any requirements on the use of GHG ERCs. However, it is anticipated that the likely uses of such GHG ERCs would be their future retirement as GHG mitigation in the CEQA process.

Pursuant to CEQA, lead agencies must consider the environmental impact of GHG emissions from a project and may require that such GHG emissions be mitigated. In evaluating various mitigation techniques, including the retirement of GHG ERCs, the lead agency must determine if the proposed mitigation technique adequately mitigates the project's GHG emission increase.

When a lead agency determines if the retirement of a particular GHG ERC provides adequate GHG mitigation for a project, the lead agency may choose to consider the location where the GHG ERC was generated and the geographical boundary used to determine the permanence of the emission reduction. In making this determination, the lead agency may conclude that the retirement of a particular GHG ERC would provide adequate mitigation for projects within that same geographical boundary. Again, that determination will be made by the lead agency for a particular project.

This facility has selected California as the geographical boundary for which the emission reduction is permanent. Information has been provided below to validate this geographical boundary selection.

As shown in the following chart, the total cotton acreage has been on a decline since January of 2005. Acreage has declined from 667,000 acres in 2005 down to 190,065 acres in 2009. The decline in acreage forced the closure of several cotton gins in California.



Because there has been a decrease in the amount of cotton being grown in the state of California, the need to gin cotton in California has decreased accordingly.

Based on this information, the geographical boundary for which the emission reduction is permanent within California.

The ERC will include the following identifier:

"Shutdown of cotton gin verified as permanent within the State of California"

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 CO₂e) 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 March 31, 2015. The applicant surrendered the PTO and therefore permanently ceased operations at this location effective March 31, 2015. 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 specifies 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 certificates to Buttonwillow Ginning Co. in accordance with the amounts specified on the draft ERC certificates in Attachment E.

Attachments:

Attachment A: Surrendered PTOs S-709-1-6 & -2-7

Attachment B: ERC Application

Attachment C: Facility Emissions Inventory Submittals

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-709-1-6 & -2-7



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT



HEALTHY AIR LIVING™

Permit to Operate

FACILITY: S-709

EXPIRATION DATE: 12/31/2018

LEGAL OWNER OR OPERATOR:
MAILING ADDRESS:

BUTTONWILLOW GINNING CO
PO BOX 666
BUTTONWILLOW, CA 93206

FACILITY LOCATION:

860 CORN CAMP RD
BUTTONWILLOW, CA 93206

FACILITY DESCRIPTION:

COTTON GINNING

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Seyed Sadredin
Executive Director / APCO

David Warner
Director of Permit Services

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-709-1-6

EXPIRATION DATE: 12/31/2018

SECTION: 04 TOWNSHIP: 29S RANGE: 23E

EQUIPMENT DESCRIPTION:
COTTON GIN #4

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 constructed, maintained and operated according to the specifications and plans contained in the permit application except as otherwise specified herein. [District Rule 2201]
5. All equipment or systems installed or used to achieve compliance with the terms and conditions of this Permit to Operate shall be maintained in good working order and be operated as efficiently as possible to minimize air pollution emissions. [District NSR Rule]
6. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201]
7. Cotton gin shall include a maximum of two wagon suction assemblies (unloading system) served by two 44 inch dia. 1D-3D type cyclone collectors. [District Rule 2201]
8. Cotton gin shall include a maximum of three incline cleaners served by six 38 inch dia. 2D-2D type cyclone collectors. [District Rule 2201]
9. Cotton gin shall include a maximum of two Murray 96 inch stick machines served by six cyclones shared with cleaners. [District Rule 2201]
10. Cotton gin shall include a maximum of six Lummus roller-type gin stands with feeders served by three 38 in. dia. 2D-2D type cyclone collectors. [District Rule 2201]
11. Cotton gin shall include a maximum of one Consolidated HGM roller-type gin stand with feeder served by three cyclones shared with Lummus gin stands. [District Rule 2201]
12. Cotton gin shall include a maximum of one battery condenser exhausted to two 56 inch dia. 1D-3D type cyclone collectors. [District Rule 2201]
13. Cotton gin shall include a maximum of one (1) HF-136 feeder dust suction fan served by one 36 inch dia. 2D-2D cyclone. [District Rule 2201]
14. Cotton gin lint cleaning system shall include a maximum of one gravity separator (incline) lint cleaner, one #700 feeder lint cleaner, and one Super-Jet lint cleaner served by two 56 in. dia. 1D-3D design type cyclone collectors. [District Rule 2201]
15. All exhaust ducts shall be connected to appropriate collection equipment. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

16. Cotton gin trash shall be handled and disposed of in a manner to prevent spontaneous ignition and/or fire hazard. [District Rule 4102]
17. 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 a combination of flexible wind barriers that extend below the top of the trash trailer sides; and sides that have solid doors that remain shut while trash trailers are being loaded, except as necessary to accommodate trailer movement. [District Rule 4204]
18. When trash is loaded outside the enclosure, a solid-side trailer shall be used for loading trash, and the trash auger and opening of the loading device shall have a flexible shroud that extends just below the top of the trailer's solid sides. [District Rule 4204]
19. Permittee shall conduct daily visual inspections of the material handling systems for leaks, breaks, or other visible signs of equipment malfunctions. [District Rule 4204]
20. Cotton gin production shall not exceed 420 bales of cotton per day. [District Rule 2201]
21. Cotton gin production shall not exceed 55,860 bales of cotton per season. [District Rule 2201]
22. Combined propane usage for Gin #4 and Gin #6 shall not exceed 2,210,000 gallons/year. [District Rule 2201]
23. Emissions from this cotton gin shall not exceed 1.12 lb PM10/bale produced. [District Rule 2201]
24. Permittee shall maintain daily production log detailing the date and bales of cotton produced. [District Rules 1070, 2201]
25. Permittee shall maintain the following annual production data: a) operating schedule in hours/day, days/week, weeks/year, as well as start-up date & last day of operation; and b) number of bales shipped. [District Rule 1070]
26. The permittee shall keep accurate annual records of combined propane usage for Gin #4 and Gin #6. [District Rule 1070]
27. 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]
28. All records shall be retained on site for at least five years and made available to the District upon request. [District Rules 1070 and 4204]

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-709-2-7

EXPIRATION DATE: 12/31/2018

SECTION: 4 TOWNSHIP: 29S RANGE: 23E

EQUIPMENT DESCRIPTION:
COTTON GIN # 6

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 constructed, maintained and operated according to the specifications and plans contained in the permit application. [District Rule 2201]
5. Operation shall include unloading system with one Beltwide module feeder. [District Rule 2201]
5. Operation shall include stage one drying/cleaning system including tower dryer, 6 MMBtu/hr burner, two stick machines, and two incline cleaners. [District Rule 2201]
7. Operation shall include stage two drying/cleaning system including one tower dryer, one slip dryer B, two 3 MMBtu/hr burners, two stick machines, and two incline cleaners. [District Rule 2201]
3. Operation shall include stage three drying/cleaning system including two tower dryers, two 3 MMBtu/hr burners and two incline cleaners. [District Rule 2201]
7. Operation shall include two conveyor distributors, two overflow systems, fourteen gin stands and feeders, two lint condensers, four lint cleaners, two super jet lint cleaners, battery condenser, bale press and trash house shared with S-709-1. [District Rule 2201]
10. Operation shall include four 58" 1D-3D cyclones serving lint cleaners, three 50" 1D-3D cyclones serving battery condensers and one 44" 2D-2D vented to the two 32" 1D-3D cyclones serving main trash handling system. [District Rule 2201]
11. Operation shall include plenum chamber with thirty three 38" 1D-3D cyclones serving unloading system, dryer/cleaner systems and lint cleaner, gin feeder and overflow trash systems. [District Rule 2201]
12. All 1D-3D cyclones shall operate at a cyclone inlet air velocity of 3200 ft 400 ft/min. [District Rule 2201]
13. S-709-2 production shall not exceed 576 bales of cotton per day. [District Rule 2201]
14. S-709-2 production shall not exceed 68,000 bales of cotton per year. [District Rule 2201]
15. Combined propane usage for S-709-1 and '2 shall not exceed 2,210,000 gallons/year. [District Rule 2201]
16. Emission rates shall not exceed any of the following limits: 1.12 lb PM10/bale produced, 0.35 lb SOx/1000 gallons propane combusted, 0.100 lb NOx/MMBtu, 0.50 lb VOC/1000 gallons propane combusted or 1.90 lb CO/1000 gallons propane combusted. [District Rule 2201]
17. The permittee shall keep accurate annual records of combined propane usage for S-709-1 and -2. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

18. The permittee shall keep accurate daily records of S-709-2 bale production. [District Rule 2201]
19. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

These terms and conditions are part of the Facility-wide Permit to Operate.

Attachment B

ERC Application

San Joaquin Valley Air Pollution Control District

RECEIVED

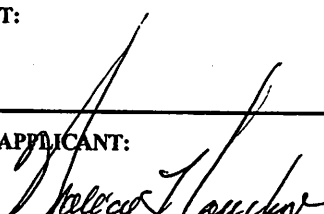
MAR 31 2015

Application for

Permits Services
SJVAPCD

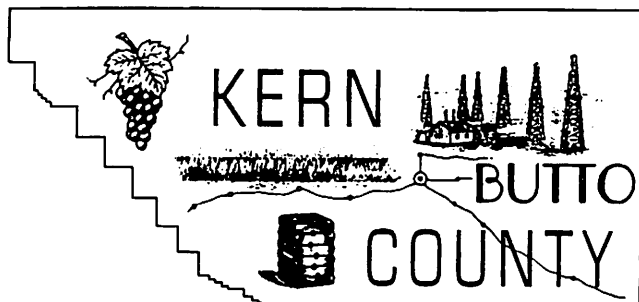
EMISSION REDUCTION CREDIT (ERC)

CONSOLIDATION OF ERC CERTIFICATES

1. ERC TO BE ISSUED TO: <u>Buttonwillow Ginning Co.</u>		Facility ID: S - <u>709</u> (if known)				
2. MAILING ADDRESS: Street/P.O. Box: <u>P.O. Box 666</u>						
City: <u>Buttonwillow</u>		State: <u>CA</u> Zip Code: <u>93206</u>				
3. LOCATION OF REDUCTION: Street: <u>860 Corn Camp Rd.</u> City: <u>Buttonwillow, CA</u> _____/4 SECTION _____ TOWNSHIP _____ RANGE _____		4. DATE OF REDUCTION: <u>3/25/15</u>				
5. PERMIT NO(S): <u>S-709-1-6, S-709-2-7</u> EXISTING ERC NO(S):						
6. METHOD RESULTING IN EMISSION REDUCTION: <input checked="" type="checkbox"/> SHUTDOWN <input type="checkbox"/> RETROFIT <input type="checkbox"/> PROCESS CHANGE <input type="checkbox"/> OTHER DESCRIPTION: <u>Shutdown of existing cotton gins.</u>						
(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						
4TH QUARTER						
8. SIGNATURE OF APPLICANT: 			TYPE OR PRINT TITLE OF APPLICANT: <u>President</u>			
9. TYPE OR PRINT NAME OF APPLICANT: <u>Wallace H. Houchin</u>			DATE: <u>3-25-15</u>		TELEPHONE NO: <u>661-323-1001</u>	

FOR APCD USE ONLY:

DATE STAMP	FILING FEE RECEIVED: \$ <u>650.00, 43226</u> DATE PAID: <u>3/31/15</u> PROJECT NO.: <u>S-1151623</u> FACILITY ID.: <u>S-709</u>
------------	---



P.O. BOX 666
BUTTONWILLOW, CALIFORNIA 93206
PHONE 661-764-5241 • 661-589-4208
FAX 661-764-6440

March 26, 2015

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

Re: **Shutdown of Buttonwillow Ginning Co.'s Gin #4 (PTO#: S-709-1-6) and Gin #6 (PTO#: S-709-2-7)**

Dear Mr. Warner,

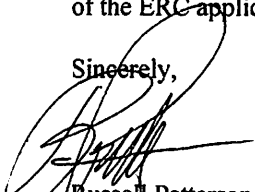
Enclosed is an application to shut down the cotton ginning operations, Gin #4 and Gin #6 located at 860 Corn Camp Road in Buttonwillow, California. Due to the serious reduction in cotton acreage, it is no longer economically feasible to maintain and operate these cotton gins.

Enclosed are the following:

- Check in the amount of \$650 for the ERC application filing fee
- ERC application
- Supplemental Cotton Gin ERC application
- Production history (bales ginned and fuel consumed)
- Emission Calculations
- Letter forfeiting the permit to operate (w/ copy of permit to operate)

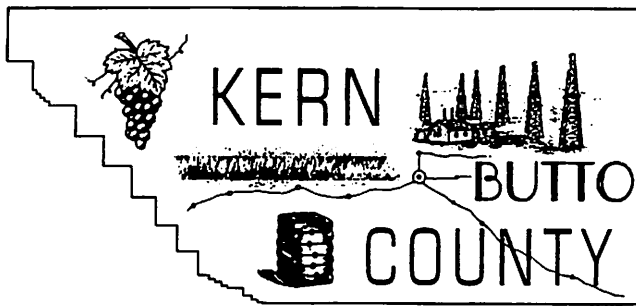
The attached documentation should provide the District with the information necessary to complete the processing of the ERC application. However, should you need additional information, please contact me at (661)323-1001.

Sincerely,



Russell Patterson
Manager

C: Roger A. Isom, CCGGA



P.O. BOX 666
BUTTONWILLOW, CALIFORNIA 93206
PHONE 661-764-5241 • 661-589-4208
FAX 661-764-6440

March 26, 2015

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

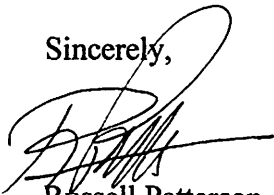
Re: **Shutdown of Buttonwillow Ginning Co.'s Gin #4 (PTO#: S-709-1-6) and Gin #6 (PTO#: S-709-2-7)**

Dear Mr. Warner,

This letter is to officially notify you that Buttonwillow Ginning Company is shutting down their #4 and #6 cotton gins located at 860 Corn Camp Road in Buttonwillow, California. Therefore, Buttonwillow Ginning Company is hereby forfeiting the permits to operate (PTO#: S-709-1-6 and PTO#: S-709-2-7).

Should you have any questions, please contact me at (661)323-1001.

Sincerely,



Russell Patterson
Manager

C: Roger A. Isom, CCGGA



Permit to Operate

FACILITY: S-709

EXPIRATION DATE: 12/31/2018

LEGAL OWNER OR OPERATOR:

BUTTONWILLOW GINNING CO

MAILING ADDRESS:

PO BOX 666
BUTTONWILLOW, CA 93206

FACILITY LOCATION:

860 CORN CAMP RD
BUTTONWILLOW, CA 93206

FACILITY DESCRIPTION:

COTTON GINNING

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Seyed Sadredin
Executive Director / APCO

David Warner
Director of Permit Services

**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:	Buttonwillow Ginning Co. – Gin #6
Gin Location:	860 Corn Camp Road

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):
S-709-1-6 and S-709-2-7

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: **3 /25 /15**

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	2010	2011	2012	2013	2014
Start MM/DD/YY	11/01/2010	10/18/2011	10/12/2012	10/13/2013	10/17/2014
End MM/DD/YY	12/16/2010	01/09/2012	12/17/2012	12/09/2013	11/25/2014
No. of Bales*	13,066	23,238	13,237	18,255	11,100

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

(Please continue on other side)

SACG-2 8/93

Attachment C

Facility Emissions Inventory Submittals



SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

2014

1990 E. Gettysburg Ave., Fresno, CA 93726

/ Electronic

(559) 230 - 6000 FAX: (559) 230 - 6061

District BCode

2

SURVEY FOR THE ANNUAL EMISSION INVENTORY : 2014

BUTTONWILLOW GINNING CO

PO BOX 666

BUTTONWILLOW, CA 93206

FACILITY ID# : **S-709**

TAD #: 15-709

SIC #: 724

PHONE #: (661) 764-5241

TOXID#: 0

US Form Required: No

SITE ADDRESS : 860 CORN CAMP RD, BUTTONWILLOW

Is this information considered:

- CONFIDENTIAL
- NOT CONFIDENTIAL

Note: All requests for confidentiality must be supported by a written justification (Title 17, section 91010, California Administrative Code)

WorkSheet for Permit # : S-709-2-7

COTTON GIN #6

COTTON GINS

Annual Process Data:

Number of STD. 500 Lb Bales for Last Season: 10,851

Fuel Combustion Data:

Primary Fuel (circle one) NG, Diesel, **(LPG)** Other: _____

Annual Usage: 39,623

Units (circle one) SCF, BTU, Therms, **(Gals)** Other: _____

Secondary Fuel (circle one) NG, Diesel, LPG, Other: N/A

Annual Usage: _____

Units (circle one) SCF, BTU, Therms, Gals, Other: _____

Length of Operating Season In Days - 39

Duration in months (e.g. from October Through January)

From OCTOBER Through NOVEMBER

Comments: _____



SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

1990 E. Gettysburg Ave., Fresno, CA 93726

/ Electronic

(559) 230 - 6000 FAX: (559) 230 - 6061

District BCode 2

SURVEY FOR THE ANNUAL EMISSION INVENTORY : 2013

BUTTONWILLOW GINNING CO

PO BOX 666

BUTTONWILLOW, CA 93206

FACILITY ID# : S-709

TAD #: 15-709

SIC #: 724

PHONE #: (661) 764-5241

TOXID: 0

US Form Required: No

SITE ADDRESS : 860 CORN CAMP RD, BUTTONWILLOW

Is this information considered;

- CONFIDENTIAL
- NOT CONFIDENTIAL

Note: All requests for confidentiality must be supported by a written justification (Title 17, section 91010, California Administrative Code)

WorkSheet for Permit # : S-709-2-7

COTTON GIN # 6

COTTON GINS

Annual Process Data:

Number of STD. 500 Lb Bales for Last Season: 17,441

Fuel Combustion Data:

Primary Fuel (circle one) NG, Diesel, **(LPG)** Other: _____

Annual Usage: 83,272

Units (circle one) SCF, BTU, Therms, **(Gals)** Other: _____

Secondary Fuel (circle one) NG, Diesel, LPG, Other: N/A

Annual Usage: _____

Units (circle one) SCF, BTU, Therms, Gals, Other: _____

Length of Operating Season In Days - 60

Duration in months (e.g. from October Through January)

From OCTOBER Through DECEMBER

Comments: _____



SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

2012

1990 E. Gettysburg Ave., Fresno, CA 93726

/ Electronic

(559) 230 - 6000 FAX: (559) 230 - 6061

District BCode: 2

SURVEY FOR THE ANNUAL EMISSION INVENTORY : 2012

BUTTONWILLOW GINNING CO

PO BOX 666
BUTTONWILLOW, CA 93206

FACILITY ID# : S-709
TAD #: 15-709
SIC #: 724
PHONE #: (661) 764-5241
TOXID #: 0
US Form Required: No

FACILITY NAME:

BUTTONWILLOW GINNING CO
860 CORN CAMP ROAD, BUTTONWILLOW

This information is considered:

- CONFIDENTIAL*
- NOT CONFIDENTIAL

***NOTE:** To be considered confidential, request MUST be supported by written justification (per Title 17, section 91010, California Administrative Code).

WorkSheet for Permit # : S-709-2-7

COTTON GIN # 6

COTTON GINS

Annual Process Data:

Number of STD. 500 Lb Bales for Last Season: 21,930

Fuel Combustion Data:

Primary Fuel (circle one) NG, Diesel, **LPG** Other: _____

Annual Usage: 109,594

Units (circle one) SCF, BTU, Therms, **Gals** Other: _____

Secondary Fuel (circle one) NG, Diesel, LPG, Other: N/A

Annual Usage: _____

Units (circle one) SCF, BTU, Therms, Gals, Other: _____

Length of Operating Season In Days - 66

Duration in months (e.g. from October Through January)

From October Through December

Distance to Nearest Business from Equipment _____ (feet)

Distance to Nearest Residence from Equipment _____ (feet)

Comments: _____

5-1120732

2011



SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

1990 E. Gettysburg Ave., Fresno, CA 93726

(559) 230 - 6000 FAX: (559) 230 - 6061

District Bcode

/ Electronic

RECEIVED

WORKSHEET FOR THE ANNUAL EMISSION INVENTORY : 2011

MAR 12 2012

BUTTONWILLOW GINNING CO

PO BOX 666

BUTTONWILLOW CA, 93206

FACILITY ID# : **S-709**

TAD #: 15-709

SIC #: 724

Permits Srvc
SJVAPCD

PHONE #: (661) 764-5241

TOXID: 0

US Form Required: No

SITE ADDRESS : 860 CORN CAMP ROAD, BUTTONWILLOW

Is this information considered;

- CONFIDENTIAL
- NOT CONFIDENTIAL

Note: All requests for confidentiality must be supported by a written justification (Title 17, section 91010, California Administrative Code)

WorkSheet for Permit # : S-709-2-7

COTTON GIN # 6

COTTON GINS

Annual Process Data:

Number of STD. 500 Lb Bales for Last Season: 21390

Fuel Combustion Data:

Primary Fuel (circle one) NG, Diesel, **LPG**, Other: _____

Annual Usage: 142,962

Units (circle one) SCF, BTU, Therms, **Gals**, Other: _____

Secondary Fuel (circle one) NG, Diesel, **LPG**, Other: n.a.

Annual Usage: _____

Units (circle one) SCF, BTU, Therms, Gals, Other: _____

Length of Operating Season In Days - 73

Duration in months (e.g. from October Through January)

From October Through December

Distance to Nearest Business from Equipment _____ (feet)

Distance to Nearest Residence from Equipment _____ (feet)

Comments: _____



SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

1990 E. Gettysburg Ave., Fresno, CA 93726

/ Electronic

(559) 230 - 6000 FAX: (559) 230 - 6061

District Bcode 2

WORKSHEET FOR THE ANNUAL EMISSION INVENTORY : 2010

BUTTONWILLOW GINNING CO

PO BOX 666

BUTTONWILLOW CA, 93206

FACILITY ID# : S-709

TAD #: 15-709

SIC #: 724

PHONE #: (661) 764-5241

TOXID: 0

US Form Required: No

SITE ADDRESS : 860 CORN CAMP ROAD, BUTTONWILLOW

Is this information considered:

- CONFIDENTIAL
- NOT CONFIDENTIAL

Note: All requests for confidentiality must be supported by a written justification (Title 17, section 91010, California Administrative Code)

WorkSheet for Permit # : S-709-2-7

COTTON GIN # 6

COTTON GINS

Annual Process Data:

Number of STD. 500 Lb.Bales for Last Season: 12829

Fuel Combustion Data:

Primary Fuel (circle one) NG, Diesel, LPG, Other: _____

Annual Usage: 79367

Units (circle one) SCF, BTU, Therms, Gals, Other: _____

Secondary Fuel (circle one) NG, Diesel, LPG, Other: N.A.

Annual Usage: _____

Units (circle one) SCF, BTU, Therms, Gals; Other: _____

Length of Operating Season In Days - 47

Duration in months (e.g. from October Through January)

From November Through December

Distance to Nearest Business from Equipment _____ (feet)

Distance to Nearest Residence from Equipment _____ (feet)

Comments: _____



SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2009

1990 E. Gettysburg Ave., Fresno, CA 93726

/ Electronic

(559) 230 - 6000 FAX: (559) 230 - 6061

District Priority Code 2

WORKSHEET FOR THE ANNUAL EMISSION INVENTORY : 2009

BUTTONWILLOW GINNING CO

PO BOX 666

BUTTONWILLOW CA, 93206

FACILITY ID# : **S-709**

TAD #: 15-709

SIC #: 724

PHONE #: (661) 764-5241

TOXID: 0

US Form Required: No

SITE ADDRESS : 860 CORN CAMP ROAD, BUTTONWILLOW

Is this information considered;

CONFIDENTIAL
 NOT CONFIDENTIAL

Note: All requests for confidentiality must be supported by a written justification (Title 17, section 91010, California Administrative Code)

WorkSheet for Permit # : S-709-2-7

COTTON GIN # 6

COTTON GINS

Annual Process Data:

Number of STD. 500 Lb Bales for Last Season: 14112

Fuel Combustion Data:

Primary Fuel (circle one) NG, Diesel, LPG, Other: _____

Annual Usage: 84703

Units (circle one) SCF, BTU, Therms, Gals, Other: _____

Secondary Fuel (circle one) NG, Diesel, LPG, Other: none

Annual Usage: n.a.

Units (circle one) SCF, BTU, Therms, Gals, Other: _____

Length of Operating Season In Days - 49

Duration in months (e.g. from October Through January)

From October Through December

Distance to Nearest Business from Equipment _____ (feet)

Distance to Nearest Residence from Equipment _____ (feet)

Comments: _____



SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

1990 E. Gettysburg Ave., Fresno, CA 93726

(559) 230 - 6000

COTTON GIN

2008

District Priority Code 2

WORKSHEET FOR THE ANNUAL EMISSION INVENTORY : 2008

BUTTONWILLOW GINNING CO

PO BOX 666

BUTTONWILLOW CA, 93206

FACILITY ID# : S-709

TAD #: 15-709

SIC #: 724

PHONE #: (661) 764-5241

TOXID: 0

US Form Required: No

SITE ADDRESS : 860 CORN CAMP ROAD, BUTTONWILLOW

Is this information considered;

- CONFIDENTIAL
- NOT CONFIDENTIAL

Note: All requests for confidentiality must be supported by a written justification (Title 17, section 91010, California Administrative Code)

WorkSheet for Permit # : S-709-2-7

COTTON GIN # 6

COTTON GINS

Annual Process Data:

Number of STD. 500 Lb Bales for Last Season: 13773

Fuel Combustion Data:

Primary Fuel (circle one) NG, Diesel, LPG, Other: _____

Annual Usage: 74855

Units (circle one) SCF, BTU, Therms, Gals, Other: _____

Secondary Fuel (circle one) NG, Diesel, LPG, Other: none

Annual Usage: n.a.

Units (circle one) SCF, BTU, Therms, Gals, Other: _____

Length of Operating Season In Days - 45

Duration in months (e.g. from October Through January)

From October Through December

Distance to Nearest Business from Equipment _____ (feet)

Distance to Nearest Residence from Equipment _____ (feet)

Comments: _____



SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

1990 E. Gettysburg Ave., Fresno, CA 93726

(559) 230 - 6000 FAX: (559) 230 - 6061

COTTON GIN

District Code: 2

S-1082723

2007

WORKSHEET FOR THE ANNUAL EMISSION INVENTORY : 2007

BUTTONWILLOW GINNING CO

PO BOX 666

BUTTONWILLOW CA, 93206

FACILITY ID#: S-709

TAD #: 15-709

SIC #: 724

PHONE #: (661) 764-5241

TOXID: 0

US Form Required: No

SITE ADDRESS :

860 CORN CAMP ROAD, BUTTONWILLOW

This information is considered:

CONFIDENTIAL*

NOT CONFIDENTIAL

***NOTE:** To be considered confidential, request MUST be supported by written justification (per Title 17, section 91010, California Administrative Code).

WorkSheet for Permit #: S-709-2-5

COTTON GIN # 6

COTTON GINS

Annual Process Data:

Number of STD. 500 Lb Bales for Last Season: 14941

Fuel Combustion Data:

Primary Fuel (circle one) NG, Diesel, LPG, Other: _____

Annual Usage: 69,379

Units (circle one) SCF, BTU, Therms, Gals, Other: _____

Secondary Fuel (circle one) NG, Diesel, LPG, Other: None

Annual Usage: _____

Units (circle one) SCF, BTU, Therms, Gals, Other: _____

Length of Operating Season In Days - 64

Duration in months (e.g. from October Through January)

From October Through December

Distance to Nearest Business from Equipment _____ (feet)

Distance to Nearest Residence from Equipment _____ (feet)

Comments: _____



SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2006

1990 E. Gettysburg Ave., Fresno, CA 93726

(559) 230 - 6000

COTTON GIN

RECEIVED

MAY 15 2007

WORKSHEET FOR THE ANNUAL EMISSION INVENTORY : 2006

BUTTONWILLOW GINNING CO

PO BOX 666
BUTTONWILLOW CA, 93206

FACILITY ID# : 15-709
TAD # : 15-709
SIC # : 724
PHONE # : (661) 764-5241
TOXID : 0
US Form Required: No

Permits Srvc
SJVAPCD

SITE ADDRESS : 860 CORN CAMP ROAD, BUTTONWILLOW

Is this information considered;

- CONFIDENTIAL
- NOT CONFIDENTIAL

Note: All requests for confidentiality must be supported by a written justification (Title 17, section 91010, California Administrative Code)

WorkSheet for Permit # : S-709-2-5

COTTON GIN # 6

COTTON GINS

Annual Process Data:

Number of STD. 500 Lb Bales for Last Season: 14,550

Fuel Combustion Data:

Primary Fuel (circle one) NG, Diesel, LPG, Other: _____

Annual Usage: 68991

Units (circle one) SCF, BTU, Therms, Gals, Other: _____

Secondary Fuel (circle one) NG, Diesel, LPG, Other: None

Annual Usage: _____

Units (circle one) SCF, BTU, Therms, Gals, Other: _____

Length of Operating Season In Days - 70 days

Duration in months (e.g. from October Through January)
From October Through December

Distance to Nearest Business from Equipment _____ (feet)

Distance to Nearest Residence from Equipment _____ (feet)

Comments: _____



SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

1990 E. Gettysburg Ave., Fresno, CA 93726

(559) 230 - 6000

COTTON GIN

2005

WORKSHEET FOR THE ANNUAL EMISSION INVENTORY : 2005

BUTTONWILLOW GINNING CO

P O BOX 666

BUTTONWILLOW CA, 93206

FACILITY ID# : **S-709**

TAD #: 15-709

SIC #: 724

PHONE #: (661) 764-5241

TOXID: 0

US Form Required: No

SITE ADDRESS : 860 CORN CAMP ROAD, BUTTONWILLOW

Is this information considered;

- CONFIDENTIAL
- NOT CONFIDENTIAL

Note: All requests for confidentiality must be supported by a written justification (Title 17, section 91010, California Administrative Code)

WorkSheet for Permit # : S-709-2-5

COTTON GIN # 6

COTTON GINS

Annual Process Data:

Number of STD. 500 Lb Bales for Last Season: 6,558

Fuel Combustion Data:

Primary Fuel (circle one) NG, Diesel, **LPG**, Other: _____

Annual Usage: 39,007

Units (circle one) SCF, BTU, Therms, **Gals**, Other: _____

Secondary Fuel (circle one) NG, Diesel, LPG, Other: NONE

Annual Usage: _____

Units (circle one) SCF, BTU, Therms, **Gals**, Other: 39007

Length of Operating Season In Days - 47 x 12 = 564 HOURS

Duration in months (e.g. from October Through January) 564

From OCT. Through DEC.

Distance to Nearest Residence from Equipment _____ (feet)

Distance to Nearest Business from Equipment _____ (feet)

Comments: _____



SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

1990 E. Gettysburg Ave., Fresno, CA 93726

COTTON GIN

(559) 230 - 6000

WORKSHEET FOR THE ANNUAL EMISSION INVENTORY : 2004

2004

BUTTONWILLOW GINNING CO

FACILITY ID# : S-709

P O BOX 666

TAD #: 15-709

BUTTONWILLOW CA, 93206

SIC #: 724

PHONE #: (661) 764-5241

TOXID: 0

SITE ADDRESS : 860 CORN CAMP ROAD, BUTTONWILLOW

Is this information considered;

- CONFIDENTIAL
- NOT CONFIDENTIAL

Note: All requests for confidentiality must be supported by a written justification (Title 17, section 91010, California Administrative Code)

WorkSheet for Permit # : S-709-2-5

COTTON GIN # 6

COTTON GINS

Annual Process Data:

Number of STD. 500 Lb Bales for Last Season: 12616

Fuel Combustion Data:

Primary Fuel (circle one) NG, Diesel, LPG Other: _____

Annual Usage: 53615

Units (circle one) SCF, BTU, Therms, Gals Other: _____

Secondary Fuel (circle one) NG, Diesel, LPG, Other: none

Annual Usage: 0

Units (circle one) SCF, BTU, Therms, Gals, Other: _____

Length of Operating Season In Days - 69

Duration in months (e.g. from October Through January)

From October Through December

Distance to Nearest Residence from Equipment _____ (feet)

Distance to Nearest Business from Equipment _____ (feet)

Comments: _____

Unit Bales of Cotton

*12616 YR
1008 HRS*

12.52 HR rate

LPG unit 31000 gal

53,615 YR

1008 HRS

1053 HR

HR 12.7.12 =

Attachment D

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

§ 98.37

40 CFR Ch. I (7-1-14 Edition)

(v) An explanation of how company records are used to measure steam production, when it is used to calculate CO₂ mass emissions under § 98.33(a)(2)(iii) or to quantify solid fuel usage under § 98.33(c)(3).

(4) Within 30 days of receipt of a written request from the Administrator, you shall submit the verification data and information described in paragraphs (e)(2)(iii), (e)(2)(v), and (e)(2)(vii) of this section.

[74 FR 56374, Oct. 30, 2009, as amended at 75 FR 79151, Dec. 17, 2010; 78 FR 71950, Nov. 29, 2013]

§ 98.37 Records that must be retained.

In addition to the requirements of § 98.3(g), you must retain the applicable records specified in §§ 98.34(f) and (g), 98.35(b), and 98.36(e).

§ 98.38 Definitions.

All terms used in this subpart have the same meaning given in the Clean Air Act and subpart A of this part.

TABLE C-1 TO SUBPART C OF PART 98—DEFAULT CO₂ EMISSION FACTORS AND HIGH HEAT VALUES FOR VARIOUS TYPES OF FUEL

DEFAULT CO₂ 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

DEFAULT CO₂ EMISSION FACTORS AND HIGH HEAT VALUES FOR VARIOUS TYPES OF FUEL—
Continued

Fuel type	Default high heat value	Default CO ₂ emission factor
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 CO₂ 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]

TABLE C-2 TO SUBPART C OF PART 98—DEFAULT CH₄ AND N₂O EMISSION FACTORS FOR VARIOUS TYPES OF FUEL

Fuel type	Default CH ₄ emission factor (kg CH ₄ /mmBtu)	Default N ₂ O emission factor (kg N ₂ O/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

DEFAULT CO₂ EMISSION FACTORS AND HIGH HEAT VALUES FOR VARIOUS TYPES OF FUEL—
Continued

Fuel type	Default high heat value	Default CO ₂ emission factor
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 CO₂ 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]

TABLE C-2 TO SUBPART C OF PART 98—DEFAULT CH₄ AND N₂O EMISSION FACTORS FOR VARIOUS TYPES OF FUEL

Fuel type	Default CH ₄ emission factor (kg CH ₄ /mmBtu)	Default N ₂ O emission factor (kg N ₂ O/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

Fuel type	Default CH ₄ emission factor (kg CH ₄ /mmBtu)	Default N ₂ O emission factor (kg N ₂ O/mmBtu)
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 CH₄/mmBtu.

[78 FR 71952, Nov. 29, 2013]

Subpart D—Electricity Generation

§ 98.40 Definition of the source category.

(a) The electricity generation source category comprises electricity generating units that are subject to the requirements of the Acid Rain Program and any other electricity generating units that are required to monitor and report to EPA CO₂ mass emissions year-round according to 40 CFR part 75.

(b) This source category does not include portable equipment, emergency equipment, or emergency generators, as defined in § 98.6.

[74 FR 56374, Oct. 30, 2009, as amended at 75 FR 79155, Dec. 17, 2010]

§ 98.41 Reporting threshold.

You must report GHG emissions under this subpart if your facility contains one or more electricity generating units and the facility meets the requirements of § 98.2(a)(1).

§ 98.42 GHGs to report.

(a) For each electricity generating unit that is subject to the requirements of the Acid Rain Program or is otherwise required to monitor and report to EPA CO₂ emissions year-round according to 40 CFR part 75, you must report under this subpart the annual mass emissions of CO₂, N₂O, and CH₄ by following the requirements of this subpart.

(b) For each electricity generating unit that is not subject to the Acid Rain Program or otherwise required to monitor and report to EPA CO₂ emissions year-round according to 40 CFR part 75, you must report under subpart C of this part (General Stationary Fuel Combustion Sources) the emissions of CO₂, CH₄, and N₂O by following the requirements of subpart C.

(c) For each stationary fuel combustion unit that does not generate electricity, you must report under subpart C of this part (General Stationary Fuel Combustion Sources) the emissions of CO₂, CH₄, and N₂O by following the requirements of subpart C of this part.

§ 98.43 Calculating GHG emissions.

(a) Except as provided in paragraph (b) of this section, continue to monitor and report CO₂ mass emissions as required under § 75.13 or section 2.3 of appendix G to 40 CFR part 75, and § 75.64. Calculate CO₂, CH₄, and N₂O emissions as follows:

(1) Convert the cumulative annual CO₂ mass emissions reported in the fourth quarter electronic data report required under § 75.64 from units of short tons to metric tons. To convert tons to metric tons, divide by 1.1023.

(2) Calculate and report annual CH₄ and N₂O mass emissions under this subpart by following the applicable method specified in § 98.33(c).

(b) Calculate and report biogenic CO₂ emissions under this subpart by following the applicable methods specified in § 98.33(e). The CO₂ emissions (excluding biogenic CO₂) for units subject to this subpart that are reported under §§ 98.3(c)(4)(i) and (c)(4)(iii)(B) shall be calculated by subtracting the biogenic CO₂ mass emissions calculated according to § 98.33(e) from the cumulative annual CO₂ mass emissions from paragraph (a)(1) of this section. Separate calculation and reporting of biogenic CO₂ emissions is optional only for the 2010 reporting year pursuant to § 98.3(c)(12) and required every year thereafter.

[75 FR 79155, Dec. 17, 2010]

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-4634-1
DRAFT

ISSUED TO: **BUTTONWILLOW GINNING CO**
ISSUED DATE: **<DRAFT>**
LOCATION OF **860 CORN CAMP RD**
REDUCTION: **BUTTONWILLOW, CA 93206**

For VOC Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
None	None	None	105 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source
 Shutdown of Emissions Units
 Other

Cotton Gin Shutdown

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

S-4634-2
DRAFT

ISSUED TO: **BUTTONWILLOW GINNING CO**
ISSUED DATE: **<DRAFT>**
LOCATION OF **860 CORN CAMP RD**
REDUCTION: **BUTTONWILLOW, CA 93206**

For NOx Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
None	None	None	520 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source**
- Shutdown of Emissions Units**
- Other**

Cotton Gin Shutdown

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

S-4634-3
DRAFT

ISSUED TO: **BUTTONWILLOW GINNING CO**
ISSUED DATE: **<DRAFT>**
LOCATION OF REDUCTION: **860 CORN CAMP RD
BUTTONWILLOW, CA 93206**

For CO Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
None	None	None	28 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source
 Shutdown of Emissions Units
 Other

Cotton Gin Shutdown

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

S-4634-4
DRAFT

ISSUED TO: **BUTTONWILLOW GINNING CO**
ISSUED DATE: **<DRAFT>**
LOCATION OF **860 CORN CAMP RD**
REDUCTION: **BUTTONWILLOW, CA 93206**

For PM10 Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
None	None	None	13,495 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source
 Shutdown of Emissions Units
 Other

Cotton Gin Shutdown

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-4634-5
DRAFT

ISSUED TO: **BUTTONWILLOW GINNING CO**
ISSUED DATE: **<DRAFT>**
LOCATION OF **860 CORN CAMP RD**
REDUCTION: **BUTTONWILLOW, CA 93206**

For SOx Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
None	None	None	20 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source**
- Shutdown of Emissions Units**
- Other**

Cotton Gin Shutdown

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

S-4634-24

DRAFT

ISSUED TO: **BUTTONWILLOW GINNING CO**
ISSUED DATE: **<DRAFT>**
LOCATION OF **860 CORN CAMP RD**
REDUCTION: **BUTTONWILLOW, CA 93206**

For CO2E Reduction In The Amount Of:

356 metric tons / year

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source**
 Shutdown of Emissions Units
 Other

Cotton Gin Shutdown

Emission Reduction Qualification Criteria

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

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services