

## **APPENDIX D**

## **MANUAL OF PROCEDURES**

### To Be Used in Conjunction with Placer County's Rule 506 - Biomass Emission Reduction Credit and Banking

#### 1. INTRODUCTION AND CONTENTS

This Manual of Procedures sets forth procedures relating to the application, calculation, review, registration, tracking and use of emission reduction credits arising from the reduction in open burning of biomass material as provided in Rule 506 - Biomass Emission Reduction Credit and Banking. The Emission Reduction Credit (ERC) application, calculation, and banking system contains the following requirements and elements:

##### A. STANDARD APPLICATION FORM

The application must contain sufficient information on the legal trail from landowner to applicant (if applicant is not landowner) to input into the database and confirm legal authority for an ERC application. Also the database will have the: landowner's name, lessee/farmer, applicant, current ERC owner, and end user (offsets) if known.

##### B. SPECIFIC APPLICATION PROCEDURES

The parcel ID will be Assessors Parcel # from the county, farmers field ID, Section, Township, Range location, nearest crossroads, and include a map of the parcel. The application will also contain burn records or other verifiable documentation on parcel(s), and a calculation sheet with the emission reductions for each parcel.

##### C. STANDARD CALCULATION TEMPLATE WITH EXAMPLE

This manual provides a standardized calculation template and examples for various crops and scenarios.

##### D. SAMPLE ERC CERTIFICATE

The certificate lists specific parcel(s) location(s), pollutants, amount of credits per quarter, and ownership of ERCs.

##### E. SPECIFICS OF ENFORCEABILITY FOR BIOMASS ERC/OFFSETS

Ownership of ERCs will go into a ledger database which will also contain information regarding the landowner and farmer. The biomass ERC list will become a no burn list and no APCD burn permit will be issued for those parcels. The database will cross-check the no burn list with the ready to burn list for verification and will be used throughout the year.

##### F. METHODS OF ADDRESSING POSSIBLE DOUBLE COUNTING PROBLEMS

Existing biomass plants that require offsets will need to report open biomass burning reduction credits claimed pursuant to Health & Safety Code Section 41605.5. These credits will be incorporated into the banking system register within a two year period. This will strengthen the central ledger approach and will work as outlined in Section 1.E. above.

##### G. SPECIFIC PROCEDURES FOR USE AND CHANGE OF CREDITS

Changes can be made in ownership of credits or quantity of credits. Amendment forms are provided to facilitate the quick re-issuance of certificates with changes. For temporary use of credits as offsets the database will specify the duration of transfer and the current ownership.

H. IDENTIFY VALID SURROGATE RECORDS

Burn records would be the most valid records, however, fire district records, written certification of the ASCS office or certification from the Placer County Agricultural Commissioner Department and Placer County Air Pollution Control District (APCD) may also be used.

I. DESCRIBE THE TRACKING SYSTEM

A comprehensive ERC banking database will be developed which has matching fields with the ready to burn database for cross-checking. A no burn list will be generated from the ERC banking database for biomass credits. The no burn list will be provided to the Dry Creek Fire Protection District and the California Department of Forestry and Fire Protection (CDF) so that they can keep from issuing fire agency burn permits for parcels with ERCs. This would not preclude a grower from obtaining a burn permit for other parcels without ERC's.

J. AN OUTLINE OF THE ISSUANCE OF AGRICULTURAL BURN PERMITS AND BURN DECISIONS

Growers come into the APCD for an annual APCD burning permit. Growers bring maps of the fields that they want to burn or for pesticide applications. After growers harvest fields or prune orchards and there is a residue to be burned they notify the APCD to get that specific parcel on the ready to burn list. When there is a burn day with sufficient acreage to allocate and the grower is available on the ready to burn list, the grower is authorized to burn that specific parcel on that day.

K. STANDARD INTER-DISTRICT AGREEMENT ON USE OF ERCS

Districts within the Sacramento Valley Air Basin agree to accept the ERC certificates issued by other districts within the Basin for use by sources required to obtain emission offsets pursuant to Rule 502, NEW SOURCE REVIEW. The district with the new or modified facility requiring offsets need only adjust those emission reductions based on specified distance ratios from the new facility.

L. MANUAL OF PROCEDURE FORMS

This Manual contains the forms that are necessary for the ERC application process including a transfer of ownership form, designation of authority form from the landowner, ERC certificate amendment form, and a release form for the designated owner of an ERC to donate the credits to the APCD.

## 2. ERC APPLICATION PROCEDURES

### A. APPLICATION FORMS

Applications for ERCs for open biomass burning shall be submitted on the following forms:

- Application cover page
- Parcel identification page
- Designation of authority page

Other information must also be submitted with the application package, such as a map(s) of the parcel(s) and the data sheet(s) used to calculate the ERCs.



PARCEL IDENTIFICATION

Data relating to the quantity of emission reduction credits requested must be included on the attached ERC calculation worksheet(s) for each parcel.

Parcel ID: \_\_\_\_\_  
Acres: \_\_\_\_\_

Field ID & AP# \_\_\_\_\_  
Sec Twn Rge \_\_\_\_\_  
Crossroads \_\_\_\_\_  
Lessee/Grower \_\_\_\_\_

Biomass type \_\_\_\_\_  
Disposition \_\_\_\_\_  
of biomass \_\_\_\_\_

Parcel ID: \_\_\_\_\_  
Acres: \_\_\_\_\_

Field ID & AP# \_\_\_\_\_  
Sec Twn Rge \_\_\_\_\_  
Crossroads \_\_\_\_\_  
Lessee/Grower \_\_\_\_\_

Biomass type \_\_\_\_\_  
Disposition \_\_\_\_\_  
of biomass \_\_\_\_\_

Parcel ID: \_\_\_\_\_  
Acres: \_\_\_\_\_

Field ID & AP# \_\_\_\_\_  
Sec Twn Rge \_\_\_\_\_  
Crossroads \_\_\_\_\_  
Lessee/Grower \_\_\_\_\_

Biomass type \_\_\_\_\_  
Disposition \_\_\_\_\_  
of biomass \_\_\_\_\_

Parcel ID: \_\_\_\_\_  
Acres: \_\_\_\_\_

Field ID & AP# \_\_\_\_\_  
Sec Twn Rge \_\_\_\_\_  
Crossroads \_\_\_\_\_  
Lessee/Grower \_\_\_\_\_

Biomass type \_\_\_\_\_  
Disposition \_\_\_\_\_  
of biomass \_\_\_\_\_

Parcel ID: \_\_\_\_\_  
Acres: \_\_\_\_\_

Field ID & AP# \_\_\_\_\_  
Sec Twn Rge \_\_\_\_\_  
Crossroads \_\_\_\_\_  
Lessee/Grower \_\_\_\_\_

Biomass type \_\_\_\_\_  
Disposition \_\_\_\_\_  
of biomass \_\_\_\_\_

DESIGNATION OF AUTHORITY  
TO APPLY FOR, TRANSFER, MODIFY, OR TERMINATE AN ERC

I \_\_\_\_\_ certify that I, or \_\_\_\_\_  
for which I am authorized to act, am the owner of the parcel of land identified below. I hereby appoint  
\_\_\_\_\_ as my (our) agent solely for purposes of applying for, transferring, or  
modifying an emission reduction credit (ERC) pursuant to Rule 506 - Emission Reduction Credit and Banking  
of the Placer County Air Pollution Control District on my behalf for the following identified parcel. This  
authorization supersedes any prior such authorization for the parcel.

Parcel Identification:

Tax Assessor Number \_\_\_\_\_

Field ID \_\_\_\_\_

Sec. Twn. Rge. \_\_\_\_\_

Nearest Crossroads \_\_\_\_\_

Map (indicate location on map with nearest road and crossroad)

Name (print): \_\_\_\_\_

Signature: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, ZIP: \_\_\_\_\_

Telephone: \_\_\_\_\_

Date: \_\_\_\_\_

**The applicant acknowledges that, upon issuance of an ERC, no APCD burn permit will be issued for the parcel(s) covered by the ERC certificate(s).**

### 3. OPEN BURNING ERC CALCULATION PROCEDURES

Default HBFs and QBFs shall be used to calculate the ERCs. An alternative use of the parcel specific HBFs and QBFs may be used after a methodology is developed and receives written California Air Resources Board (ARB) concurrence. The alternative method is to address specific geographic areas with specific air quality problems. In the event that a specific crop factor (i.e. FL or EF) is not found in Table 3 then factors from other sources (e.g. Darley, Jenkins, or AP42) may be used.

#### A. EMISSION REDUCTION CREDITS CALCULATION FORMULA

The APCD will calculate, for each parcel, the ERC amount based on the following calculation equation:

$$\text{ERCs} = (\text{AB}-\text{DA}) * \text{HBF} * \text{FL} * \text{EF} * \text{QBF}$$

These ERCs will be specific for each pollutant and stated in pounds per quarter.

#### B. FORMULA DEFINITIONS

Open biomass burning ERCs shall be calculated separately for each crop type, for each pollutant and for each quarter according to the above formula:

Where:

ERC = Emission reduction credit for each pollutant in pounds per quarter.

AB = Acreage burned is specific to a parcel, for which open burning is to be restricted upon issuance of the ERC.

FL = Fuel loading factor in dry tons per acre. The fuel loading factor shall be determined for each crop type from the fuel loading factors in Table 3.

EF = Emission factor in pounds per dry ton. The emission factor for each crop type and each pollutant shall be determined from the open field biomass burning emission factors listed in Table 3.

HBF = Historical burn fraction or the fraction of actual harvested acreage for each crop type which was historically open burned. The historical burn fraction shall be determined on a county-by-county basis from the default HBFs listed in Table 1.

QBF = Quarterly burn fraction is the fraction of the total historically burned acreage which was burned during each calendar quarter. The quarterly burn fraction shall be determined on a county-by-county basis for each calendar quarter from the default QBFs listed in Table 2.

DA = Discount acreage is the specified acres the applicant wishes to allow for continued burning on a portion of the parcel which is the subject of an ERC application. The portion of the parcel that is covered by the discount acreage (i.e. the acreage eligible for an APCD burn permit) must be clearly identified. This portion will not be allowed to change without prior APCD notification and approval.

#### C. METHODS OF CALCULATION

The method used for calculating emission reductions which can qualify for open biomass burning ERCs uses several factors. The ERC calculation worksheet in Table 4 below provides an example of the calculation method. The method allows the applicant to use



preset factors required for the ERC calculation for the historical burn fraction, quarterly burn fraction, fuel loading factor, and the emission factors for each pollutant.

D. BURN INFORMATION SOURCES AND AVAILABILITY

The following sources or combination of information of sources may be used to verify the burn history of a specific crop on a specific parcel of land.

The APCD receives applications to burn, issues APCD burn permits allocates acres for burning and maintains lists of growers requesting authorization to burn. Fire Districts also receives and issues fire agency burn permits for agricultural burning. These records are preferred hard data used to determine the historical information that specific crop residues were burned on specific parcels of land during specific calendar quarters of the year. The ERC applicant should identify the records available, attach copies, and identify the public agency source(s) with contacts and phone numbers for verification as needed.

Where the public agency burn records are missing or inadequate, a certification by the respective public agency representative, based on his or her first hand knowledge that the identified crop residue burning occurred during specific quarters of specific years, may be accepted by the Air Pollution Control Officer, at her or his discretion, to meet the ERC application requirements.

E. APPLICATION COMPLETENESS

To be considered a complete application for ERCs, specific parcel information to verify burning during at least one year of the baseline years (1988-92), acreage burned, and crop type as a minimum must be included. An application for an ERC for open biomass burning will not be deemed incomplete due to burn history data not provided for each of the five baseline years of 1988 to 1992. However, the application must provide whatever data are reasonably available from the sources described Section 3.D. above.

F. HISTORICAL BURN FRACTIONS (HBF):

The default HBFs listed in Table 1 shall be used for the crops indicated.

G. QUARTERLY BURN FRACTION (QBF):

The default QBFs listed in Table 2 shall be used for the crops indicated.

H. FUEL LOADING (FL) AND EMISSION FACTORS (EF):

The biomass fuel loading (FL) and emission factors (EF) listed in Table 3 shall be used for the crops indicated.

I. CALCULATION FORM

The Sacramento Valley Air Basin Biomass ERC Calculation Worksheet form shall be completed for each parcel for which an ERC application is made.

4. PROCEDURES FOR USE AND MODIFICATION OF OPEN BIOMASS BURNING ERCS

- A. Procedures for the application and registration of ERCs are set forth in Rule 506 - Biomass Emission Reduction Credit and Banking ERCs may be used as air emission offsets. Such offsets may be required under the Rule 502, NEW SOURCE REVIEW of the APCD or by other regulatory or land use authorities. ERCs may be used as offsets for emissions on the same parcel on which open biomass burning reductions have occurred or to offset emissions of sources of air emissions off the parcel site but generally within the same air basin (the

Sacramento Valley Air Basin). In order to be used off site by another party the ERC must be transferred to such party by the registered owner of the ERC. Alternatively, the ERC may be applied for in the first instance by the party intending to use the ERC if the landowner, or the landowner's authorized agent, authorizes the user to make such an application on behalf of the landowner or the landowner's authorized agent.

- B. ERC's may be transferred by the registered owner upon application and payment of a transfer fee as required by the APCD. Applications for transfers shall be made by submission of an Application to Transfer ERC form as follows:

#### APPLICATION TO TRANSFER ERC

I, \_\_\_\_\_ hereby transfer to \_\_\_\_\_ the Emissions Reduction Certificate number \_\_\_\_\_. I understand that the new registered owner of the ERC is entitled to all rights and privileges and will be subject to all the requirements and limitations related thereto. This transfer is (please initial one of the two following choices):

- 1. Permanent \_\_\_\_\_
- 2. Will expire on \_\_\_\_\_

Previous registered owner: \_\_\_\_\_ Date: \_\_\_\_\_

New registered owner: \_\_\_\_\_ Date: \_\_\_\_\_

Address and telephone: \_\_\_\_\_

- C. ERC's may be canceled upon surrender of the ERC certificate by the registered owner. Applications for cancellation shall be made by submission of an Application to Cancel ERC form as follows:

#### APPLICATION TO CANCEL ERC

I, \_\_\_\_\_ hereby surrender for cancellation the Emissions Reduction Certificate number \_\_\_\_\_ (attached). I understand that in the event this ERC has been previously used to offset air emissions of another source that cancellation of this ERC certificate may require such emitting source to curtail or cease operations or obtain a substitute offset.

Furthermore, if the ERCs pertain to open biomass burning I understand that burning may only be undertaken on the parcel subject to this ERC if permitted under applicable agricultural burning provisions set forth in the Health & Safety Code, in APCD regulations and in the current Sacramento Valley Annual Agricultural Burning Plan.

Registered Owner: \_\_\_\_\_ Date: \_\_\_\_\_

Address and telephone: \_\_\_\_\_

- D. Rule 506 - Biomass Emission Reduction Credit and Banking provides that the District may claim emission reductions neither banked nor used as emission reduction credits from any source, after expiration of the application period stated in the rule, and use such emission reductions toward attainment of air quality standards or deposit the emission reductions into the community bank. Before making such a claim for emission reductions the APCD shall provide notice to the landowner or source that the APCD intends to claim the emissions reduction unless the landowner or source, or their authorized designee, makes an application for an ERC within 90 days of the notice. Ninety days following such notice, the District may claim the emission reductions.

## 5. APPLICATION REVIEW PROCEDURES

- A. The time periods stated in the rule for determining application completeness, doing calculations, processing the application, and making a final decision are the maximum timeframe allowed. Every effort will be made to complete the analysis and make a decision as quickly as possible consistent with APCD workload. Time periods in this section may be extended by mutual agreement of both the applicant and APCO. The District shall determine whether an ERC application is complete not later than thirty (30) calendar days following receipt of the application. If the application is not deemed incomplete within the specified time period, the APCD shall deem it complete.

If the APCD determines that the application is not complete, the applicant shall be notified in writing of the decision, specifying in writing the additional information is required. The applicant shall have sixty (60) days to submit the requested information. Upon receipt of the information, the APCO shall have another fifteen (15) days to determine completeness. If no information is submitted and/or the application is still incomplete, the APCO may cancel the application with written notification to applicant.

Upon determination that the application is complete, the APCO shall notify the applicant in writing. Thereafter, only information to clarify, correct, or otherwise supplement the information submitted in the application may be requested by the District. No such notification need be made if the District determines that the ERC will be issued within fifteen (15) calendar days of receipt of the original or a revised application.

Withdrawal of a ERC application by an applicant shall result in cancellation of the application; any re-submittal will be processed as a new application.

For open biomass burning applications, not requiring a public comment period, final action will be taken within 30 days of the APCD receiving a complete application. For open biomass burning applications, requiring a public comment period, final action will be taken within 60 days of the APCD receiving a complete application.

For applications for open biomass burning ERCs for parcels of 500 acres or larger the APCO shall provide written notice to the applicant upon completion and transmittal to the applicant of the initial assessment. The District shall also provide written notice to the ARB and shall publish the notice in a local newspaper of general circulation. The notice shall specify the applicant, the quantity of emission reduction credits requested and a copy of the initial assessment.

The notice requirements related to issuance of ERCs may be waived by the APCD if the emission reduction credits applied for are less than 10,000 pounds per quarter per pollutant (or less than 20,000 pounds per quarter of CO), and for open field biomass burning credits or modifications thereof for a parcel less than 500 acres.

Publication of the notice shall commence a thirty (30) day public comment period during which the APCD shall accept written comments on the merits of the ERC application. Upon conclusion of this thirty (30) day period, the APCD shall have another thirty (30) days to render a decision to approve, conditionally approve, or deny the application. This decision shall be provided in writing to the applicant.

The applicant may appeal the APCD's decision following provisions specified in the APCD regulations.

## 6. ENFORCEMENT

### A. OPEN BIOMASS BURNING ERCS AND THE AGRICULTURAL BURNING PROGRAM

A parcel for which an ERC has been issued is not eligible for issuance of an APCD burn permit. Prior to issuance of an ERC, the APCD shall determine whether an APCD burn permit has been issued for the parcel. If such a permit has been issued, the application for the ERC shall be denied unless the applicant surrenders the APCD burn permit for cancellation or modification within fifteen (15) days of notice by the APCD of its intention to deny the ERC application. Prior to issuance of an APCD burn permit, the APCD shall determine whether the parcel has already been issued an ERC. If an ERC has been issued, the application for an APCD burn permit shall be denied.

B. THE BIOMASS ERC BANKING RULE AND THE RICE STRAW BURNING PHASEDOWN LAW

The Biomass ERC banking rule and the rice burning phasedown law are separate programs and have separate requirements even though there is some connection and overlap. Section 41865 (p)(1) of the Health & Safety Code provides that emission reductions achieved in compliance with the required phasedown shall not affect emission reduction credits which would otherwise accrue from reductions in rice straw burning.

Growers are responsible for meeting the requirements related to both the phasedown and requirements that are associated with the registration and use, transfer or modification of ERCs. An individual parcel may be barred from burning both because of the phasedown and because an ERC has been issued for the parcel.

C. A COMPUTERIZED TRACKING SYSTEM WILL BE DEVELOPED FOR RULE 506 - BIOMASS EMISSION REDUCTION CREDIT AND BANKING

All ERCs which are granted will be entered into a computer database to keep track of pertinent information. Health & Safety Code Sections 41605.5 and 42314.5 provide that emission reduction credits shall be allowed to sources which utilize biomass waste material that would otherwise be open burned as a fuel for electrical generation or digester facilities. Rule 506 - Biomass Emission Reduction Credit and Banking contains procedures for the recording of credits allowed for by such facilities and ERCs in a single emission banking

register. Information regarding the claiming of credits by electrical generation or digester facilities is required to be maintained in the central register. Prior to issuance of an ERC the APCD will cross-check its emission banking register to assure that credit is not being given both for an ERC and under Sections 41605.5 and 42314.5.

7. INTERDISTRICT AGREEMENTS REGARDING ERCS

APCDs/AQMDs within the Sacramento Valley Air Basin agree to accept the ERC certificates issued by other districts within the Basin for use by sources required to obtain emission offsets pursuant to Rule 502, NEW SOURCE REVIEW.

8. A sample of an open biomass burning ERC certificate follows:

PLACER COUNTY AIR POLLUTION CONTROL DISTRICT  
 11464 "B" Avenue, Auburn, CA 95603  
 (916) 889-7130

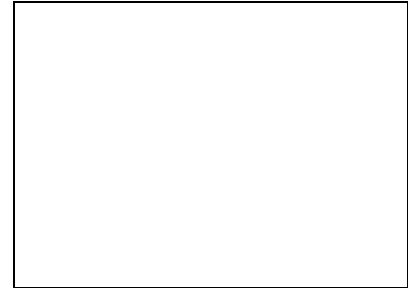
EMISSION REDUCTION CREDIT AND BANKING CERTIFICATE

Certificate Number: \_\_\_\_\_

Registered Owner: \_\_\_\_\_  
 Name  
 \_\_\_\_\_  
 Address

Parcel Identification Number: \_\_\_\_\_  
 Parcel Location:  
 Assessor's Parcel Number: \_\_\_\_\_  
 Field ID: \_\_\_\_\_  
 Sec. Twn. Rge.: \_\_\_\_\_  
 Crossroads: \_\_\_\_\_

District seal:



ERC Pollutant Amounts (Pounds/Quarter)	1	<u>Quarter</u> 234		
NO <sub>x</sub> as NO <sub>2</sub>	X	X	X	X
VOC	X	X	X	X
PM10	X	X	X	X
SO <sub>x</sub> as SO <sub>2</sub>	X	X	X	X
CO	X	X	X	X

Date Issued: \_\_\_\_\_  
 \_\_\_\_\_  
 District representative (Title)

**This ERC certificate shall terminate on transfer of ownership of the parcel unless the landowner complies with Rule 506 - Biomass Emission Reduction Credit and Banking provisions concerning transfers.**

**TABLE 3****OPEN BIOMASS BURNING FUEL LOADING AND EMISSION FACTORS**

<b>CROP</b>	<b>(lb/ton)</b>					<b>(ton/acre)</b>
	<b>NO<sub>2</sub></b>	<b>SO<sub>2</sub></b>	<b>CO</b>	<b>ROG</b>	<b>PM<sub>10</sub></b>	<b>FUEL LOADING</b>
<b>Rice</b>	6.72	1.85	83	8	9	3.0
<b>Wheat</b>	4.48	7.10	108	9	13	1.9
<b>Safflower</b>	5.50	3.21	144	20	18	1.3
<b>Sorghum</b>	5.66	1.08	77	9	18	2.9
<b>Barley</b>	5.55	5.07	157	7	22	1.7
<b>Corn</b>	4.86	0.49	108	12	14	4.2
<b>Alfalfa</b>	5.50	3.21	119	29	29	0.8
<b>Oats</b>	5.50	3.21	136	14	21	1.6
<b>Grape</b>	5.83	1.42	39	3	3	2.5
<b>Orchard</b>	4.92	0.69	37	2	3	2.5
<b>Almond</b>	4.05	0.32	46	6	6	1.6
<b>Apple</b>	4.92	0.69	42	3	4	2.3
<b>Apricot</b>	4.92	0.69	49	6	6	1.8
<b>Cherry</b>	4.92	0.69	44	8	8	1.0
<b>Olive</b>	4.92	0.69	114	14	12	1.2
<b>Peach</b>	5.48	0.12	42	4	6	2.5
<b>Pear</b>	4.92	0.69	57	7	9	2.6
<b>Prune</b>	4.92	0.69	47	6	3	1.2
<b>Walnut</b>	4.92	0.69	47	6	6	1.2
<b>Wildland</b>	4.00		140	25	17	70

Factors based on Darley and AP42.