

Annual Offset Equivalency Demonstration

May 11, 2016

San Joaquin Valley APCD
webcast@valleyair.org



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Offset Equivalency Background

- Rule 2201 (New Source Review), Section 7
- Purpose is to demonstrate equivalency:

District's offset requirements
versus
Federal offset requirements



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Minor Projects Not Affected

- District's current offsetting requirements adequate under all conditions for all minor projects:
 - New sources that are not major
 - Modifications that are not federal major modifications (even at major sources)
- Can offset emissions with any valid credits
- No surplussing-at-time-of-use



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District Offsetting Program

- District offsetting requirements are more strict overall:
 - Higher offset ratios
 - Lower offsetting thresholds
 - Portion (10%) of all original banking actions goes to clean air
- More offsets required than federal program
- After annual equivalency demonstration, leftover credits carry-over to subsequent years



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Offset Equivalency Demonstration

- First test: Compares federal offset requirements to offsets required by District program
- Second test: Compares federal offset requirements to surplus portion of District offsets (surplus reductions are in excess of requirements in existence on the date when the permit is issued)



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Offset Equivalency Reporting

Schedule for Report

- Annual equivalency demonstration period is August 20 to August 19
- Report due to EPA on November 19 of each year
- All reports available on District website, valleyair.org



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Offset Equivalency Demonstration

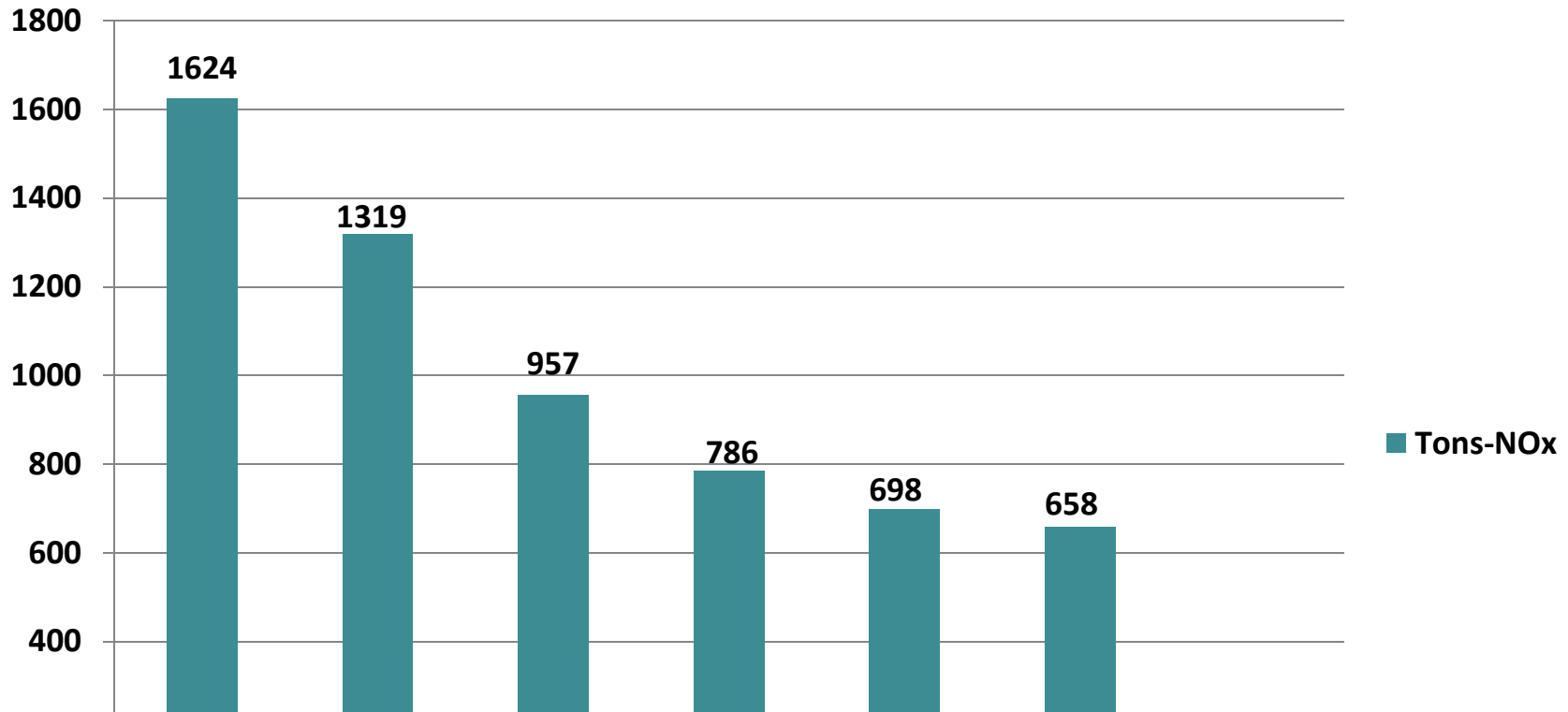
- Successful for the last thirteen years for all pollutants
- Tracking system potential failure for **NOx** this coming year
- If fail, November 19, 2016 report due date triggers ramifications for Authority to Construct permits issued on and after that date



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Carry-Over Surplus NOx Reductions (tons-NOx/yr)



Ramifications of Failure

- New major sources and federal major modifications required to use surplus-at-time-of-use credits
 - Does not affect minor projects
- Ramification in place until subsequent annual report is submitted showing no failure
- Likely significant impact on prices/availability of offsets for such projects



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Evaluation of NOx Registry

- District performed detailed evaluation of our NOx ERC Bank
- Surplus values methodology:
 - Identify original banking project
 - Determine source type and emission factors used to calculate actual emission reductions
 - Evaluate current rules and regulations applicable to original banking action to determine the surplus value of credits



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Current State of NOx Registry

- Approximately 18% of NOx ERC credits available for surplus-at-time-of-use
 - About 1,000 tons of NOx credits
- May seem large, but a few large projects could significantly reduce available credits
- May impact the ability for any future growth in the San Joaquin Valley
- Current offset program not sustainable for long-term equivalency



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Voluntary Changes to Major Modification or New Major Source Projects

- Ongoing: Identify and revisit unimplemented ATC projects requiring federal offsets
 - Applicant can cancel or modify ATCs not implemented
 - Return surplus reductions used to mitigate past project emissions increases
- Ongoing: work with applicants to reduce emissions
 - Avoid Major Modifications
 - Minimize offset requirements



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Option: Voluntary Surrendering or Retiring Existing Surplus ERCs

- Advantages
 - No changes to current rules
 - Facilities who benefit most would likely be the ones who would voluntarily participate
- Disadvantages
 - No guarantees of participation
 - Short timeframes to identify and surrender ERCs
 - Surplus amounts needed, only determined after August
 - Creates a high level of uncertainty for equivalency demonstration



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Option: Mandatory Surrendering or Retiring Existing Surplus ERCs

- Approach #1 – Only facilities with projects requiring federal offsets required to make up shortfall
- Approach #2 – All stationary sources required to make up shortfall
- Advantages
 - More certainty that a mechanism exists
- Disadvantages
 - Short timeframes to identify and surrender ERCs
 - Unfair to non-Major Source facilities that do not benefit from equivalency demonstration



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Option: Interpollutant Trading – Surplus VOC for Surplus NOx

- Allowed per Rule 2201 (Section 4.13.3.1.4)
- Robust carry-over surplus amount of VOCs
 - 1,657 tons in database
- However, no approved ratios currently exist
 - Long and complex process with EPA/ARB
 - No guarantees EPA/ARB would approve
 - Estimated ratios could range from 12-to-1 to 20-to-1 based on the importance of NOx to the Valley's attainment strategies



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Option: Amendments to District Rule 2201

- Increase the AQID (i.e. 10% to 20%)
 - Small amount of surplus reductions generated
- Lower the NOx offset threshold (i.e. 10 tons to 5 tons)
 - NSR and Federal thresholds are the same
 - Effects smaller facilities not affected by offset equivalency failure
 - Offsets provided for additional projects may not be surplus reductions
- Amending a rule is a lengthy process



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Option: Adopt RECLAIM-Type Rule

- Establish cap on the amount of federal offsets
 - Based on the amount of surplus reductions expected to be generated
- Limits the amount of projects approvable by the District
- The District has well controlled NO_x sources
 - Not much room for innovation
 - Cap will act like a production limit for facilities



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Option: Revamp Federal NSR Mitigation Concept

- Modify state and federal requirements to allow use of non-surplus emissions reductions
- District already pursuing modernization of Clean Air Act
 - Include changes to federal offsetting requirements in this action
- Ongoing multiyear effort
 - Not an immediate solution for addressing failure, if even possible



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Option: Fund and Generate Surplus Credits for Demonstrating Equivalency

- District Rule 9610 creates EPA-approved mechanism for creating surplus reductions from incentive programs
- Annual fees from Rule 4320 suggested as a source of funding
 - Used to fund a variety of incentive programs (Burn Cleaner, TAP, etc.)
 - Reductions generated are not Rule 9610-compliant
 - Using these funds for equivalency would require replacing funds from other sources



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Option: Fund and Generate Surplus Credits for Demonstrating Equivalency

- Develop new source of funding for equivalency demonstration
 - Would likely require rule development
 - Funding would be used to generate a bank of surplus credits for use in equivalency demonstration
 - Reductions would have to be 9610-compliant
 - Mobile source reductions, stationary source increases
 - Who pays? Major Sources? All permitted facilities? Other?



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Comments/Questions

- Other ideas? Preferred options?
- Comments due by June 1, 2016
- If you have comments, questions, answers:
errol.villegas@valleyair.org
- District's next steps:
 - Develop concept paper for preferred option(s)
 - Schedule meeting to discuss concept paper



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