# RULE 4501 ALTERNATE COMPLIANCE FOR BEST AVAILABLE RETROFIT CONTROL TECHNOLOGY (BARCT) (Adopted June 17, 1999)

# 1.0 Purpose

The purposes of this rule are to:

- 1.1 Provide an administrative mechanism for sources to retire emission reduction credits (ERC) in lieu of compliance with emission requirements of best available retrofit control technology (BARCT) rules.
- 1.2 Ensure that equivalent emission reductions are achieved according to the applicable air quality attainment plan. This rule and the provisions herein are subject to revision or repeal by the District Governing Board, in consideration of air quality conditions and/or projections, and in accordance with Rule 2301 (Emission Reduction Credit Banking).
- 1.3 Define administrative and calculation procedures to determine the amount of BARCT Offsets required.

# 2.0 Applicability

- 2.1 The provisions of this rule apply to any emission unit with a valid Permit to Operate or a valid Authority to Construct which is subject to one of the District rules listed in Section 4.1.2 of this rule.
- 2.2 The provisions of this rule shall not enable the retiring of ERC in lieu of compliance with requirements Best Available Control Technology (BACT), Reasonably Available Control Technologies (RACT), Maximum Achievable Control Technology (MACT), or other non-BARCT District, State, or federal rules.
- 2.3 The provisions of this rule shall not allow the retiring of ERC as an alternative to compliance for stationary sources that have, or were required to have complied with, the rules indicated in Section 4.1.2.
- 2.4 The provisions of this rule shall not supersede or subsume the requirements of Rule 2201 (New and Modified Stationary Source Review). Any offsets required by Rule 2201 are in addition to any BARCT offsets provided under the provisions of this rule.

#### 3.0 Definitions

Unless otherwise defined, terms used in this rule are defined in Rule 1020 (Definitions) and Rule 2201 (New and Modified Stationary Source Review Rule) and Rule 2301 (ERC Banking).

- 3.1 BARCT Offset: the amount of ERC retired in lieu of reducing emissions from a source subject to the requirements of a specified BARCT rule.
- 3.2 BARCT Offset unit: an emission unit for which BARCT Offsets have been provided in lieu of compliance with BARCT emission requirements.
- 3.3 Retire: to officially and permanently surrender all or part of an ERC certificate to the APCO so that it is removed from the ERC bank and is not eligible for future use or reissuance.
- 3.4 Surplus ERC: Surplus ERC are reductions which are not assumed or relied upon in the EPA-approved air quality management plan or State Implementation Plan, nor credited in any Reasonable Further Progress or milestone demonstration. They represent the amount of an ERC which is found, at the time of use as BARCT Offsets, by the APCO, to be surplus to the following, non-exhaustive list of reductions that are required or will be required for an emission unit similar to the original source of ERC as of the date the ERC certificate is retired:
  - 3.4.1 Emissions reductions required or encumbered by any laws, rules, regulations, agreements, or orders;
  - 3.4.2 Emissions reductions attributed to a control measure noticed for workshop, or proposed or contained in a State Implementation Plan; and
  - 3.4.3 Emissions reductions proposed in the District's adopted air quality plan for attaining the reductions required by the California Clean Air Act.
  - 3.4.4 Emissions reductions attributed to a proposed control measure in Sections 3.4.2 or 3.4.3 may be eligible as surplus actual emissions reductions for control measures identified in the District Air Quality Attainment Plan or State Implementation Plan, if no rule has been adopted and the APCO has revised the State Implementation Plan to reflect that such measures are not required for attainment and the revisions have been approved by the EPA.
- 3.5 Significant emission unit: an emission unit with a carcinogenic risk in excess of 10 in one million or a non-cancer risk Hazard Index of greater than 1. The risk shall be determined based on the maximum impact to an actual receptor. For non-cancer risks, the Hazard Index of greater than 1 shall be deemed significant if prescribed so by the State's Office of Environmental Health Hazard Assessment.

### 4.0 Eligibility and Exclusions

# 4.1 Eligibility

- 4.1.1 Only ERC, which have been issued according to District Rule 2301 (ERC Banking), for emission reductions occurring after January 1, 1991, shall be eligible for retirement in lieu of BARCT requirements.
  - 4.1.1.1 Notwithstanding Section 4.1.1, no credits shall be used as BARCT offsets which were generated by the shutdown or curtailment of the operating hours or throughput of an entire major source. Credits generated from the shutdown or curtailment of an individual unit(s) at a source may be used in lieu of BARCT, if other emission units at the stationary source continued operating.
- 4.1.2 The owner of any emission unit which is subject to one or more of the following rules may retire ERC in lieu of BARCT emission requirements indicated:
  - 4.1.2.1 Rule 4305 (Boiler, Steam Generators, and Process Heaters): Units subject to Section 5.1 except for box and cabin type units and vertical cylindrical process heaters, as defined in Rule 4305.
  - 4.1.2.2 Rule 4354 (Glass Melting Furnaces): Section 5.1 Tier 2 emission limits only.
  - 4.1.2.3 Rule 4701 (Internal Combustion Engines): Section 5.1.3 BARCT emission limits only.
  - 4.1.2.4 Rule 4703 (Stationary Gas Turbines): Rule 4501 is applicable only for turbines with a permit condition limiting NOx emissions to 42 ppmv @ 15% O2 or less as of May 31, 1995.
- 4.1.3 Should additional BARCT rules be developed, the APCO shall review such rules and determine if this rule should be amended to include the additional BARCT rules.

#### 4.2 Exclusions

4.2.1 Notwithstanding Section 4.1.2, ERC shall not be retired in lieu of compliance with requirements for Reasonably Available Control Technologies (RACT) in any of the specified BARCT rules.

- 4.2.2 Notwithstanding Section 4.1.2, ERC shall not be retired in lieu of BARCT compliance for an emission unit which is part of an Alternative Emission Control Plan or a glass melting furnace subject to Section 9.0 of Rule 4354 (Glass Melting Furnaces).
- 4.2.3 Notwithstanding Section 4.1.2, the provisions of this rule shall not apply to a significant emissions unit.
- 4.2.4 Notwithstanding Section 4.1, the use of ERC in lieu of BARCT shall not be permitted if the use of ERC, in the aggregate, result in greater annual pollutant-specific emissions than would have occurred in lieu of trading, consistent with the District's air quality attainment plan. To satisfy this requirement, the ERC used in lieu of BARCT shall meet all the following conditions:
  - 4.2.4.1 shall be post-1990 reductions,
  - 4.2.4.2 shall be surplus at time of use, and,
  - 4.2.4.3 for reductions from shutdown or curtailed emission units in a source category for which the attainment plan projected a negative growth factor, only the reduction in emissions in excess of those projected in the attainment plan for source categories from which the ERC originated are to be used in lieu of BARCT.

# 5.0 Requirements

- 5.1 The owner of a BARCT-offset unit shall retire an amount of ERC at least as great as the quantity of BARCT Offsets calculated pursuant to Section 5.12.
- 5.2 Additional BARCT Offsets shall be provided for any increase in permitted emissions resulting from the modification of a Permit to Operate of a BARCT Offset unit. The quantity of BARCT Offsets required shall be determined in accordance with Section 5.12 of this rule.
- 5.3 Additional BARCT Offsets shall be provided for any change in permitted emissions resulting from the amendment of an applicable BARCT rule. The quantity of BARCT Offsets required shall be determined in accordance with Section 5.12 of this rule.
- 5.4 The emission reduction credits shall be permanently retired upon use as BARCT Offsets.
- 5.5 The APCO shall require compliance testing, monitoring, recordkeeping, or other adequate means of establishing continual compliance with BARCT Offset emission levels and to confirm emission levels claimed in conjunction with an

application. Testing requirements shall be added as permit conditions in the Authority To Construct (ATC) which authorizes the changes for compliance with this rule. The operating permits of the BARCT Offset unit shall also be modified to reflect the use of ERC in lieu of BARCT compliance and include applicable emission limits.

- 5.6 The use of CO ERC for reductions occurring between November through February may be used to BARCT Offset CO at any period of the year. Any such use shall be demonstrated to comply with the District's Federal 1992 Air Quality Attainment Plan for Carbon Monoxide.
- 5.7 Except as provided in Section 5.6, ERC used as BARCT Offsets must have resulted from Actual Emissions Reductions occurring during the same calendar quarter as the emissions being offset. ERC for a Seasonal Source must have occurred during the same calendar quarter as the BARCT offset unit will operate.
- 5.8 A BARCT Offset unit is subject to all applicable Federal and State rules and regulations.
- 5.9 A BARCT Offset unit is subject to the requirements of all applicable District rules except those BARCT requirements which pertain to the pollutant for which ERC have been retired.
- 5.10 For future ERC applications from the shutdown, curtailment, or modification of a BARCT Offset unit, ERC issued pursuant to District Rule 2301 shall be calculated as though the unit were operating at the required BARCT emission limit or the actual emission factor, whichever is less, and shall not include any consideration for the retired ERC.
- 5.11 Except as provided in Section 5.10, emissions from a BARCT Offset unit, shall be calculated using the unit's actual emission factor.
- 5.12 Calculation of BARCT Offsets required shall be accomplished using the following equations:

BARCT Offsets[Required] = Offsets x BARCT Offset Ratio

Offsets = PE[Proposed] - PE[BARCT] - BARCT Offsets[Prior]

Where:

BARCT Offsets[Required]: The amount of emission reduction credits, in pounds per calendar quarter, required as a BARCT Offset, after the offset ratio has been applied.

PE[Proposed]: The Potential to Emit (PE), in pounds per calendar quarter, of a BARCT Offset unit as allowed by its valid Permit to Operate (PTO) or Authority to Construct (ATC).

PE[BARCT]: The maximum potential emissions, in pounds per calendar quarter, of a unit calculated as though the unit was operating at its maximum rate as allowed by its valid PTO or ATC, and the unit was complying with the applicable BARCT emission requirement. The maximum operating rate shall be the same value as was used to calculate the PE[proposed].

BARCT Offsets[Prior]: The amount of emission reduction credits, in pounds per calendar quarter, that have previously been retired for the BARCT Offset unit in accordance with this rule divided by the offset ratio used at that time for that ERC source. This amount does not include any offsets which may have been provided for requirements of the Rule 2201 nor those proposed for the current BARCT Offset action.

- 5.12.1 BARCT Offset ratio: a value equal to the distance ratio defined in District Rule 2201.
- 5.12.2 ERC shall be adjusted, pursuant to Section 3.5, prior to use as BARCT offsets to indicate only the surplus value of the ERC which can be used for BARCT Offsets.
- 5.13 If the ERC certificate exceeds the amount of BARCT Offsets applied, the remaining ERC shall be returned. The value of the residual ERC certificate shall be calculated as follows:

$$ERC[Residual] = \frac{ERC[Surplus] - ERC[Retired]}{ERC[Surplus]} \times ERC[Certificate]$$

Where:

ERC[Residual]: The value of the ERC which can be reissued as a new certificate after the rest of that certificate is applied in lieu of BARCT.

ERC[Surplus]: The surplus value of the ERC certificate.

ERC[Retired]: The amount of surplus ERC retired as BARCT Offsets

ERC[Certificate]: The pre-project value of the ERC certificate.

5.14 ERC, which are retired as BARCT offsets, in excess to a unit's actual emissions in a given year, may not be accumulated and added to or subtracted from the total BARCT offsets in subsequent years. Such excess credits are also not available for any new source review or banking purposes.

# 6.0 Applications and Processing

- Any owner proposing to comply with this rule must, for each affected unit, submit an ERC in-lieu of BARCT alternate compliance plan to the APCO including the necessary application for Authority to Construct and banking certificates. The application shall include sufficient information to allow adequate evaluation of compliance with the provisions of this rule. The application must also identify the source of the ERC(s) which will be used as BARCT offsets.
- 6.2 Submittal of a BARCT Offset application does not relieve an owner of the responsibility to comply with any BARCT emission limit.
- 6.3 The APCO shall determine whether a BARCT Offset application is complete no later than 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.
- 6.4 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 90 calendar days to submit the requested information. Upon receipt of all requested information, the APCO shall have 30 calendar days to determine completeness. If 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, information to clarify, correct, or otherwise supplement the information submitted in the application may be requested.
- 6.5 Withdrawal of an application by an applicant shall result in cancellation of the application; any resubmittal shall be evaluated according to the regulatory requirements in effect on the date of the resubmittal.
- 6.6 The APCO shall, after determination of application completeness, perform an initial assessment of the application. Upon completion of this initial assessment the APCO shall provide written notice of such to the applicant and shall also provide the written notice and assessment to ARB and EPA and publish notice in a newspaper of local and general circulation in the District. The notice shall specify the applicant and the quantity of ERC involved and a statement of the initial assessment including the result of the health risk evaluation.
- 6.7 Publication of the notice shall commence a 30 calendar day public comment period during which the APCO shall accept written comments on the merits of the application. Upon conclusion of this 30 calendar day period, the APCO shall, within 180 calendar days of deeming the application complete, render a decision as to whether the APCO approves, conditionally approves, or denies the application. This decision shall be supplied in writing to the applicant and published in a newspaper of local circulation within ten days of the date the decision is made.

- 6.8 The applicant or any other party may appeal the APCO's decision following provisions specified in the applicable rules in Regulation V (Procedure Before the Hearing Board).
- 6.9 The APCO shall include ERC transactions under this rule as part of the review and reporting requirements of California Health and Safety Code, section 40709.5.

## 7.0 Compliance Schedule

- 7.1 Owners shall submit Emission Control Plans and ATC applications according to the requirements and compliance schedules of the applicable BARCT rule(s).
- 7.2 Owners shall submit complete BARCT Offset applications, including ATC applications, by the date specified in the applicable BARCT rule for submitting complete applications for Authorities to Construct. Owners may revise their original submittals under the BARCT rules if they decide to use the provisions of this rule in lieu of compliance with the BARCT requirements, provided that the applicable BARCT compliance demonstration date has not passed.
- 7.3 The schedule for achieving equivalent emission reduction by retiring ERC shall be at least as expeditious as the schedule were applicable units to comply with the BARCT emission limits of the applicable rules indicated in Section 4.1.2.

#### 8.0 Fees

Applications received pursuant to Section 6.0 shall be considered banking applications subject to fees indicated by Rule 3060 (Emission Reduction Credit Banking Fees).