



AUG 28 2013

Michael Hooper  
Farmer's Cooperative Gin  
2531 Wasco Way  
Buttonwillow, CA 93206

**Re: Notice of Preliminary Decision – Emission Reduction Credits**  
**Facility Number: S-878**  
**Project Number: S-1122686**

Dear Mr. Hooper:

Enclosed for your review and comment is the District's analysis of Farmer's Cooperative Gin's application for Emission Reduction Credits (ERCs) resulting from the shutdown of a cotton gin, at 18451 Beech Avenue in Shafter, CA. The quantity of ERCs proposed for banking is 351 metric tons CO<sub>2</sub>e/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. Steve Roeder of Permit Services at (661) 392- 5615.

Sincerely,



David Warner  
Director of Permit Services

DW:SR/st

Enclosures

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

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

Northern Region  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-8400 FAX: (209) 557-8475

Central Region (Main Office)  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
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Southern Region  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: 661-392-5500 FAX: 661-392-5585

Bakersfield Californian

Newspaper notice for publication in Bakersfield Californian and for posting on  
valleyair.org

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**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 Farmer's Cooperative Gin for the shutdown of a cotton gin, at 18451 Beech Avenue in Shafter, CA. The quantity of ERCs proposed for banking is 351 metric tons CO<sub>2</sub>e/yr.

The analysis of the regulatory basis for this proposed action, Project #S-1122686, is available for public inspection at [http://www.valleyair.org/notices/public\\_notices\\_idx.htm](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 September 30, 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: Farmer's Cooperative Gin

Date: August 20, 2013

Mailing Address: 2531 Wasco Way  
Buttonwillow, CA 93206

Engineer: Steve Roeder  
Lead Engineer: Leonard Scandura

Contact Person: Michael Hooper

Telephone: (661) 764-5251

Project #: S-1122686

Received: July 10, 2012

Deemed Complete: April 1, 2013

ERC #: S-4108-24

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## **I. Summary**

The primary business of this facility is cotton ginning. Farmer's Cooperative Gin has surrendered the Permit to Operate (PTO) for their cotton gin (S-878-1-6) following the permanent shutdown after the 2006 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 12/21/06 (ERC Project S-1065230).

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 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 by 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-4108-24	CO <sub>2</sub> e	351 metric tons/year

## II. Applicable Rules

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

## III. Location of Reduction

The equipment was located at 18451 Beech Avenue, in Shafter, 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-878-1-6: COTTON GIN #1

## V. Calculations

### A. Assumptions and Emission Factors

#### Assumptions

- Units of GHG AER is metric tons of CO<sub>2</sub>e per year, rounded to the nearest metric ton
- 1,000 kg = 1 metric ton
- 1 therm of Natural Gas = 100 scf
- The final CO<sub>2</sub>e emission factor from the combustion of natural gas includes GHG emissions of CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O, 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<sub>2</sub> equivalent emission factors for CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O are shown in the following table.

Natural Gas Emission Factors					
Pollutant	kg/MMBtu	0.1 MMBtu/therm	GWP	CO <sub>2</sub> e EF	
CO <sub>2</sub>	52.87	0.1	1.00	5.287	kg-CO <sub>2</sub> e /therm
CH <sub>4</sub>	0.0009	0.1	21.00	0.0019	kg-CO <sub>2</sub> e /therm
N <sub>2</sub> O	0.0001	0.1	310.0	0.0031	kg-CO <sub>2</sub> e /therm
CO <sub>2</sub> e				5.292	kg-CO <sub>2</sub> e /therm

The CO<sub>2</sub>e emission factor is converted into metric tons/therm as follows:

$$\frac{5.292 \text{ kg} \cdot \text{CO}_2\text{e}}{\text{therm}} \times \frac{1 \text{ metric ton}}{1,000 \text{ kg}} = 0.00529 \frac{\text{metric tons} \cdot \text{CO}_2\text{e}}{\text{therm}}$$

### 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-878, 1065230 specified the baseline period as the operating year 2004. 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 year of 2004.

### 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 ERC project S-1065230, and is posted in the following table.

Baseline Fuel Usage	
Year	Annual Fuel Use (Therms)
2004	66,424

### 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.

CO <sub>2</sub> e HAE						
2004	0.00529	metric tons/therm x	66,424	therms/yr =	351	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.

$$\begin{aligned} \text{ERCs eligible for banking} &= 351 \text{ metric ton/year} - 0 \text{ ton/year} \\ &= 351 \text{ metric ton/year} \end{aligned}$$

## 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 1/1/06. 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 18451 Beech Avenue, in Shafter, 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.

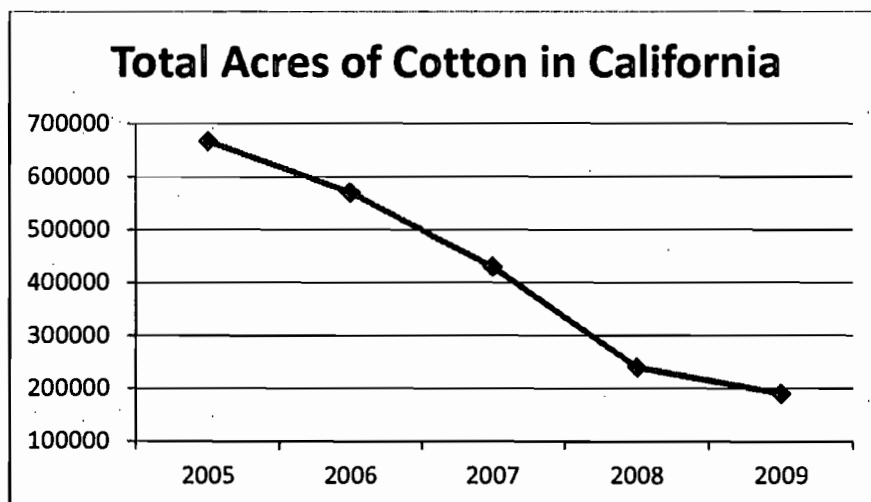
Please note that while Rule 2301 allows facilities to receive ERCs for GHG emission reductions, the District does not have any requirements on the use of GHG ERCs. However, it is anticipated that the likely uses of such GHG ERCs would be their future retirement as GHG mitigation in the CEQA process.

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:**

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 CO<sub>2</sub>e) 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-4108-24	CO <sub>2</sub> e	351 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-878-1-6

EXPIRATION DATE: 01/31/2010

SECTION: 22 TOWNSHIP: 28S RANGE: 25E

EQUIPMENT DESCRIPTION:  
COTTON GIN #1

## PERMIT UNIT REQUIREMENTS

1. Operation shall include ten (10) - 66 inch dia. 1D-3D type cyclone collectors all attached to a common plenum. [District Rule 2201]
2. Operation shall include one 7 cylinder module feeder with 6 in. dia. roller bed, two 17 in. dia. power telescoping suction tubes, and unloading separator with unloading separator fan discharging to common plenum. [District Rule 2201]
3. Operation shall include #1 hot air push fan with 8 MMBtu/hr burner, #1A screen separator over 15-cylinder horizontal cleaner over stick machine, and #1A separator & stick machine trash pull fan discharging to common plenum. [District Rule 2201]
4. Operation shall include #1B screen separator over 15-cylinder horizontal cleaner over one stick machine, and #1B separator & stick machine trash pull fan discharging to common plenum. [District Rule 2201]
5. Operation shall include #2A and #2B hot air push fans each serving 3 MMBtu/hr burners, #2A 8 ft. over-head incline cleaner, and #2A pull fan discharging to common plenum. [District Rule 2201]
6. Operation shall include conveyor distributor, automatic over-flow bin, #2B 8 ft. over-head incline cleaner, and #2B pull fan discharging to common plenum. [District Rule 2201]
7. Operation shall include one overflow separator and overflow separator fan discharging to common plenum, three extractor feeders, and three saw brush gin stands. [District Rule 2201]
8. Operation shall include three centrifugal lint cleaners, three double lint cleaners, and three 24D condenser pull fans discharging to a total of 6 - 60 in. dia. 1D-2D cyclones. [District Rule 2201]
9. Operation shall include seed blower to seed storage, feeder dust & main trash fan discharging to common plenum, and 24D "A" side mote pull fan discharging to 2 - 50 in. dia. 1D-3D cyclones. [District Rule 2201]
10. Operation shall include 24D "B" side mote pull fan discharging to 2 - 50 in. dia. 1D-3D cyclones, one battery condenser, bale press, battery condenser pull fan discharging to 3 - 64 in. dia. 1D-2D cyclones, and one 3 MMBtu/hr humidaire. [District Rule 2201]
11. Operation shall include condensers collectors bleed fan discharging to common plenum, and mote collectors bleed fan discharging to 1 - 44 in. dia. 1D-3D cyclone over one mote cleaner. [District Rule 2201]
12. Operation shall include one mote line reclaimer cleaner, one condenser pull fan discharging to plenum chamber, and one lint cleaner mote condenser over mote press. [District Rule 2201]
13. Operation shall include condenser pull fan discharging to one 38" dia. 1D-3D cyclone, one mote lint cleaner and mote cleaner trash pull fan discharging to 1 - 44 in. dia. 1D-3D cyclone. [District Rule 2201]
14. Operation shall include one flat bale mote press, one plenum trash auger blower discharging to one stockpiler plenum with 2 - 18 in. dia. 1D-3D cyclones. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: FARMERS COOPERATIVE GIN INC  
Location: BEECH BETWEEN RIVERSIDE/ORANGE,SHAFTER, CA 93283  
S-878-1-6 Apr 11 2007 12:43PM - FURUKAO

15. Operation shall include seed handling/storage operation with one 60 hp blower discharging to covered seed storage. [District Rule 2201]
16. All exhaust ducts shall be vented to appropriate dust collection equipment. [District Rule 2201]
17. There shall be no baffles or other projections inside cyclones. [District Rule 2201]
18. Daily ginning rate shall not exceed 270 tons of baled cotton per day (1080 bales per day, corrected to 500-pound bales). [District Rule 2201]
19. Annual ginning rate shall not exceed 35,999 tons of baled cotton per season (143,996 bales per season, corrected to 500-pound bales). [District Rule 2201]
20. Particulate collection equipment shall be in operation when process equipment is in operation. [District Rule 2201]
21. Material removed from dust collector(s) shall be treated in a manner preventing entrainment to the atmosphere (less than 5% opacity), e.g., trash trailer shall be enclosed. [District Rule 2201]
22. Cotton gin trash shall be handled and disposed of in a manner preventing spontaneous ignition and/or fire hazard. [District Rule 2201]
23. The trash auger of the trash piling system shall have both sides equipped with wind barriers that extend, as measured vertically prior to trash pile build-up, one foot above and three feet below the auger. [District Rule 4204]
24. After the trash pile has built up to the height of the trash auger, removing material from the pile shall be performed in such a way as to prevent free-falling trash from the stockpiling system. [District Rule 4204]
25. If the trash stockpile is removed to prevent the build-up of heat in the pile, the operator shall record the date of the removal. [District Rule 4204]
26. Emissions of PM-10 shall not exceed 3.64 pounds per ton of baled cotton (0.91 pounds per bale, corrected to 500-pound bales). [District Rule 2201]
27. Annual emissions of PM-10 shall not exceed 66 tons per year (0.91 pounds per bale, corrected to 500-pound bales). [District Rule 2201]
28. Emission rates for burners shall not exceed: PM-10: 0.005 lb/MMBtu; SO<sub>x</sub> (as SO<sub>2</sub>): 0.0006 lb/MMBtu; NO<sub>x</sub> (as NO<sub>2</sub>): 0.100 lb/MMBtu; VOC: 0.0053 lb/MMBtu; and CO: 0.020 lb/MMBtu. [District Rule 2201]
29. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is dark or darker than Ringelmann 1/4 or equivalent to 5% opacity. [District Rule 2201]
30. Permittee shall conduct daily visual inspections of the material handling systems for leaks, breaks, or other visible signs of equipment malfunctions. [District Rule 4204]
31. Permittee shall maintain a record of the daily inspections, including any equipment malfunctions discovered and corrective action taken to repair the malfunction, and any source test results. [District Rule 4204]
32. Permittee shall maintain accurate records of daily bale production rate. [District Rules 1070 & 2201]
33. Permittee shall maintain accurate annual records of bale production, fuel type, and volume of fuel burned. [District Rules 1070 & 2201]
34. All records shall be retained on site for 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.

Facility Name: FARMERS COOPERATIVE GIN INC  
Location: BEECH BETWEEN RIVERSIDE/ORANGE, SHAFER, CA 93283  
S-878-1-6 Apr 11 2007 12:43PM - FULFILLAD

**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**

**S-4108-24**  
**DRAFT**

ISSUED TO: FARMERS COOPERATIVE GIN INC  
ISSUED DATE: <DRAFT>  
LOCATION OF REDUCTION: 18451 BEECH AVENUE  
SHAFTER, CA 93263

**For CO2E Reduction In The Amount Of:**

**351 metric tons / year**

Conditions Attached

**Method Of Reduction**

- Shutdown of Entire Stationary Source  
 Shutdown of Emissions Units  
 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

**DRAFT**  
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David Warner, Director of Permit Services