



JUL 17 2013

Wallace Houchin **Buttonwillow Ginning Company** PO Box 666 Buttonwillow, CA 93206

Notice of Preliminary Decision – Emission Reduction Credits Re:

Facility Number: S-707 Project Number: S-1122823

Dear Mr. Houchin:

Enclosed for your review and comment is the District's analysis of Buttonwillow Ginning Company's application for Emission Reduction Credits (ERCs) resulting from the shutdown of a cotton gin, at 2536 Buttonwillow Drive, in Buttonwillow. The quantity of ERCs proposed for banking is 446 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 30day 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. Steve Roeder of Permit Services at (661) 392-5615.

Sincerely,

David Warner

Director of Permit Services

DW:SR/st

Enclosures

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

> Seved Sadredin Executive Director/Air Pollution Control Officer

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

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District solicits public comment on the proposed issuance of Emission Reduction Credits to Buttonwillow Ginning Company for the shutdown of a cotton gin, at 2536 Buttonwillow Drive, in Buttonwillow. The quantity of ERCs proposed for banking is 446 metric tons CO2e/yr.

The analysis of the regulatory basis for this proposed action, Project #S-1122823, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and at any District office. For additional information, please contact the District at (661) 392-5500. Written comments on this project must be submitted by August 21, 2013 to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 34946 FLYOVER COURT, BAKERSFIELD, CA 93308.

San Joaquin Valley Air Pollution Control District ERC Application Review - Greenhouse Gases Cotton Gin Shutdown

Facility Name: Buttonwillow Ginning Company Date: July 5, 2013

Mailing Address: PO Box 666 Engineer: Steve Roeder

Buttonwillow, CA 93205 Lead Engineer: Leonard Scandura

Contact Person: Wallace Houchin

Telephone: (661) 764-5241

Project #: S-1122823 Received: July 19, 2012

Deemed Complete: April 1, 2013

ERC #: S-4072-24

I. Summary

The primary business of this facility is cotton ginning. Buttonwillow Ginning Company has surrendered the Permit to Operate (PTO) their cotton gin (S-707-1-9) following the permanent shutdown on 4/1/08 after the 2007 ginning season. The facility had submitted an application to bank the emission reduction credits (ERCs) for the actual emission reductions (AER) of the criteria pollutants on 4/15/08 (ERC Project S-1081432).

Subsequently, the facility has submitted this application to bank the Greenhouse Gas (GHG) AER that also resulted for the shutdown of their gin. See the surrendered (PTO) in Appendix A.

Selection of Geographical Boundary for Determining Permanence of the GHG Emission Reduction

Rule 2301 contains several eligibility criteria for emission reduction credit banking, including that the emission reduction must be permanent. 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 the 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 California Environmental Quality Act (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 projects 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 be the lead agency for any particular project.

For this application, the facility has selected California as the geographical boundary for which the emission reduction is permanent. Information has been provided to validate this geographical boundary selection. Using this geographical boundary, it was determined that the GHG emission reduction is permanent within California.

The following AER qualify for ERC banking.

GHG ERCs			
ERC Certificate	Pollutant	Amount	
S-4072-24	CO ₂ e	446 metric tons/year	

II. Applicable Rules

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

III. Location of Reduction

The equipment was located at 2536 Buttonwillow Drive, in Buttonwillow, CA.

IV. Method of Generating Reductions

The emission reductions were generated by the shutdown of a permitted cotton ginning operation. The GHG were emitted from the cotton drying equipment which was fired on natural gas.

Equipment Description

S-707-1-9: 15.0 MMBTU/HR COTTON GIN #2

V. Calculations

A. Assumptions and Emission Factors

Assumptions

- Units of GHG AER is metric tons of CO₂e per year, rounded to the nearest metric ton
- 1,000 kg = 1 metric ton
- 1 therm of Natural Gas = 100 scf
- The final CO₂e 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)
- The emission factors are from the District's Spreadsheet: ARB GHG Emission Factors

Emission Factors (EF)

The emission factors, global warming potential, and CO_2 equivalent emission factors for CO_2 , CH_4 , and N_2O are shown in the following table.

Natural Gas Emission Factors					
Pollutant	kg/MMBtu	0.1 MMBtu/therm	GWP	CO2e EF	
CO ₂	52.87	0.1	1.00	5.287	kg-CO₂e /therm
CH₄	0.0009	0.1	21.00	0.0019	kg-CO₂e /therm
N2O	0.0001	0.1	310.0	0.0031	kg-CO₂e /therm
CO ₂ e				5.292	kg-CO ₂ e /therm

The CO₂e emission factor is converted into metric tons/therm as follows:

$$\frac{5.292\;kg\cdot CO_2e}{therm}x\;\frac{1\;metric\;ton}{1,000\;kg}=0.00529\\ \frac{metric\;tons\cdot CO_2e}{therm}$$

B. Baseline Period Determination

Pursuant to Rule 2301, Section 3.6, the Baseline Period is the same as defined in Rule 2201, which is:

The two consecutive years of operation immediately prior to the submission date of the complete application; or at least two consecutive years within the five years immediately prior to the submission date of the complete application if determined by the APCO as more representative of normal source operation.

The original ERC Banking Project S-707, 1081432 specified the baseline period as the operating years 2003-07. Since the District has already established this as the correct baseline period for the criteria pollutant emission reductions that have already been evaluated and issued, the same baseline period is used for this evaluation.

Therefore the Baseline Period is the operating years of 2003-07.

C. Baseline Data

The baseline natural gas-use is taken from the annual fuel-use records that have been supplied by the applicant, as evaluated in the original ERC project, and is posted in the following table.

Baseline Fuel Usage			
Year	Annual Fuel Use (Therms)		
2003-07	84,353		

D. Historical Actual Emissions (HAE)

The HAE from the fuel use is determined by multiplying the annual fuel-use by the emission factor presented above.

CO₂e HAE.						
2003-07	0.00529	metric tons/therm x	84,353	therms/yr =	446	metric tons/yr

E. Post Project Potential to Emit (PE2)

As discussed above, the subject equipment has been permanently shut down and its PTO was surrendered. Therefore the PE2 is 0.

F. 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.

ERCs eligible for banking = 446 metric ton/year – 0 ton/year = 446 metric ton/year

VI. Compliance

Rule 2301 – Emission Reduction Credit Banking

Regarding GHG, the purpose of this Rule is to:

- 1.2.1 Provide an administrative mechanism for sources to bank voluntary greenhouse gas emission reductions for later use.
- 1.2.2 Provide an administrative mechanism for sources to transfer banked greenhouse gas emission reductions to others for any use.
- 1.2.3 Define eligibility standards, quantitative procedures and administrative practices to ensure that banked greenhouse gas emission reductions are real, permanent, quantifiable, surplus, and enforceable.

Section 4.5 specifies eligibility criteria for GHG emission reductions to qualify for banking. Below is a summary of each criteria and a description of how the emission reductions satisfy the criteria.

Section 4.5.1 requires that the emission reduction must have occurred after 1/1/05.

The emission reductions occurred when the PTO was surrendered on 10/1/07. As the emission reduction occurred after 1/1/05, this criteria has been satisfied.

Section 4.5.2 requires that the emissions must have occurred in the District.

The emissions occurred at 2536 Buttonwillow Drive, in Buttonwillow, CA. Since this location is within the District, this criteria has been satisfied.

Section 4.5.3 requires that the emission reductions must be real, surplus, permanent, quantifiable, and enforceable.

Real:

The GHG emission reductions were generated by the shutdown of a cotton gin. The real emissions were calculated from actual historic fuel-use data and recognized emission factors. The cotton gin has been removed. Therefore, the emission reductions are real.

Surplus:

The facility is not subject to the CARB cap and trade regulation, and the emission reductions occurred prior to 1/1/12. Therefore, the emission reductions satisfy the surplus requirement in Section 4.5.3.1.

There are no laws, rules, regulations, agreements, orders, or permits requiring any GHG emission reductions from cotton gins. Therefore, the emission reductions satisfy the surplus requirement in Section 4.5.3.2.

The emission reductions are not the result of an action taken by the permittee to comply with any requirement. The emission reductions are surplus and additional of all requirements. Therefore, the emission reductions satisfy the surplus requirement in section 4.5.3.4.

The Certificates will be identified according to Section 6.15.3 below.

Permanent:

The cotton gin has been shut down, removed, and the PTO has been surrendered.

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.

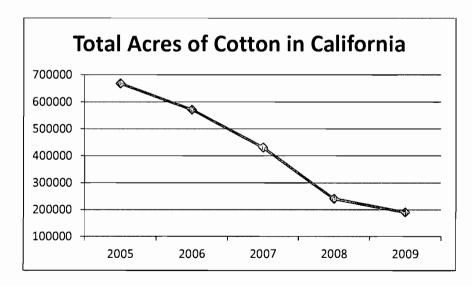
Please note that the while Rule 2301 allows facilities to receive ERCs for GHG emission reductions, the District does not have any requirements on the use of GHG ERCs. However, it is anticipated that the likely uses of such GHG ERCs would be their future retirement as GHG mitigation in the CEQA process.

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 projects 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. The 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 be 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:

The actual emissions were calculated from historic fuel-use records and accepted emission factors. Therefore, the emission reductions are quantifiable and have been quantified.

Enforceable:

The cotton gin has been shut down and the PTO has been surrendered to the District. Operation of the equipment without a valid permit would subject the permittee to enforcement action. Therefore, the emission reductions are enforceable.

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 (the shutdown of the cotton gin), 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 gin, with none of the load being shifted to any other gin in California, there is no post-project potential to emit GHG.

Section 4.5.5.5 requires that GHG emission reductions proposed to be quantified using CARB-approved emission reduction project protocols shall be calculated in accordance with the applicable protocol.

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 held a legal District operating permit. That permit has been surrendered to the District. Since the operation of the cotton gin would require a new Authority to Construct, as discussed above the emission reduction is enforceable.

Section 5 identifies ERC Certificate application procedures.

Section 5.5.2 requires, for emission reductions occurring prior to 1/19/12, applications for ERCs must be submitted by 7/19/12.

The ERC application was submitted on 7/10/12, therefore the application is timely.

Section 6.15 specifies the registration requirements for GHG ERCs.

This emission reductions are 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

Issue the ERC Certificate in the amount posted in the table below and on the Draft ERC Certificate in Appendix B.

GHG ERCs			
ERC Certificate	Pollutant	Amount	
S-4072-24	CO ₂ e	446 metric tons/year	

List of Appendixes

- A. Surrendered PTO
- B. Draft Emission Reduction Credit Certificate

Appendix A Surrendered PTO

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-707-1-9 EXPIRATION DATE: 12/31/2008

SECTION: SW14 TOWNSHIP: 29S RANGE: 23E

EQUIPMENT DESCRIPTION: 15.0 MMBTU/HR COTTON GIN #2

PERMIT UNIT REQUIREMENTS

- 1. 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]
- 2. 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]
- 3. Operation shall include suction unloading system served by three (3) 48" diameter 1D3D cyclones. [District Rule 2201]
- 4. Operation shall include module feeder unloading system, including trash collection with trash bin and positive pressure type blower (800 cfm minimum displacement) exhausting to one (1) 18" 1D3D cyclone. [District Rule 2201]
- 5. Only one unloading system shall be in use at any one time. [District Rule 2201]
- 6. Operation shall include seed cotton cleaning system, including: one (1) slip dryer, four (4) tower dryers, one (1) 6 MMBtu/hr & three (3) 3 MMBtu/hr heaters, six (6) incline cleaners, and two (2) stick machines. [District Rule 2201]
- Operation shall include overflow/gin trash system, including: one overflow separator and one conveyor distributor.
 [District Rule 2201]
- 8. Operation shall include one 8' x 40' plenum chamber with eleven (ten simultaneously operational) 48" 1D3D cyclones serving the seed cotton cleaning system, overflow/gin trash system, and mote cleaner trash system. [District Rule 2201]
- 9. Only ten of the eleven cyclones serving the plenum chamber shall be operation at any given time. [District Rule 2201]
- 10. Operation shall include lint cotton handling system, including: four gin stands, four feeders, eight lint cleaners, and eight (8) 70" 1D3D cyclones. [District Rule 2201]
- 11. Operation shall include mote cleaning system, including: one mote cleaner, one mote press, and two (2) 60" 1D3D type cyclones. [District Rule 2201]
- 12. Operation shall include battery condenser system, including: one battery condenser, one bale press, and (3) 82" 1D3D type cyclones. [District Rule 2201]
- 13. 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]
- 14. 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]

- 15. Particulate collection equipment shall be in operation when process equipment is in operation. [District Rule 2201]
- Daily ginning rate shall not exceed 180 tons of baled cotton per day (720 bales per day, corrected to 500-pound bales).
 [District Rule 2201]
- 17. Annual ginning rate shall not exceed 19,491.5 tons of baled cotton per season (77,966 bales per season, corrected to 500-pound bales). [District Rule 2201]
- 18. Emissions of PM-10 shall not exceed 5.89 pounds per ton of baled cotton (1.473 pounds per bale, corrected to 500-pound bales). [District Rule 2201]
- 19. Emissions of PM10 from unloading system shall not exceed 0.16 lb/bale. [District Rule 2201]
- Emissions of PM10 from plenum chamber serving seed cotton cleaning system, overflow/gin trash system, and mote cleaner trash system shall not exceed 0.82 lb/bale. [District Rule 2201]
- 21. Emissions of PM10 from #1 lint cleaner system shall not exceed 0.16 lb/bale. [District Rule 2201]
- 22. Emissions of PM10 from #2 lint cleaner system shall not exceed 0.033 lb/balc. [District Rule 2201]
- 23. Emissions of PM10 from mote cleaning system shall not exceed 0.25 lb/bale. [District Rule 2201]
- 24. Emissions of PM10 from battery condenser shall not exceed 0.05 lb/bale. [District Rule 2201]
- 25. Emission rates for burners shall not exceed any of the following: PM-10: 0.005 lb/MMBtu; SOx (as SO2): 0.0006 lb/MMBtu; NOx (NO2): 0.100 lb/MMBtu; VOC: 0.0053 lb/MMBtu; or CO: 0.020 lb/MMBtu. [District Rule 2201]
- Buttonwillow Ginning Co. shall maintain accurate daily records of bale production and bale weight. [District Rule 2201]
- 27. Buttonwillow Ginning Co, shall maintain accurate seasonal records of bale production, bale weight, fuel type, and fuel volume burned. [District Rule 2201]
- 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 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]
- 30. 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]

Appendix B Draft ERC Certificate

San Joaquin Valley Air Pollution Control District

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

Emission Reduction Credit Certificate

ISSUED TO:

BUTTONWILLOW GINNING CO

ISSUED DATE:

<DRAFT>

LOCATION OF

HWY 58 & BUTTONWILLOW DR

REDUCTION: BUTTONWILLOW, CA 93206

For CO2E Reduction In The Amount Of:

446 metric tons / year

Method Of Reduction	
[X] Shutdown of Entire Stationary Sou	ırc
[1 Shutdown of Emissions Units	

I 1 Conditions Attached

1 Other

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

Emission Reduction Qualification Criteria

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

Seyed Sadredin, Executive Director APCO

David Warner, Director of Permit Services