

# SHASTA COUNTY AIR QUALITY MANAGEMENT DISTRICT

## **RULE 2:2 EMISSION REDUCTION CREDIT AND BANKING RULE**

*(Adopted 7-26-94)(Amended 6-19-01)*

### **A. PURPOSE OF THIS RULE**

1. To provide a mechanism for permitted and non-permitted emission sources to deposit, transfer, and use ERCs as offsets as allowed by applicable laws and regulations. To ensure that all emission reductions are transferred through the District's emission reduction credit bank pursuant to the Health and Safety Code. All transfers and uses of emission reductions that are required under the District's New Source Review (NSR) Rule shall be processed in accordance with this rule.
2. To define ERC eligibility standards, quantitative procedures, and administrative practices and to ensure that ERCs are real, permanent, quantifiable, surplus, and enforceable.
3. To provide a mechanism for intrabasin transfer and use of banked ERCs.
4. To ensure that open biomass burning is prohibited for a parcel for which an ERC exists.
5. To ensure that reductions in emissions from the required phasedown of rice straw burning pursuant to Section 41865 of the California Health and Safety Code qualify as air quality offsets and emission reduction credits.

### **B. APPLICABILITY OF THIS RULE**

The provisions of this Rule apply to the deposit, transfer, and use of emission reduction credits (ERCs) from stationary sources and open biomass burning sources of air pollution emissions. References in this rule to non-permitted source, permit exempt, shutdown, curtailment, authority to construct and permit to operate do not apply to open biomass burning sources. Additional details and procedures covering open biomass burning sources can be found in the Manual of Procedures (MOP) for this rule.

### **C. DEFINITIONS**

1. Actual Emissions: Measured or estimated emissions which most accurately represent the emissions from an emissions unit.
2. Actual Emission Reductions: A reduction in actual emissions from a source for use as emission offsets or banking for ERCs.

- a. Actual emission reductions shall be calculated on a quarterly basis and shall be real, surplus, enforceable, quantifiable and permanent.
- b. To be surplus, emission reductions must be in excess of any emission reductions that are:
  - (1) required or encumbered by any law, rule, regulation, agreement or order; or
  - (2) attributed to a control measure proposed or contained in a State Implementation Plan; or
  - (3) attributed to a control measure proposed or contained in the most recently adopted District Air Quality Attainment Plan for attaining annual reductions required for the California Clean Air Act (CCAA) or the Federal Clean Air Act.

However, if the control measures referenced in (2) or (3) above are not adopted within two years after the timeframe outlined in the Plan, unless the timeframe is extended by the District, then those emission reductions are eligible as emission reduction credits.

- c. To be enforceable, there must be conditions placed on the permit to operate or a legally binding written contract must be executed with the District or other enforceable methods employed.
  - d. To be quantifiable, emission reductions must be real(not artificial, fraudulent, or illusory) and be able to be measured or estimated in terms of both their amount and characteristics.
  - e. To be permanent, emission reductions must continue or endure without fundamental or marked change while the ERCs are banked. ERCs may be leased or temporarily transferred as offsets subject to other requirements of this rule.
    - 1. Notwithstanding paragraph C.2.b., emission reductions due to the decreased open burning of rice fields that were planted prior to the Connelly- Areias-Chandler Rice Straw Burning Reduction Act of 1991 shall qualify as actual emission reductions in accordance with California Health and Safety Code Section 41865(r)(1).
3. Affected Pollutant: An air pollutant for which an ambient air quality standard has been established by the U.S. Environmental Protection Agency (EPA) or the California Air Resources Board (ARB), and the precursors to such pollutants.

4. Applicant: The person, entity, landowner or their designee applying for an ERC certificate.
5. Bankable Emissions: Reductions in affected pollutants which meet the applicable provisions of the District's banking and NSR rules.
6. Banking System: The procedures of quantifying, certifying, recording, and storing ERCs for future use or transfer.
7. Banking Register: The document that records all ERC applications, deposits, withdrawals, transfers, and other transactions including the claiming of open biomass burning offset credits by stationary sources existing prior to first adoption of this Rule.
8. Biomass: Material derived from the harvesting of crops or removal of vegetation, including timber, except for material from processed dimensional timber.
9. Control Efficiency: The ratio of controlled emissions to uncontrolled emissions of the proposed air pollution control technology which will be incorporated, by means of enforceable permit conditions, in the authority to construct and permit to operate. Emission reductions attributed to lowering throughput rates or operating hours shall not be considered in determining control efficiency.
10. Emission Reduction Credits: Reductions of actual emissions from an emission source that are registered with the District in accordance with this banking rule. Reductions will be specified by pollutant, by location, and in units of pounds per calendar quarter.
11. Emissions Unit: An identifiable operation, parcel(s), process or control equipment, such as an article, machine, or other contrivance, which emits, may emit, or results in the emissions of any affected pollutant directly or as fugitive emissions.
12. ERC Certificate: A document certifying title to defined quantities and types of emission reductions issued by the District to the owner(s) identified on the certificate.
13. Historic Actual Emissions: Actual emissions of an existing emissions unit averaged over three consecutive years immediately preceding the date of application. If the last three years are unrepresentative of normal operations as determined by the APCO, then three consecutive years of the last five years may be used. Where an emissions unit has been in operation for less than three years, a shorter averaging period of at least one year may be used, providing it

represents the full operational history of the emissions unit. For rice straw burning, the emissions baseline years will be a five year period (1988 through 1992) and emissions shall be calculated under Section K of this Rule.

14. No-burn List: A list of parcels for which ERCs exist and which will not receive burn permits.
15. Non-permitted Emissions: Emissions of pollutants into the atmosphere from sources that do not have air pollution operating permits. Non-permitted sources include exempt facilities.
16. Offsets: The use of an emission decrease from one or more sources to compensate for an emission increase in a non-attainment pollutant or its precursor from a new or modified source subject to the requirements of the District's New Source Review rule.
17. Parcel(s): A legally identifiable piece of land, a portion of that land, or combined lands, under common ownership as registered with the County Assessor's office for property tax purposes.
18. Potential to Emit: The maximum daily capacity of a stationary source or emissions unit to emit affected pollutants under its physical and operational design. Any physical or operational limitation on the daily capacity of the source or unit to emit a pollutant, including pollution control equipment and restrictions in hours of operation, type of material combusted, stored, or processed, shall be treated as part of its design limitation if they are incorporated into the applicable permit as enforceable permit conditions.
19. Proposed Emissions: The potential to emit for a new or post-modification emissions unit.
20. Registered owner: The person, entity, landowner or their designee in whose name the ERC certificate is issued and listed in the banking register.
21. Restricted Burn List: A list of parcels for which ERCs exist and can receive a restricted burn permit.
22. Restricted Burn Permit: A permit to burn specific fields within an emission unit or parcel of land for which an ERC certificate has been issued. The restricted burn permit ensures that the actual emissions are less than or equal to the amount allotted to the permit holder.
23. Shutdown: Either the earlier of the permanent cessation of emissions from a source or an emission unit or the surrender of that unit's or source's operating permit. If prior to the

surrender of the operating permit, the APCO determines that the source or emission unit has been removed or fallen into an inoperable or unmaintained condition, the APCO may notify the owner of the intent to cancel the permit. If the owner cannot demonstrate to the satisfaction of the APCO, or does not respond within 60 days from the notice of the District's to cancel the permit, that the owner intended to operate again, then the APCO may cancel the permit and deem the source shutdown as of the date of the last emissions.

24. Source: Any building, structure, facility, or emission unit which emits or may emit any affected pollutant directly or as a fugitive emission. A source may have a permit to operate or be exempt from permit. For purposes of this rule open biomass burning will be considered a source and such activity requires an annual burning permit.
25. Transfer: The conveyance of an ERC certificate from one entity to another.

#### **D. ELIGIBILITY OF EMISSIONS REDUCTIONS FOR CREDITS**

1. Except as noted below, emission reductions must comply with the definition of historic actual emission reductions, and will be deemed to have occurred on the date when emissions actually decreased or when the parcel(s) have been put onto the no-burn list or restricted burn list. An applicant may apply for ERCs for the amount calculated according to methods described in Section J (for stationary sources) or Section K (for biomass sources) of this Rule. Applicants that have been required to phasedown rice straw burning emissions under the Connelly-Areias-Chandler Rice Straw Burning Reduction Act of 1991 are eligible for the actual emission reductions that have occurred from the time that the field was initially planted with rice, subject to the following:
  - a) Emission reductions from decreased open burning of rice fields that were planted prior to the Connelly- Areias-Chandler Rice Straw Burning Reduction Act of 1991, and burned any one of the years 1988-1992 are eligible for banking 100% of the actual emission reductions able to be quantified respective to any one(1) of the five(5) baseline years.
  - b) Emission reductions from decreased open burning of rice fields that were planted after 1992 are eligible for banking those reductions calculated based on the historic actual emissions, subject to the calculation procedures of Section K of this Rule.
2. The District may claim emission reductions not applied for as ERCs under this rule, from any source, and use such emission reductions toward attainment of air qualitystandards or

- deposit the emission reductions into the community bank.
3. For non-permitted sources the following additional requirements shall apply:
    - a. Emissions must have been included in the 1987 emissions inventory.
    - b. The applicant for the ERCs must apply for and obtain a Permit to Operate from the District or execute a legally binding contract with the District or through other enforceable means.
    - c. An applicant who proposes to bank emissions from permit exempt sources must relinquish the exempt status and obtain permits for any new or modified sources of the same type.
    - d. If the emission reduction is due to the shutdown of a non-permitted source, the applicant must demonstrate to the satisfaction of the APCO that the emissions reductions from the source meet all applicable requirements of this rule. The source can no longer be operated within the District unless and until a Permit to Operate is obtained from the District.
  4. Under no circumstances shall any emissions reductions occurring before July 26, 1994, other than as described in subsection D.5. be eligible for ERC certificates.
  5. Emissions reductions occurring after December 31, 1987, and before July 26, 1994.
    - a. Emission reductions formally recognized by the District (in written form, emission databases, etc) shall be deemed eligible emission reductions, provided the APCO determines that such emission reductions comply with the definition of actual emission reduction.
  6. Emissions reductions occurring after July 26, 1994:

The following criteria must be met in order to deem such emissions reductions eligible for ERC banking:

    - a. Emission reductions are calculated in accordance with District procedures contained in the NSR Rule or, for biomass burning, in this rule and comply with the definition of actual emission reductions.
  7. A source which obtained offsets pursuant to the District's NSR Rule and was issued an Authority to Construct after December 31, 1987, may apply to bank such offsets if the Authority to Construct is canceled or if the Permit to Operate is voluntarily modified or surrendered or is revoked by the

District.

8. The following emission reductions are not eligible for ERCs for banking:
  - a. Emission reductions from the shutdown or curtailment of retail gasoline dispensing or retail dry cleaning operations. These facilities may be eligible if they can demonstrate to the satisfaction of the APCO that their emission reductions are not offset by increases in demand and emissions from other similar sources within the District.
  - b. Emission reductions occurring from the shutdown or curtailment of a stationary source for which the offsets originally provided are no longer enforceable by the District.
  - c. Emission reductions occurring from the shutdown or curtailment of a stationary source for which the District originally provided the required offsets.
9. Emission reduction credits resulting from shutdowns or curtailment of sources shall not be more than the quantity of emissions that would have been emitted had the source operated in compliance with rules and regulations applicable to the source at the time of shutdown or curtailment.

**E. APPLICATION PROCEDURES FOR EMISSION REDUCTION CREDITS**

1. Any person, entity, landowner, or authorized agent, which owns or operates an emission unit for which an eligible emission reduction has occurred or will occur may apply for an ERC certificate in accordance with the requirements of this Rule. If the applicant is not the landowner, written authorization from the landowner must be included with the application for an ERC certificate.
2. The person or entity requesting the ERC certificate shall make an application on forms supplied by the District.
3. The application may be for reductions in one or more affected pollutants. The application shall contain sufficient information to allow for adequate evaluation of actual emission reductions. The application for an ERC certificate for open biomass burning may include more than one parcel but must have separate emission calculations for each parcel or portion of a parcel covered in the application.
4. In accordance with the provisions of the Federal Clean Air Act, Government Code, and the Health and Safety Code applicants may claim confidentiality of information contained in the application.

5. Applications associated with emission reductions for an emissions unit at a stationary source shall be submitted within 365 days after permanent emission reduction or shutdown occurs.
6. To verify emission reductions claimed in conjunction with an application for an ERC certificate, the District may require source tests by ARB approved methods, continuous monitoring, production records, fuel use records, or any other appropriate means. For open biomass burning, verification of emission reductions shall be in accordance with Section K and the Manual of Procedures (MOP).

**F. ADMINISTRATIVE PROCEDURES AND TIMETABLE**

For ERCs for open biomass burning reductions, a separate administrative timetable is found in the Manual of Procedures.

1. The APCO shall determine whether an ERC application is complete not later than thirty (30) calendar days following receipt of the application, or after a longer time period agreed upon in writing by both the applicant and the APCO.
2. If the APCO determines that the application is not complete, the applicant shall be notified in writing of the decision, specifying the additional information that is required. The applicant shall have sixty (60) days, or a longer time period agreed upon in writing by both the applicant and the APCO, to submit the requested information. Upon receipt of additional information, the APCO shall have another thirty (30) days to determine completeness. If no information is submitted or the application is still incomplete, the APCO may cancel the application with written notification to applicant.
3. Upon determination that the application is complete, the APCO shall notify the applicant and ARB in writing. Thereafter, only information to clarify, correct, or otherwise supplement the information submitted in the application may be requested by the District.
4. 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.
5. Upon acceptance of an application as complete, the APCO shall have 180 days to take final action on the application after considering all written comments. Upon completion of the initial assessment, the APCO shall provide written notice of such to the applicant and shall also provide written notice to the ARB and the EPA and publish 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 may be waived by the APCO if the emission reduction credits applied for are less than 10,000 pounds per quarter per pollutant except for CO which is 20,000 pounds per quarter, and open biomass burning credits for less than 500 acres per parcel.

6. Publication of the notice shall commence a thirty (30) day public comment period during which the APCO shall accept written comments on the merits of the ERC application. Upon conclusion of this thirty (30) day period, the APCO 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.
7. The applicant or any other party may appeal the APCO's decision following provisions specified in District regulations.

**G. REGISTRATION OF EMISSION REDUCTION CREDITS**

1. The District shall maintain a bank register, which shall consist of the following:
  - a. A record of all deposits, withdrawals, and other transactions with regard to the District's banking system.
  - b. A record of all open biomass burning offset credits derived from reduced burning within the District which credits are claimed by stationary sources existing prior to the adoption of this rule (pre-existing source).
2. In the event that open burning biomass emission credits are claimed by a new or modified stationary source as offsets and obtained from outside the District, the District shall report the claiming of such offset credits to the District of origin of the biomass material.
3. The APCO may only grant an ERC certificate after the emission reductions have actually occurred and upon satisfaction of the following applicable provisions:
  - a. If the emission reductions were created as a result of greater operating efficiencies, reduced throughput, shortened operating hours, or from the application of more efficient control technology a revised Permit to Operate must be issued. This revised permit must include specific quantifiable emission limits reflecting the reduced emissions.
  - b. If the emission reductions were created as a result of the shutdown of a permitted source or emitting unit, the

Permit to Operate has been surrendered and voided or modified to ensure that the emissions reductions are permanent.

4. When all the requirements of this rule have been satisfied and the emission reduction has actually occurred, the APCO shall issue the ERC certificate. After granting an ERC certificate, title to such certificate shall be entered into the banking register. Such information may be made available for public inspection.
5. All ERC certificate information concerning titles, interests, liens, restrictions, encumbrances, and other changes of record shall be identified in the District's banking register until the certificate is canceled or nullified by operation of law.
6. Each ERC certificate shall be numbered, bear the date of issuance, be signed by the APCO, bear the seal of the District, and contain information regarding the quantity and type of ERCs. One copy of the ERC certificate shall be retained by the District and the original shall be delivered to the applicant. Transmittal of the ERC certificate to the owner shall be accomplished in person or by registered mail. The person accepting the ERC certificate shall sign a receipt therefor and provide such proof of identity as the APCO may require.
7. ERC certificates issued for open biomass burning emission reductions shall be valid and effective only after, and on the condition that, the ERC certificate is recorded as a condition of the parcel deed. The notice of recording shall be in a form approved by the District, and include the following information at a minimum: owner of the ERC certificate, Assessor Parcel Number, owner of the property, notice of open burning restriction and date of recording.
8. At the option of joint owners of ERCs, such persons may receive one ERC certificate for the entirety or separate ERC certificates reflecting each proportional share. The District's bank shall reflect the consolidation or separation of the ERCs.
9. Title to an ERC certificate shall be deemed registered at the time the required information concerning the ERC is entered into the banking register. Title will be vested in the applicant's name or his/her designee and shall inure to the benefit of his or her heirs. In the case of ERCs granted for open burning of biomass, title will be vested with the landowner or landowner's designee.
10. All dealings with ERCs and all liens, restrictions, encumbrances, and changes subsequent to the first registration shall be deemed to be subject to the terms of this regulation,

and to such amendments and alterations as may hereafter be made.

11. The APCO may reissue lost or destroyed ERC certificates after the registered owner certifies in writing that the original has been lost or destroyed.

#### **H. ADJUSTMENTS TO EMISSION REDUCTION CREDITS**

1. Except as provided in H.2. below, the District shall take five percent (5%) of the emissions reductions before the ERCs are granted and apply the emissions toward attainment of the air quality standards or place the emissions into a community bank controlled by the District for use by essential public services, such as sewage treatment, schools, hospitals, fire fighting, police, jail, water delivery, and mandated cleanup operations.
2. An applicant may restrict use of the ERCs only for applicants own future use, at the same parcel or site, in which case the District will not adjust the ERCs. The applicant may have the restriction removed by the District upon payment of costs incurred by the District to reissue an unrestricted ERC certificate.
3. Deposits are permanent until used by the depositor or any party to whom the ERC certificate has been transferred. After issuance of the certificate, subsequent changes in regulations to require the type of emission reduction which has been banked shall not reduce or eliminate the ERC.
4. Owners of ERC certificates may donate their ERCs to the District for purposes of assisting the District towards attainment of the air quality standards.

#### **I. TRANSFER AND USE OF EMISSION REDUCTION CREDITS**

1. The ERCs may be used at the time of, or anytime after deposit into the District's banking system by the registered owner, or owner's designee of the ERC certificate to provide offsets for increase in emissions from new or modified sources subject to the NSR Rule.
2. Transfer in whole or in part of an ERC certificate shall be done by the registered owner in accordance with applicable procedures of this rule. Upon payment of a transfer fee a new ERC certificate, certifying the title or interest in the ERC, shall be issued and the original certificate shall be canceled. Such cancellation shall be recorded in the banking register.
3. Nothing in this rule prevents the lease or temporary transfer, in whole or in part, of ERCs represented by certificates to be

used as offsets, provided the District has procedures for adjusting the ERC at the end of the lease period to account for the facility historic actual emissions. However, no transfers shall be made until application is made to the District and approval given by the APCO.

4. Except as provided below, all emission s reductions to be used as offsets under the New Source Review rule must first be processed through this rule and receive an ERC certificate in accordance with the requirements of this rule. Onsite reductions in emissions which are concurrent with onsite increases in emissions from other emission units and meet the requirements of the NSR Rule are not required to go through this ERC/Banking Rule.
5. ERCs which result from stationary source shutdowns and curtailments shall not be used as offsets for a new or modified stationary source where permitted emissions would exceed emissions thresholds established for the District in the Federal Clean Air Act for major source modifications, unless the applicant can establish the following:
  - a. The proposed new source or modification is a replacement, and the shutdown or curtailment occurred after August 7, 1977, or
  - b. An application for ERC was filed with the District within 180 days of the date of last emission; and
    - (1) The crediting of shutdown emissions complies with the most recent emission trading policy or regulations of the US Environmental Protection Agency; and
    - (2) The District has met statutory planning mandates and air quality improvement milestones.
6. On transfer of ownership of ERCs to a stationary source for use as offsets the registered owner shall provide information to the District on costs, if any, in dollars per ton, on a per pollutant basis, of emission offsets purchased for, or acquired by, the new or modified source.

**J. STATIONARY SOURCE ERC CALCULATIONS**

Calculations of emission reductions shall be determined by the methods described in the District's NSR Rule.

**K. OPEN BIOMASS BURNING ERC CALCULATIONS**

The MOP contains emission factors (EF) , fuel loading factors (FL), default historical burn fractions (HBF), and default quarterly burn fractions (QBF). Default HBFs and QBFs should be used to

calculate the ERCs. The following information will be used in the calculation of ERCs. However when using default HBF and QBF factors, paragraphs 3 and 4 below do not apply:

1. Basic information: The applicant shall provide data on the crop type, exact location of the parcel including assessor's parcel number and other information regarding parcel location required in the MOP, acreage burned (AB), and date(s) of open biomass burning within the baseline period. The applicant shall use county burn permit/authorization records or other verifiable records to validate the information as specified in the MOP. The type of biomass residue and the acreage burned (AB) will be used in the ERC calculation.
2. Acreage Burned: The applicant for emission reductions from open biomass burning shall provide the acreage burned for each parcel(s) of land for which ERCs are applied. Acreage must have been burned for at least one of the five (5) baseline years of 1988 through 1992. The applicant shall use county burn permit/authorization records or other verifiable records to determine the acreage.
3. Historical burn fraction (HBF): The applicant shall provide available data on historical biomass burn percentage for the parcel(s) during the five (5) baseline years of 1988 through 1992. The historical burn fraction (0-1) is an adjustment to the amount of ERC available. The applicant may use county burn permit authorization records or other verifiable records to determine the amounts of prior burning. For rice straw burning, an historical burn fraction of one (1) will be used for the parcel(s) burned during the phasedown period required under the Connelly-Areias-Chandler Rice Straw Burning Reduction Act of 1991
4. Quarterly burn fraction (QBF): The applicant may provide available data on quarterly biomass burning for the parcel(s). The applicant may use county burn permit authorization records or other verifiable records to determine the date(s) of burning. The quarters are defined as Jan-Mar, Apr-Jun, Jul-Sep, and Oct-Dec.
5. The biomass fuel loading (FL) and emission factors (EF) set forth in the MOP or other best available data as approved by the APCO shall be used for the crops indicated.
6. Discount acreage (DA): The applicant may reduce the total acreage covered by the ERC certificate to allow for continued burning of a portion of the total acreage of the parcel(s). This reduction in the total acreage covered will be reflected in the emission credits applicable to the parcel(s). The District shall either:
  - a. Identify the portion(s) of the parcel(s) covered by the

discount acreage (i.e. the acreage eligible for a burn permit) and place the remaining acreage on a no-burn list. This portion will not be allowed to change without prior District notification and approval; or

- b. Place the parcel(s) covered by the ERC certificate on a restricted burn list. Burning can only occur on specified fields within the parcel(s) after the District has issued a restricted burn permit for the emissions unit parcel(s)).
7. The District will determine a quarterly ERC value for each pollutant based on the following calculation:

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

#### **L. DISTRICT ENFORCEMENT CONSIDERATIONS**

1. Revision or cancellation of ERC certificates at the request of the registered owner to allow burning of a parcel(s) for which ERCs have been granted may be handled as follows, with prior written approval from the APCO:
  - a. The registered owner may request that the District reduce the quantities of the emissions covered by the ERC certificate by the amount of emissions associated with the reduced acreage requested. After the District revises the ERC certificate that portion of the parcel may be burned in accordance with current agricultural burning regulations. The portion of the parcel that is covered by the discount acreage ( i.e the acreage eligible for a burn permit) must be clearly identified. This portion will not be allowed to change without prior District notification and approval.
  - b. The registered owner may surrender the ERC certificate to the District for cancellation and burn the parcel(s) pursuant to current agricultural burning regulations.
2. District enforcement considerations related to ERCs are the following:
  - a. To meet the requirement of enforceability, a contract, permit conditions, no burn list or restricted burn list, and/or other means shall be utilized.
    - (1) The primary means of enforcing open biomass burning ERCs will be by placing the parcels on a no burn list or a restricted burn list. Based on the District's enforcement and tracking policy for biomass ERCs, a restricted burn permit or no burn list will be issued for a parcel(s) if an ERC is currently in effect for that parcel unless the

registered owner applies for cancellation, modification or substitution of the ERC under Section L.1 of this Rule.

- (2) At the time of application, the applicant for ERCs for reduced open biomass burning must provide information to the District on the disposition of the biomass.
  - (3) Emission reduction credits used to offset project emissions in another district shall be implemented through an inter-district agreement to ensure their enforceability and permanence.
- b. Prior to issuance of an ERC certificate, the registered owner of ERC-designated parcel(s)/field(s) shall provide notification by certified mail to all growers leasing land covered by the certificate that open biomass burning is restricted. A copy of the certified letter and receipt shall be provided to the District and maintained in the District files.
  - c. Facilities that claim open burning emission reduction offsets pursuant to Health & Safety Code Sections 41605.5 and 42314.5 must keep a daily log of biomass received by type, origin, quantity, and date. Such facilities will also be required to prepare and submit to the District a quarterly report on their emissions and corresponding biomass offsets. The District will further require an annual status report on biomass contracts for next year prior to reissuance of the annual Permit to Operate.
3. To further ensure enforceability of this Rule refer to the Manual of Procedures which contains ERC and offset tracking, open biomass burn permitting, and other procedures related to the implementation of the Rule.

**M. FEES**

A \$75 filing fee shall be required for application, analysis, transfer and replacement of an ERC certificate. In addition, the applicant shall pay to the Shasta County Air Quality Management District an amount equal to that specified in District Rule 2:11.a.3(c) for each hour of staff time expended in excess of two (2) hours to cover the costs of all aspects of the preparation and issuance of the ERC certificate.

## MANUAL OF PROCEDURES

### Emission Reduction Credit and Banking Rule

#### A. Introduction and Contents

1. This Manual of Procedures sets forth procedures relating to the application, calculation, review, registration, tracking and use of emission reduction credits arising from reduction in open burning of biomass material as provided in Rule 2:2.

The 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 database and confirm legal authority for ERC application. Also the database will have: landowner's name, lessee/farmer, applicant, current ERC owner, end user(offsets).

- 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 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 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 be required 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 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 AG DEPT and APCD/AQMD 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 crosschecking. A no-burn list will be generated from the ERC banking database for biomass credits. The no-burn list will be provided to agriculture departments or fire districts if they issue the burn permits so that they can keep from issuing burn permits for parcels with ERCs.

j. An outline of the issuance of agricultural burn permits and burn decisions:

Growers come into agriculture departments or districts for an annual agricultural 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 responsible agency for agricultural burning to get that specific parcel on the ready to burn list. When there is a burn day with sufficient acreage 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:

There needs to be a basinwide agreement that all

districts will accept each others ERC certificates as valid emission reductions for offset purposes. The district with the new or modified facility requiring offsets needs only to adjust those emission reductions based on specified distance ratios from the new facility.

1. Manual of Procedure forms:

The Manual contains examples of forms that will be necessary including a transfer of ownership form, designation of authority form from the landowner, ERC certificate amendment form, and a release form for an ERC designated owner to donate the credits to a district.

2. ERC Application Procedures:

a. Application forms:

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

(a) Application cover page

(b) Parcel identification page

(c) Designation of authority page

b. 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 emission reduction credits (ERCs).

(REFER APPLICATION PACKAGE)

3. Open burning ERC calculation procedures:

Default HBFs and QBFs shall be used to calculate the ERCs. An alternative use of parcel specific HBFs and QBFs may be used after a methodology is developed and receives written 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 II then factors from other sources (e.g. Darley, Jenkins, or AP42) may be used.

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

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

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

b. 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 II.
- 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 II.
- 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 I.
- 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 I.
- 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 a burn permit) must be clearly identified. This portion will not be allowed to change without prior District 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 III

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 sources may be used to verify the burn history of a specific crop on a specific parcel of land.

Depending upon the county, the air district, agriculture department, fire districts, or other public agencies receive burning applications, issue burning permits, allocate acres for burning and maintain lists of growers requesting authorization to burn. If available, these records are preferable hard data to determine the history that specific crop residues were burned on specific parcels of land during specific calendar quarters of the year. The ERC applicant should describe what records are available, attach copies where available, and identify the public agency source(s) with contacts and phone numbers for verification as needed.

Where 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 his or her discretion, to meet the ERC application requirements.

e. Application completeness:

To be considered complete an application for ERC must include parcel specific information to verify burning during at least one year of the baseline years (1988-92), acreage burned, and crop type as a minimum. An application for an ERC for open biomass burning will not be found incomplete because burn history data is 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 I shall be used for the crops indicated.

g. Quarterly burn fraction (QBF):

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

- i. Calculation Form:

The form in Table IV 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 application for and registration of ERCs are set forth in the District ERC banking rule. ERCs may be used as air emission offsets. Such offsets may be required under the New Source Review Rule (NSR Rule) of the District 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 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 \$75 transfer fee as required by the District. Applications for transfers shall be made by submission of an Application to Transfer ERC form as follows:

(REFER APPLICATION TO TRANSFER ERC)

- 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:

(REFER APPLICATION TO CANCEL ERC)

- d. The ERC banking rule provides that the District may claim emission reductions neither banked nor used as offset credits from any source, after expiration of the application period stated in the rule, and use such emission reductions toward attainment of standards or deposit the emission reductions into the community bank. Before making such a claim for emission reductions the District shall provide notice to the landowner or source that the District 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. Following such notice, the District may claim the emission reductions provided that the landowner or source does not apply for an ERC to the District within the 90 day period.

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 District 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 District does not find that the application is incomplete within this period of time, the application shall be deemed complete.

If the District determines that the application is not complete, the applicant shall be notified in writing of the decision, specifying the additional information that is required. The applicant shall have sixty (60) days to submit the requested information. Upon receipt of additional information, the APCO shall have another fifteen (15) days to determine completeness. If no information is submitted 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 may 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 District receiving a complete application. For open biomass burning applications, requiring a public comment period, final action will be taken within 60 days of the District 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 publish 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 District 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 District shall accept written comments on the merits of the ERC application. Upon conclusion of this thirty (30) day period, the District 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 District's decision following provisions specified in District 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 agricultural burn permit. Prior to issuance of an ERC, the District shall determine whether an agricultural 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 burn permit for cancellation or modification within fifteen (15) days of notice by the District of its intention to deny the ERC application.

Prior to issuance of a burn permit, the District shall determine whether the parcel has already been issued an ERC. If an ERC has been issued, the application for a burn permit shall be denied.

- b. The ERC banking rule and the rice straw burning phasedown law:

The 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 of 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 the ERC rule:

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. The ERC banking rule contains procedures for recording of credits allowed for such facilities and ERCs in a single emission banking register. Information regarding 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 District 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:

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 the New Source Review Rule.

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

(REFER EMISSION REDUCTION CERTIFICATE)

APPLICATION FOR:  
OPEN BIOMASS BURNING EMISSION REDUCTION CREDIT CERTIFICATE

Please provide the appropriate information below, it must include authorization to apply from landowner if landowner is not the applicant. Please indicate if any section is not applicable (N/A). This application covers \_\_\_\_\_ parcel(s). Attach additional sheets for each additional parcel if information is not consistent with that presented below. Attach a map of each parcel covered by this application. Please print or type the requested information.

Applicant

\_\_\_\_\_  
(name)  
\_\_\_\_\_  
(address)  
\_\_\_\_\_  
(phone number)

Landowner

\_\_\_\_\_  
(name)  
\_\_\_\_\_  
(address)  
\_\_\_\_\_  
(phone number)

Authorized Designee

\_\_\_\_\_  
(name)  
\_\_\_\_\_  
(address)  
\_\_\_\_\_  
(phone number)

ERCs are requested to be issued in the following name(s):

\_\_\_\_\_  
(name)  
\_\_\_\_\_  
(address)  
\_\_\_\_\_  
(phone number)

Applicant

\_\_\_\_\_  
(signature)                      \_\_\_\_\_  
(date)

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

PARCEL IDENTIFICATION

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

**Parcel ID:** Field ID & AP# \_\_\_\_\_  
Acres: \_\_\_\_\_  
Sec. Twn. Rge. \_\_\_\_\_  
Crossroads \_\_\_\_\_  
Lessee/Grower \_\_\_\_\_  
  
Biomass type \_\_\_\_\_  
Disposition \_\_\_\_\_  
of biomass \_\_\_\_\_

**Parcel ID:** Field ID & AP# \_\_\_\_\_  
Acres: \_\_\_\_\_  
Sec. Twn. Rge. \_\_\_\_\_  
Crossroads \_\_\_\_\_  
Lessee/Grower \_\_\_\_\_  
  
Biomass type \_\_\_\_\_  
Disposition \_\_\_\_\_  
of biomass \_\_\_\_\_

**Parcel ID:** Field ID & AP# \_\_\_\_\_  
Acres: \_\_\_\_\_  
Sec. Twn. Rge. \_\_\_\_\_  
Crossroads \_\_\_\_\_  
Lessee/Grower \_\_\_\_\_  
  
Biomass type \_\_\_\_\_  
Disposition \_\_\_\_\_  
of biomass \_\_\_\_\_

**Parcel ID:** Field ID & AP# \_\_\_\_\_  
Acres: \_\_\_\_\_  
Sec. Twn. Rge. \_\_\_\_\_  
Crossroads \_\_\_\_\_  
Lessee/Grower \_\_\_\_\_  
  
Biomass type \_\_\_\_\_  
Disposition \_\_\_\_\_  
of biomass \_\_\_\_\_

**Parcel ID:** 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 \_\_\_\_\_ of the \_\_\_\_\_ Air Pollution District Rule  
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 Code: \_\_\_\_\_

Telephone: (      ) \_\_\_\_\_

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

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

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: \_\_\_\_\_

Telephone: (     ) \_\_\_\_\_

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 District regulations and in the applicable Sacramento Valley Annual Agricultural Burning Plan.

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

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

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

Telephone: ( \_\_\_\_\_ ) \_\_\_\_\_

**EMISSION REDUCTION CERTIFICATE**

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

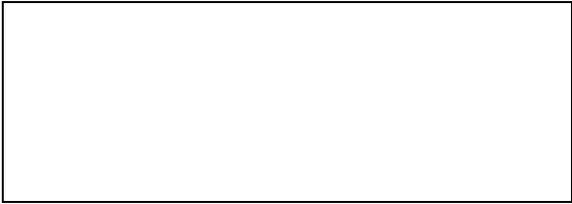
Registered Owner: \_\_\_\_\_  
Name

\_\_\_\_\_  
Address

Parcel Identification Number: \_\_\_\_\_

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

District seal:



ERC Pollutant Amounts (Pounds/Quarter)	Quarter			
	1	2	3	4
NO <sub>x</sub> as NO <sub>2</sub>	X	X	X	X
VOC	X	X	X	X
PM <sub>10</sub>	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 pertinent ERC banking rule provisions concerning transfers.**

Table III

OPEN BIOMASS BURNING FUEL LOADING AND EMISSION FAC TORS  
(June 2, 2000-Ref. Sacramento Valley SMP Adopted 6/2/00)

CROP	(lb/dry ton)					(dry ton/acre)
	PM <sub>10</sub>	NO <sub>x</sub>	SO <sub>2</sub>	VOC	CO	FUEL LOADING
Rice	6.9	5.7	1.2	5.1	62.8	3.0
Wheat	11.5	4.7	0.9	8.3	133.4	1.9
Safflower	18.0	5.5	3.2	20.0	144.0	1.3
Sorghum	17.7	4.9	0.7	5.1	77.0	2.9
Barley	15.4	5.4	0.1	16.1	197.3	1.7
Corn	12.4	3.6	0.4	7.2	77.6	4.2
Alfalfa	28.5	4.9	0.7	21.7	119.0	0.8
Oats	20.7	4.9	0.7	10.3	136.0	1.6
Grape	2.7	5.8	1.4	2.5	39.1	2.5
Bean/Pea	13.7	7.0	0.2	14.2	148.0	2.5
Almond	8.6	7.2	0.1	6.4	63.9	1.6
Apple	4.0	4.9	0.7	3.0	42.0	2.3
Apricot	5.9	7.0	0.2	4.6	49.0	1.8
Cherry	8.0	4.9	0.7	8.0	44.0	1.0
Olive	11.8	7.0	0.2	10.3	114.0	1.2
Peach	5.9	7.0	0.2	3.0	42.0	2.5
Pear	8.8	7.0	0.2	5.1	57.0	2.6
Prune	2.9	7.0	0.2	4.6	47.0	1.2
Walnut	6.3	6.8	0.3	7.2	100.1	1.2
Orchard	2.9	4.9	0.7	2.0	36.7	2.5
Wildland	17.0	4.0	NA	24.7	140.0	70.0
Grassland	16.3	4.9	0.7	11.1	118.4	2 to

						3.2
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