

What's Up With Nonattainment

Designations and Emission Reduction Credits

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Air and Waste Management Association Meeting
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Nonattainment

- Pollutant Specific
- A Pattern of Measured Ground-level Ambient Air Quality Standard Exceedances that Result in “Violations” and a Pattern of “Violations” that Result in the Area being Designated “Nonattainment”
 - Exceed Does Not Mean “Violate”
 - Exceed Does Not Mean “Nonattainment”
 - “Violate” Does Not Mean “Nonattainment”
- A Prescriptive Pattern of Exceedances can Become a “Violation”
 - Codified Criteria for Exceedances to become a “Violation”
- A Prescriptive Pattern of “Violations” can Make an Area “Nonattainment”
 - Codified Criteria for “Violations” to become “Nonattainment”

Nonattainment

Exceedances of Air Quality Standards

Pattern of Exceedances

Violations

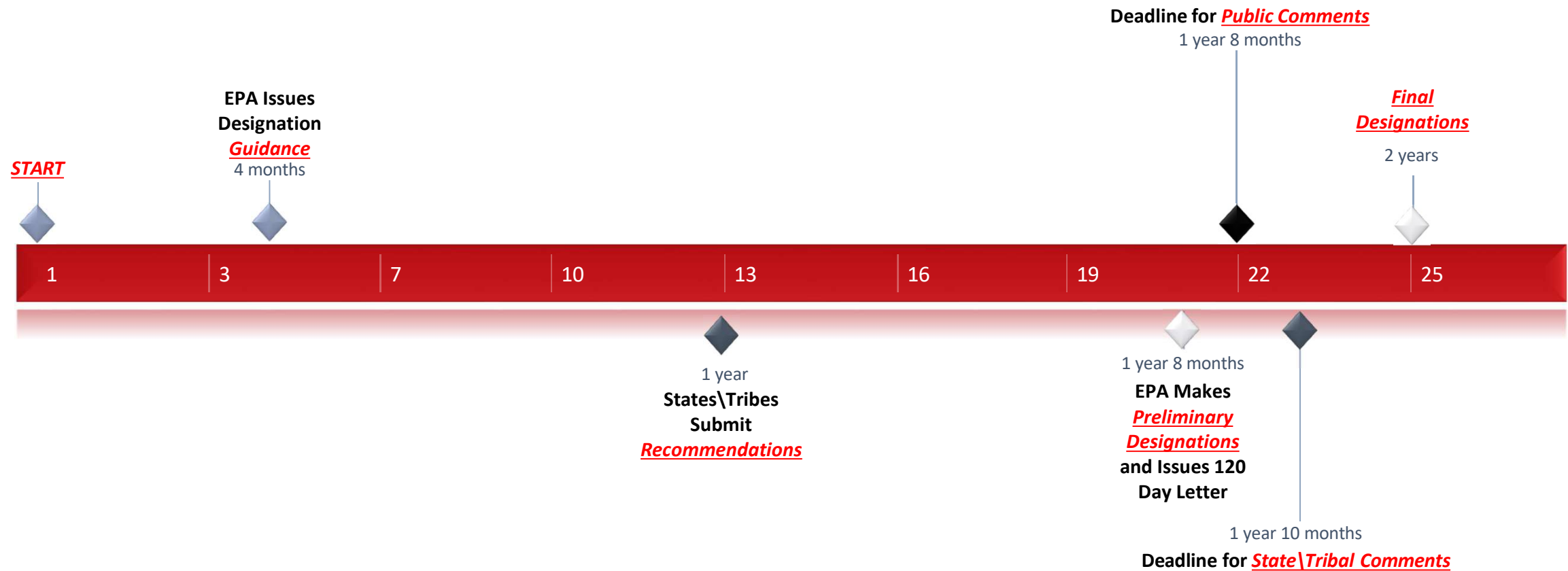
Pattern of Violations

Nonattainment

Nonattainment Processes

- Area Designations
 - Pollutant Specific
 - State\Tribal Recommendations
 - EPA Designations
 - Attainment\Unclassifiable
 - Nonattainment
- Nonattainment Area Classification
 - EPA Proposes Criteria for New Standards (Such as 2015 ozone standard)
 - Finalize as Part of Code of Federal Regulations
 - Nonattainment Status is Classified in 5 bins with escalating requirements
 - 1) Marginal, 2) Moderate, 3) Serious, 4) Severe (2 levels), 5) Extreme

Representative Nonattainment Area Designation Timeline



2015 Ozone Nonattainment Area Designation Timeline



2015 Ozone Nonattainment Classification Timeline

Proposed Ozone Nonattainment Classification Thresholds

(Proposed November 17, 2016)

OZONE NONATTAINMENT STATE IMPLEMENTATION PLAN REQUIREMENTS AND PROPOSED¹ CLASSIFICATIONS

NONATTAINMENT CLASSIFICATIONS		REQUIRED SIP ELEMENTS		PROPOSED NONATTAINMENT CLASSIFICATION OZONE THRESHOLDS ¹	OFFSET RATIO ³	MAJOR SOURCE THERESHOLD ³
EXTREME (20 years to attain)	TRANSPORTATION CONGESTION CONTROLS			Equal to or above 0.163 ppm	1.5:1	10 TPY
	CLEAN FUELS REQUIREMENT FOR BOILERS					
SEVERE (15 OR 17 YEARS TO ATTAIN)	PENALTY FEE PROGRAM FOR MAJOR SOURCES			From 0.105 up to ² 0.111 ppm or From 0.111 up to ² 0.163 ppm	1.3:1	25 TPY
	VEHICLE MILES TRAVELED GROWTH OFFSET	LOW VOC REFORMULATED GAS				
SERIOUS (9 years to attain)	TRANSPORTATION CONTROL MEASURES (IF NEEDED)			From 0.093 up to ² 0.105 ppm	1.2:1	50 TPY
	NONATTAINMENT NEW SOURCE REVIEW REQUIREMENTS FOR EXISTING SOURCE MODS					
	MILESTONE CONTINGENCY MEASURES FOR REASONABLE FURTHER PROGRESS					
	ENHANCED EMISSIONS INSPECTION and MAINTENANCE PROGRAM		ENHANCED MONITORING PLAN			
	VEHICLE MILES TRAVELED DEMONSTRATION		CLEAN FUELS PROGRAM (IF APPLICABLE)			
	18% REASONABLE FURTHER PROGRESS OVER 6 YEARS		MODELED DEMONSTRATION OF ATTAINMENT			
MODERATE (6 years to attain)	BASIC EMISSIONS INSPECTION and MAINTENANCE PROGRAM		STAGE II GASOLINE VAPOR RECOVERY	From 0.081 up to ² 0.093 ppm	1.15:1	100 TPY
	15% REASONABLE FURTHER PROGRESS OVER 6 YEARS		CONTINGENCY MEASURES for FAILURE TO ATTAIN			
	VOC/NO _x REASONABLY AVAILABLE CONTROL TECHNOLOGY FOR MAJOR SOURCES		ATTAINMENT DEMONSTRATION			
MARGINAL (3 years to attain)	TRANSPORTATION CONFORMITY DEMONSTRATION			From 0.071 up to ² 0.081 ppm	1.1:1	100 TPY
	NONATTAINMENT NEW SOURCE REVIEW PROGRAM		MAJOR SOURCE EMISSION STATEMENTS			
	BASELINE EMISSION INVENTORY		PERIODIC EMISSION INVENTORY UPDATES			

¹November 17, 2016 Proposed Classification Thresholds

²Up to but not including

³Both VOC emissions and NO_x emissions are subject to ozone nonattainment requirements and treated independently. When either pollutant is emitted at the major source threshold, that pollutant is subject to applicable offsets.

Finalizing Thresholds: 2015 Ozone Nonattainment Classification

- Must be Office of Management and Budget Approved
- Proposed Final Submitted to Office of Management and Budget on September 21, 2017

AGENCY: EPA-OAR

RIN: 2060-AT41

Status: Pending Review

TITLE: Implementation of the 2015 National Ambient Air Quality Standards for Ozone: Nonattainment Area Classifications

STAGE: Proposed Rule

ECONOMICALLY SIGNIFICANT: No

RECEIVED DATE: 09/21/2017

LEGAL DEADLINE: None

Source: Office of Management and Budget Dashboard (www.reginfo.gov/public/jsp/EO/eoDashboard.jsp)

- Not Publicly Available (Closed door process)
- **Abstract:** “This final action will establish the air quality thresholds that define the classifications assigned to all nonattainment areas for the 2015 ozone national ambient air quality standards.”
 - EPA Feedback: “Supplemental proposal on 2015 ozone NAAQS classifications”

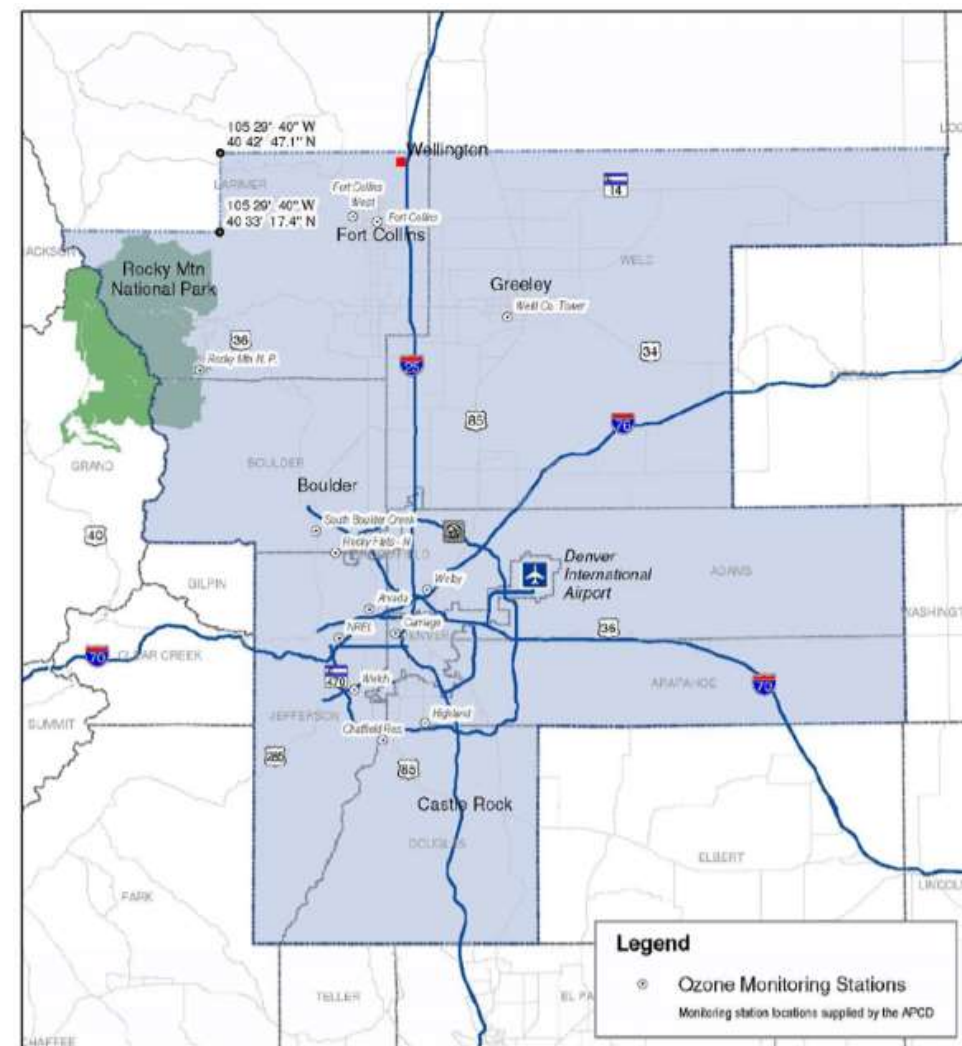
Current and Proposed Colorado Nonattainment Designations

- 2008 Ozone Standard (75 ppb):
 - 2008 Ozone Standard Requirements Remain In Place
 - The Denver/North Front Range Area is classified Moderate Nonattainment
 - Bumped up Because the Area did not Meet the Original 3-year Attainment Schedule for Marginal
 - Could be Bumped Up to Serious
 - A 2008 Ozone Standard SIP was Submitted to EPA in May 2017 (A Moderate Classification Requirement)
 - July 2018 Attainment Deadline
 - Expecting to Receive a 1-year Extension Resulting from 2017 Values Being ≤ 75 ppb (Requiring Approval of an Exceptional Event)
 - EPA Proposed Options to Revoke the 2008 Standard
 - Revoke Nationwide 1-year after 2015 Standard Designations
 - Revoke for Nonattainment Area after it Attains the 2008 Standard

Current and Proposed Colorado Nonattainment Designations (Continued)


- 2015 Ozone Standard (70 ppb):
 - Yet to be Fully Implemented
 - Colorado Recommended Denver/North Front Range Area as Marginal Nonattainment
 - All or Part of 9 Counties
 - The Denver/North Front Range Area recommendation is Identical to 2008
 - Colorado Recommended Rio Blanco County as Attainment/Unclassifiable
 - Exceptionally High 2013 Values in Rangely
 - On 11/6/17 EPA Designated 44 of 64 Counties as Attainment\Unclassifiable
 - 20 Counties were not identified in the 11/6/17 Designations

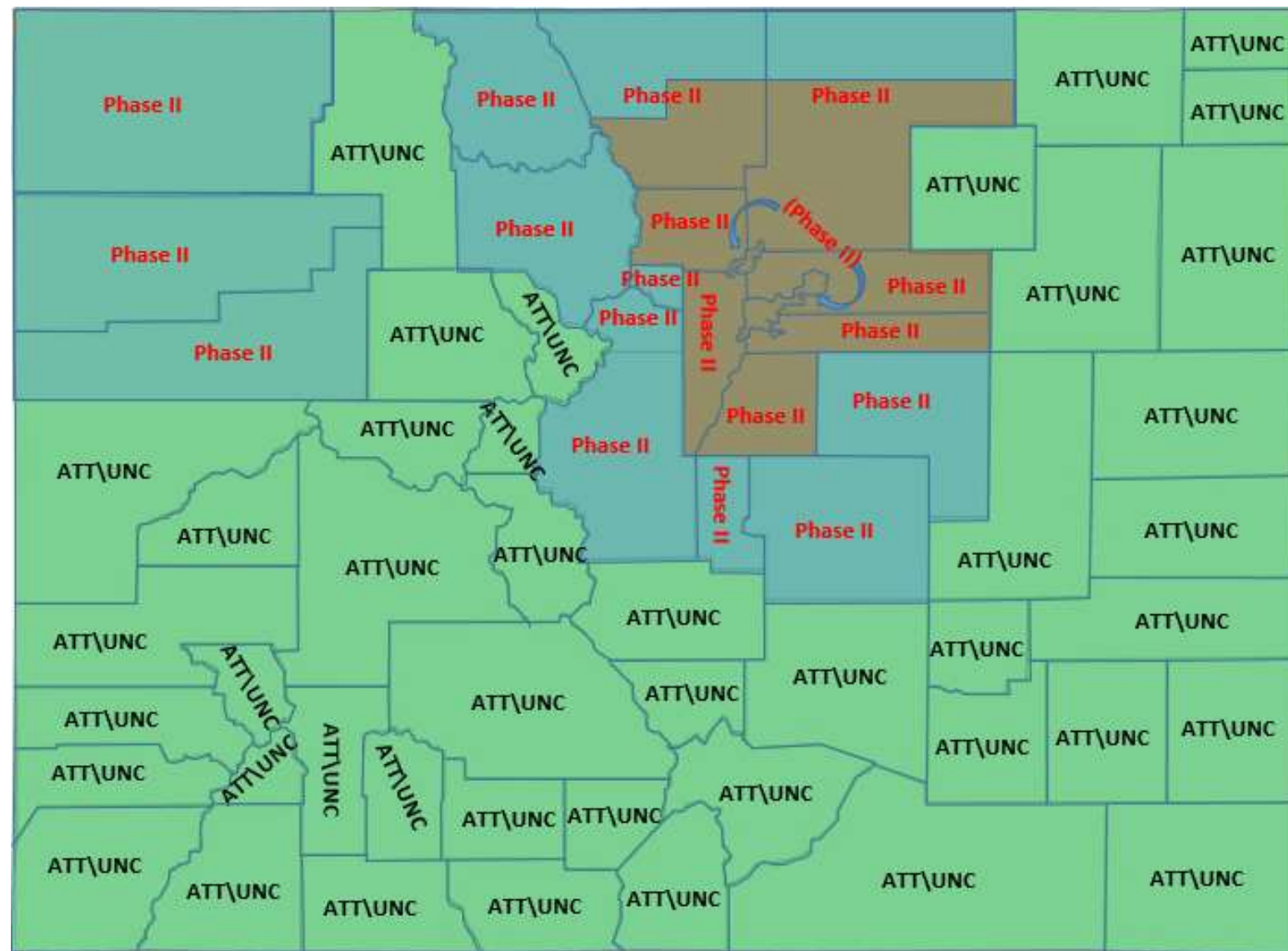
The Recommended Nonattainment Area Boundaries for the 2008 Standard and the 2015 Standard are Identical



Denver-Boulder-Greeley-Fort Collins, Colorado
Eight-Hour Ozone Control Area

2015 Ozone Standard Attainment Designations

-  9/23/16 Colorado Recommended Nonattainment Designations
-  11/6/17 EPA Final Attainment\Unclassified Designations
-  Pending EPA Designations



Where Are We Now

- Denver/North Front Range Area is Moderate Nonattainment for the 2008 75 ppb Ozone Standard
- Colorado Recommended Denver/North Front Range Area as Marginal Nonattainment for the 2015 70 ppb Ozone Standard (proposed thresholds)
- EPA Took Final Action on 44 Counties, Designating Them Attainment\Unclassifiable for the 2015 Ozone Standard
- Waiting on Designations for 17 Counties Near or in the Denver/North Front Range Area and 3 Counties in Northwest Colorado

Emission Reduction Credits

Emission Reduction Credits

Can = \$\$\$\$\$

- Stockpile for use in Future Expansion\Development
- Sell to Other Companies

Emission Reduction Credits

- Enforceable Decreases in Stationary Source Emissions
 - Pollutant Specific
 - Quantifiable (tons per year)
 - Enforceable (Permanent)
 - Surplus
 - Not Required by Current Regulations (NSPS, NESHAP, BACT, etc.)
 - Not Used for “SIP Credit” Toward Nonattainment “Reasonable Further Progress” (RFP), “Rate of Progress” (ROP), Attainment, or Maintenance in a “Moderate” or Higher Nonattainment SIP
 - Not Already Used for Other Regulatory Requirements (No Double Counting)
 - Real (Actual) (= current actual **minus** enforceable [permitted] new emissions)
- Units: tons per year of specific (single) pollutant

Credit Eligible Emission Reduction Measures

- Permit Conditions
 - Controls
 - Permit Enforceable Control Requirements
 - Not Required by Other Regulations (NSPS, NESHAP, BACT, etc.)
 - Minor Source Reasonably Available Control Technology (RACT)
 - Production\Operation Limits
 - Shutdown
- Quantifiable – Enforceable – Surplus - Real

Using Emission Reductions

- No Double Counting
 - Can Only be Used Once
- Permitting
 - Major Sources – Credits\Offsets
- OR
- State Implementation Plans
 - “SIP Credit” Toward Nonattainment “Reasonable Further Progress” (RFP), “Rate of Progress” (ROP), Attainment, or Maintenance

Minor Sources

- Minor Sources Thresholds for Marginal and Moderate Nonattainment:
 - VOCs \leq 100 tpy and NO_x \leq 100 tpy
 - (Threshold drops to 50 tpy for Serious Designation)
- Minor Sources aren't Subject to Federal Nonattainment NSR Rules
 - Federal Nonattainment Permitting Rules apply to Major Sources
- Minor Sources can be affected by State Implementation Plan (SIP) Requirements for Nonattainment Areas

Colorado Emission Reduction Credit Program

- Rules Are In Place
 - Regulation 3, Part A, Section V
 - Draft Instructions and Forms
 - Request to Create (Form APCD-601)
 - Intent to Use (Form APCD-602)
 - Change in Credit Ownership (Form APCD-603)
- Two Components:
 - Certified Emission Reductions
 - Emission Credit Transactions
- Change of Ownership

Emission Reduction Credits

- Reg 3.V.C: “Certified Emissions Reduction”
 - Must Be State Certified (EPA Certification Not Required Unless Specifically Stated in the SIP)
 - Major or Minor Sources can Generate and Bank Credits
 - Application to the State for Certification (Before permit is issued)
 - Pollutant Specific
 - Amount Issued:
 - 90% of Reductions in Attainment Areas
 - 80% of Reductions in Nonattainment Areas
 - Certificate Issued by State of Colorado to Owner – Certificate Number
 - State will Maintain an Online Registry of Emission Reduction Credits
 - Expire 7 Years After Certification

Emission Reduction Credits: Generating Credits

Submit a Permit Application and ERC Creation Form (APCD-601)

Obtain Confirmation of Application Receipt from State

Receive Permit and Begin Construction

Make Associated Shut Down or Modification After Confirmation

Emission Credit Transactions

- Transaction Involving the Use of Emission Reduction Credits for
 - Netting (Facility)
 - Offsets (Regional)
 - Bubbling (Between Facilities, Commission Approval, SIP Revision)
 - Alternative Compliance Method (Facility, Commission Approval, SIP Revision)
- Must Involve Like Pollutants
 - Case-by-case EPA Approval of Interpollutant (e.g. NO_x ERC or VOC ERC for the other)

Emission Credit Transactions: Offsets

- In Most Cases Must be Used in the Same Nonattainment/PSD Baseline Area
- Using Offsets From Outside of the Same Nonattainment Area
 - V.A.3.b.(i) A greater air quality benefit may thus be achieved, or sufficient offsets are not available from sources within the nonattainment area; **and**
 - V.A.3.b.(ii) The other area has an equal or higher nonattainment classification than the area in which the source is located; **and**
 - V.A.3.b.(iii) Emissions from such other area contribute to a violation of the National Ambient Air Quality Standard in the nonattainment area in which the source is located.
 - V.A.3.b.(iv) With respect to offsets obtained from outside the nonattainment area, **the Division may increase the ratio** of the required offsets to new emissions the greater the distance such offsets are from the new or modified source.
- Must be greater than 1:1 (see O₃ nonattainment ratios for marginal, moderate, serious, severe, extreme)

Emission Credit Transactions: Process

Submit Permit Application Accompanied by ERC
Use Application Form (APCD-602)



Receive Confirmation of the Application from
the State



Receive Permit and Begin Construction

Change of Credit Ownership

- Buying or Selling Emission Credits

File an Application for Change of Credit Ownership Form (APCD-603) and Company Contact Information Form (APCD-101)



Confirm Change in Ownership in the State Registry

Coming Soon

- Emission Reduction Credit Website
 - Emission Reduction Credit Registry
 - Track:
 - Certifications
 - Change of Ownership
 - Use of Credits
 - Forms
 - Instructions and Support Materials

Emission Reduction Credits can be a Prized Resource

THANK YOU