



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

Emission Offsets

Applicability and Implementation

Presentation Overview

- New Source Review (Regulation 2-2)
- Emission Reduction Credits (Regulation 2-2-201)
- Emission Offsets (Regulation 2-2-214)
- NO_x and POC offset applicability (Regulation 2-2-302)
- SO₂ and PM₁₀ offset applicability (Regulation 2-2-303)
- Calculating Contemporaneous Emission reductions (Regulation 2-2-605)
- Purchasing Emission Reduction Credits

New Source Review

- Includes requirements for not just Offsets, but also Best Available Control Technology (BACT) and Prevention of Significant Deterioration (PSD)
- Applies to all new or modified sources which result in a potential to emit of 10.0 pounds or more per highest day of POC, NPOC, NO_x, SO₂, PM₁₀, or CO

Regulation 2-2

Emission Reductions Credits (ERC's)

- ERC's can be banked for emission reductions which exceed those required by the measures in the current Clean Air Plan or by federal, state, or District laws, rules, and regulations
- Emission reductions must be in excess of the reductions achieved by, or achievable by, the source using Reasonably Available Control Technology (RACT)

Regulation 2-2-201

Emission Reductions Credits (ERC's) cont.....

- Emission reductions must be:
 - Real – constitutes an actual decrease in air emissions
 - Permanent – exists for the duration of the credit generation period
 - Quantifiable
 - Enforceable

Regulation 2-2-201

Emission Offsets

- Emission reduction credits (ERC's) which are used to mitigate cumulative increase of emissions.
- Can be obtained:
 - From the District emissions bank
 - By purchasing privately banked ERC's
 - Through onsite contemporaneous emissions reductions

Regulation 2-2-214

POC and NOx Offset Applicability

- Offsets are required for any new or modified sources at a facility that emits, or is permitted to emit more than 10 tons/year.

Regulation 2-2-302

POC and NOx Offset Applicability

NOx or POC (Emissions or Permitted Emissions)	Offset Requirements
< 10 tons/year	No offsets required
10 tons/year to 35 tons/year	Offsets shall be provided by the District's small facility banking account at a 1.0 to 1.0 ratio
> 35 tons/year	Offsets shall be provided by the facility at a 1.15 to 1.0 ratio. Additionally, the facility must reimburse the District's small facility banking account for any unreimbursed offsets previously provided by the District at a 1.0 to 1.0 ratio.

Regulation 2-2-302

SO₂ and PM₁₀ Offset Applicability

- Offsets only apply to major facilities (>100 tons/year of the specified pollutant)
- Must be provided for any new or modified sources which will results in a cumulative increase is excess of 1.0 ton/year

Regulation 2-2-303

Calculating Contemporaneous Emission Reductions (Real, Permanent, Quantifiable, Enforceable)

1. Determine baseline emissions
 - Baseline emissions are the lesser of actual emissions or permitted emissions over the previous 3 year period
2. Adjust the baseline downward, if necessary, to comply with RACT
3. Emission reduction credits are granted for the difference between the adjusted baseline and the new federally enforceable emission limit

Regulation 2-2-605

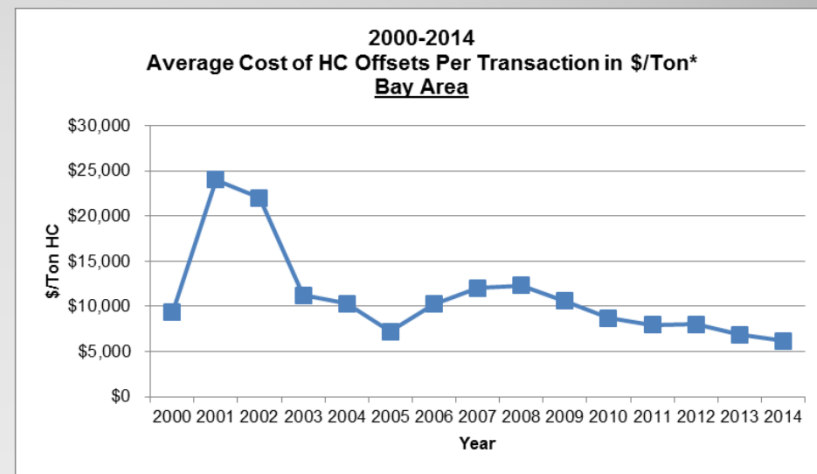
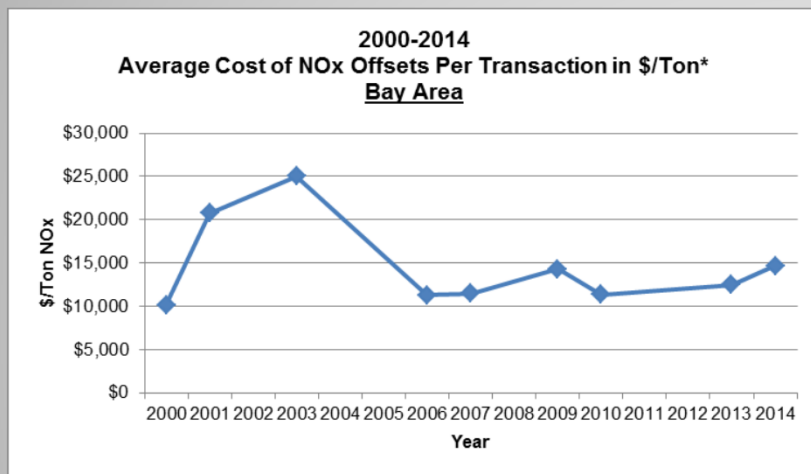
Purchasing Emission Reduction Credits

- ERC's earned through shutdown or control of an existing source can be banked by a facility.
- These ERC's are permanent, and can be used either by the facility during future projects, or can be transferred and sold on the open market.

Purchasing Emission Reduction Credits

Pollutant	Total Tons Traded	Average (mean)	Median (\$/ton)	High (\$/ton)	Low (\$/ton)
POC	212.64	\$6,196	\$7,000	\$9,542	\$1,200
NOX	73.33	\$14,643	\$14,500	\$15,000	\$14,500

2014 Summary Statistics for ERC Transactions in the Bay Area



<http://www.arb.ca.gov/nsr/erco/erco.htm>

Purchasing Emission Reduction Credits

- Current ERC Bank:

http://hank.baaqmd.gov/pmt/emissions_banking/banking.htm