

Annual Offset Equivalency Demonstration

May 11, 2016

San Joaquin Valley APCD
webcast@valleyair.org



HEALTHY AIR LIVING™

Live a Healthy Air Life!

Offset Equivalency Background

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

District's offset requirements
versus
Federal offset requirements



HEALTHY AIR LIVING™

Live a Healthy Air Life!

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



HEALTHY AIR LIVING™

Live a Healthy Air Life!

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



HEALTHY AIR LIVING™

Live a Healthy Air Life!

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)

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



HEALTHY AIR LIVING™

Live a Healthy Air Life!

Offset Equivalency Demonstration

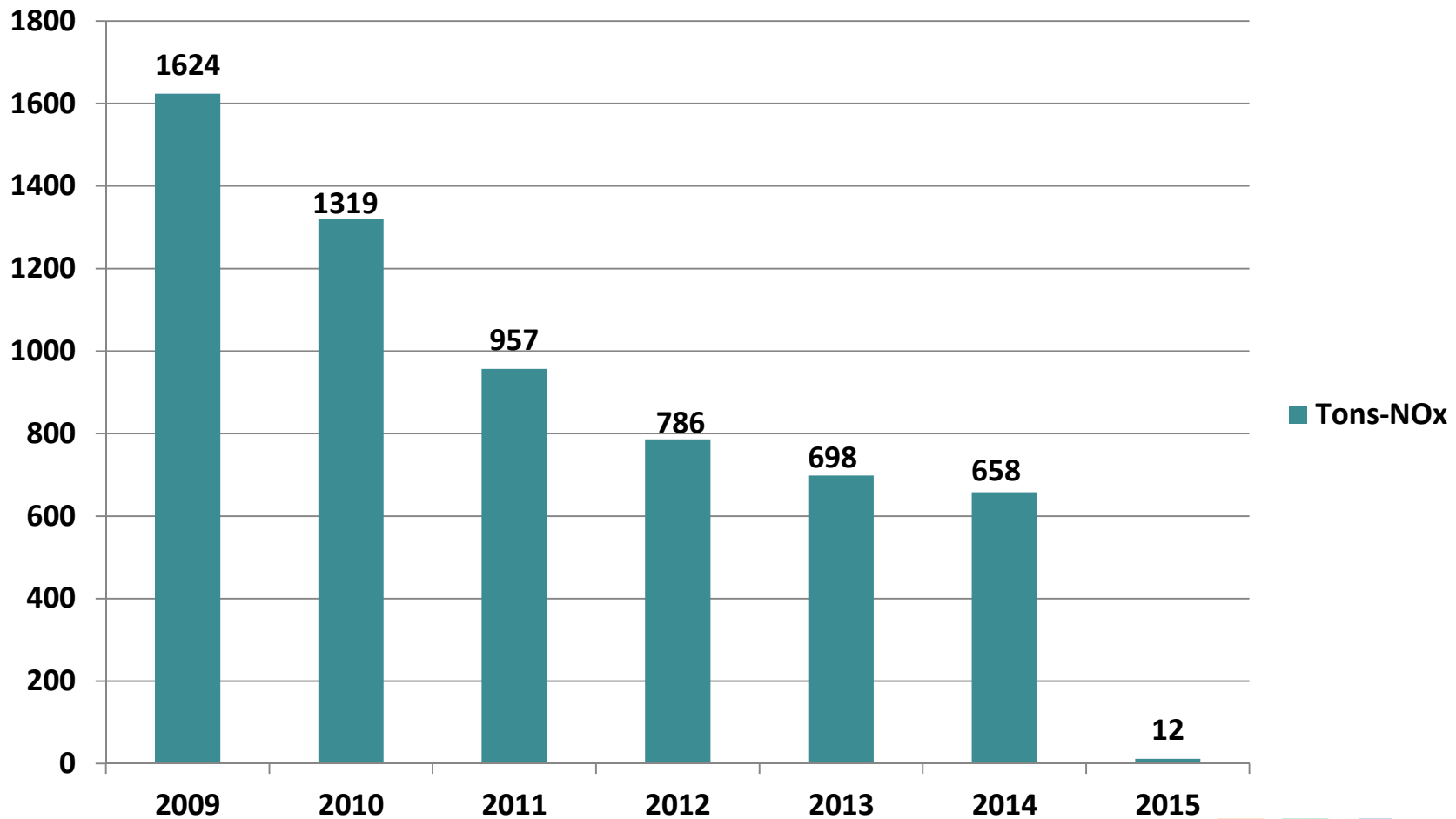
- Successful for the last thirteen years for all pollutants
- Tracking system potential failure for **NOx** this coming year
- If fail, November 19, 2016 report due date triggers ramifications for Authority to Construct permits issued on and after that date



HEALTHY AIR LIVING™

Live a Healthy Air Life!

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

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



HEALTHY AIR LIVING™

Live a Healthy Air Life!

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

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



HEALTHY AIR LIVING™

Live a Healthy Air Life!

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



HEALTHY AIR LIVING™

Live a Healthy Air Life!

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



HEALTHY AIR LIVING™

Live a Healthy Air Life!

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



HEALTHY AIR LIVING™

Live a Healthy Air Life!

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

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



HEALTHY AIR LIVING™

Live a Healthy Air Life!

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



HEALTHY AIR LIVING™

Live a Healthy Air Life!

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

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?



HEALTHY AIR LIVING™

Live a Healthy Air Life!

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



HEALTHY AIR LIVING™

Live a Healthy Air Life!