JUL 17 2013

Karlene Story
Elbow Enterprises
12021 Avenue 328
Visalia, CA 93291

Re: Notice of Preliminary Decision – Emission Reduction Credits
Facility Number: S-521
Project Number: S-1122687

Dear Ms. Story:

Enclosed for your review and comment is the District’s analysis of Elbow Enterprises’s application for Emission Reduction Credits (ERCs) resulting from the shutdown of a cotton gin, at 12021 Avenue 328 in Visalia. The quantity of ERCs proposed for banking is 686 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. 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
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 Elbow Enterprises for the shutdown of a cotton gin, at 12021 Avenue 328 in Visalia. The quantity of ERCS proposed for banking is 686 metric tons CO2e/yr.

The analysis of the regulatory basis for this proposed action, Project #S-1122687, 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: Elbow Enterprises
Mailing Address: 12021 Avenue 328
               Visalia, CA 93291
Contact Person: Karleen Story
Telephone: (559) 734-1177
Project #: S-1122687
Received: July 10, 2012
Deemed Complete: April 1, 2013
ERC #: S-4069-24

Date: July 5, 2013
Engineer: Steve Roeder
Lead Engineer: Leonard Scandura

I. Summary

The primary business of this facility is cotton ginning. Elbow Enterprises has surrendered the Permit to Operate (PTO) for their cotton gin (S-521-1-7) following the permanent shutdown on 12/27/06 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 4/6/07 (ERC Project S-1071703).

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 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.

<table>
<thead>
<tr>
<th>ERC Certificate</th>
<th>Pollutant</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-4069-24</td>
<td>CO₂e</td>
<td>686 metric tons/year</td>
</tr>
</tbody>
</table>

II. Applicable Rules

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

III. Location of Reduction

The equipment was located at 12021 Avenue 328, in Visalia.

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-521-1-7: SAW-TYPE COTTON GIN
V. Calculations

A. Assumptions and Emission Factors

Assumptions

- Units of GHG AER is metric tons of \( CO_2e \) per year, rounded to the nearest metric ton
- 1,000 kg = 1 metric ton
- 1 therm of Natural Gas = 100 scf
- The final \( CO_2e \) emission factor from the combustion of natural gas includes GHG emissions of \( CO_2 \), \( CH_4 \), and \( N_2O \), where the total emission factor includes the summation of each of the compounds multiplied by their Global Warming Potential (GWP)
- 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.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>kg/MMBtu</th>
<th>0.1 MMBtu/therm</th>
<th>GWP</th>
<th>( CO_2e ) EF</th>
</tr>
</thead>
<tbody>
<tr>
<td>( CO_2 )</td>
<td>52.87</td>
<td>0.1</td>
<td>1.00</td>
<td>5.287 kg-( CO_2e ) /therm</td>
</tr>
<tr>
<td>( CH_4 )</td>
<td>0.00009</td>
<td>0.1</td>
<td>21.00</td>
<td>0.0019 kg-( CO_2e ) /therm</td>
</tr>
<tr>
<td>( N_2O )</td>
<td>0.0001</td>
<td>0.1</td>
<td>310.0</td>
<td>0.0031 kg-( CO_2e ) /therm</td>
</tr>
<tr>
<td>( CO_2e )</td>
<td></td>
<td></td>
<td></td>
<td>5.292 kg-( CO_2e ) /therm</td>
</tr>
</tbody>
</table>

The \( CO_2e \) emission factor is converted into metric tons/therm as follows:

\[
\frac{5.292 \, kg \cdot CO_2e \, to \, therm}{therm} \times \frac{1 \, metric \, ton}{1,000 \, kg} = 0.00529 \, metric \, tons \cdot CO_2e \, to \, therm
\]

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-521, 1071702 specified the baseline period as the operating years 2002-2003. 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 2002 - 2003.
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.

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Fuel Use (Therms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-03</td>
<td>129,765</td>
</tr>
</tbody>
</table>

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.

| 2002-03 | 0.00529 | metric tons/therm x 129,765 therms/yr = 686 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 = 686 metric ton/year – 0 ton/year  
= 686 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 9/18/08. 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 12021 Avenue 328, in Visalia. 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.

![Total Acres of Cotton in California](chart.png)

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.

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List of Appendixes

A. Surrendered PTO
B. Draft Emission Reduction Credit Certificate
Appendix A
Surrendered PTO
CONDITIONS FOR PERMIT S-521-1-7

LEGAL OWNER OR OPERATOR: ELBOW ENTERPRISES INC
MAILING ADDRESS: 12021 AVENUE 328
                 VISALIA, CA 93291

LOCATION: 12021 AVENUE 328
           VISALIA, CA 93291

SECTION: NE07 TOWNSHIP: 18S RANGE: 25E

INSPECT PROGRAM PARTICIPANT: NO

EQUIPMENT DESCRIPTION: SAW-TYPE COTTON GIN

CONDITIONS

1. All systems shall demonstrate compliance with the requirements of District Rule 4204 by the compliance dates in Section 7.0. [District Rule 4204]

2. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]

3. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

4. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

5. {1935} Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201]

6. {1934} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]

7. Daily ginning rate of the saw gin stand shall not exceed 270 tons of baled cotton per day (1,080 bales per day, based on 500 pound bales). [District Rule 2201]

8. Annual ginning rate of the saw gin stand shall not exceed 35,204 tons of baled cotton per year (140,816 bales per year, based on 500 pound bales). [District Rule 2201]

9. Total PM10 emissions from the saw cotton gin operation shall not exceed 3.20 pound per ton of baled cotton (0.80 pound per bale, corrected to 500 pound bales). [District Rule 2201]

10. PM10 emissions from the cyclone system serving the # 3 precleaning system shall not exceed 0.09 pound per bale, corrected to 500 pound bales. [District Rule 2201]

11. Operation shall include: one module feeder; and # 1 precleaning served by a plenum chamber with three 44 in. dia. 1D-3D cyclones with expansion chambers. [District Rule 2201]

12. Operation shall include: # 2 precleaning served by four 38 in. dia. 1D-3D cyclones; # 3 precleaning served by six 36 in. dia. 1D-3D enhanced cyclones; and overflow system served by one 36 in. dia. 2D-2D cyclone. [District Rule 2201]

13. Operation shall include: lint cleaners (6 first stage and 6 second stage) served by twelve 62 in. dia. 1D-3D cyclones, and two battery condensers served by two 80 in. dia. and two 70 in. dia. 1D-3D cyclones. [District Rule 2201]

14. Operation shall include: motes system served by three 60 in. dia. cyclones; motes cleaner served by one 38 in. dia. 2D-2D cyclone, mote press served by one 28 in. dia. 2D-2D cyclone. [District Rule 2201]

15. Operation shall include: main trash system served by one 28 in. dia. and two 20 in. dia. 2D-2D cyclones. [District Rule 2201]

16. The # 3 precleaning system shall be controlled by six 36” enhanced 1D-3D cyclones, operating at a cyclone inlet air velocity of 3200 ft 400 ft/min. [District Rules 2201 and 4204]

17. All 1D-3D cyclones shall operate at a cyclone inlet air velocity of 3200 ft 400 ft/min. [District Rule 4204]
18. Source testing to measure the air inlet velocity of the 36" enhanced 1D-3D cyclone serving the #2 cleaning system shall be conducted within 60 days of initial start-up. [District Rules 2201 and 4204]

19. (109) Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]

20. (110) The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

21. Stack gas velocity and volumetric flow rate shall be determined using EPA Method 2. [District Rule 4204]

22. 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]

23. 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]

24. 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]

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

26. 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]

27. Permittee shall maintain accurate daily records of the number and weight of bales produced. [District Rule 2201]

28. All records shall be retained on site for 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
S-4069-24

ISSUED TO: ELBOW ENTERPRISES INC
ISSUED DATE: <DRAFT>
LOCATION OF REDUCTION: 12021 AVENUE 328
VENAL, CA 93291

For CO2E Reduction In The Amount Of:

686 metric tons / year

[ ] Conditions Attached

Method Of Reduction
[X] 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 Sadreddin, Executive Director / APCO

David Warner, Director of Permit Services