

Annual Offset Equivalency Demonstration

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What are ERCs?

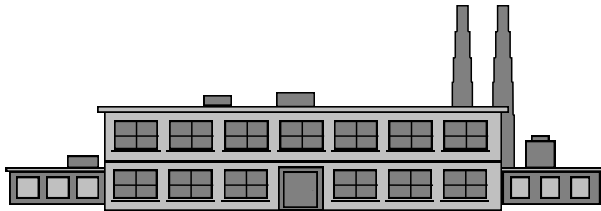
Emission Reduction Credits (ERCs)

- Created by voluntary reductions in actual emissions
- Reductions must be real, quantifiable, permanent, enforceable, surplus
- Considered valid after District analysis
- ERC Certificate issued

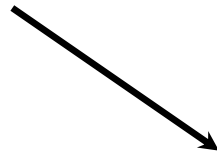


How are ERCs used?

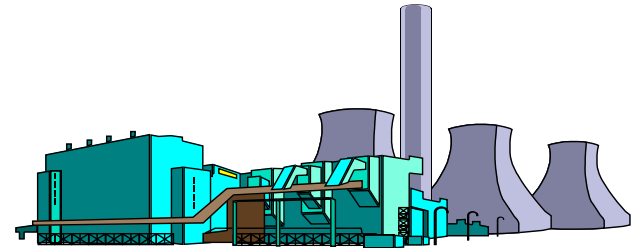
Existing source



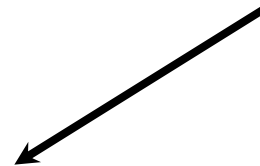
**Decrease in
existing
emissions**



**New or modified
source**



New emissions



**No increase
in emissions
in the Valley**



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ERC Issues

Federal rules require “Surplus Credits”

- Credits “surplus” of required reductions
- District looks at “surplus” issues at time of banking
- EPA says ERCs must be surplus-at-time-of-use (surplus of federal requirements)
 - Applies only to federal major sources – new major sources and major modifications at those sources (for example, annual NO_x emissions over 10 tons)



Surplus Credits

- Arguments against surplus-at-time-of-use:
 - Stifles early or innovative reductions.
 - Takes valuable property from those who move ahead of pollution reduction requirements.
 - Use of un-surplussed credits doesn't affect attainment efforts when properly accounted for in attainment plans.



ERC Issues

- District offsetting requirements are more strict overall:
 - Higher offset ratios
 - Lower offsetting thresholds
 - Portion (10%) of all original banking actions goes to clean air
- Not entirely successful with these arguments, and EPA required development of our offset equivalency demonstration system



Offset Equivalency Demonstration

- 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



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 Demonstration

- Quantify increases in emissions from units that require federal offsets (reminder, only affects larger sources):
 - New Major Sources
 - Federal Major Modifications
- Calculate the ERCs necessary to offset these sources per federal requirements



Offset Equivalency Demonstration

- Test 1:
 - Quantify offsets required by District program (higher than fed because of lower offset thresholds and higher offset ratios)
 - Not expected to fail this test
 - If necessary, can add “extra” surplus reductions resulting from the District’s permitting program:
 - Retire sufficient banked reductions
 - 10% cut prior to banking new credits
 - Un-banked reductions



Offset Equivalency Demonstration

- Test 2:
 - Determine surplus offsets required by District program
 - Can add “extra” surplus reductions resulting from the District’s permitting program:
 - Minor Source BACT
 - 10% cut prior to banking new credits
 - Un-banked reductions



Offset Equivalency Demonstration

- If fail 1st test (quantity of offsets):
 - District must retire additional surplus credits until shortfall is made up
 - If insufficient credits are available, District must require sources to use federal offsetting requirements, until rule is changed
 - Again, failure of 1st test is not expected



Offset Equivalency Demonstration

- If fail 2nd test (surplus credits):
 - District must require all new major sources and federal major modifications to use surplus-at-time-of-use credits, until shortfall of surplus reductions is made up
- Remedies kick in on report due-date
- Remedies only affect pollutants for which the demonstration failed



Offset Equivalency Demonstration

Reporting Schedule

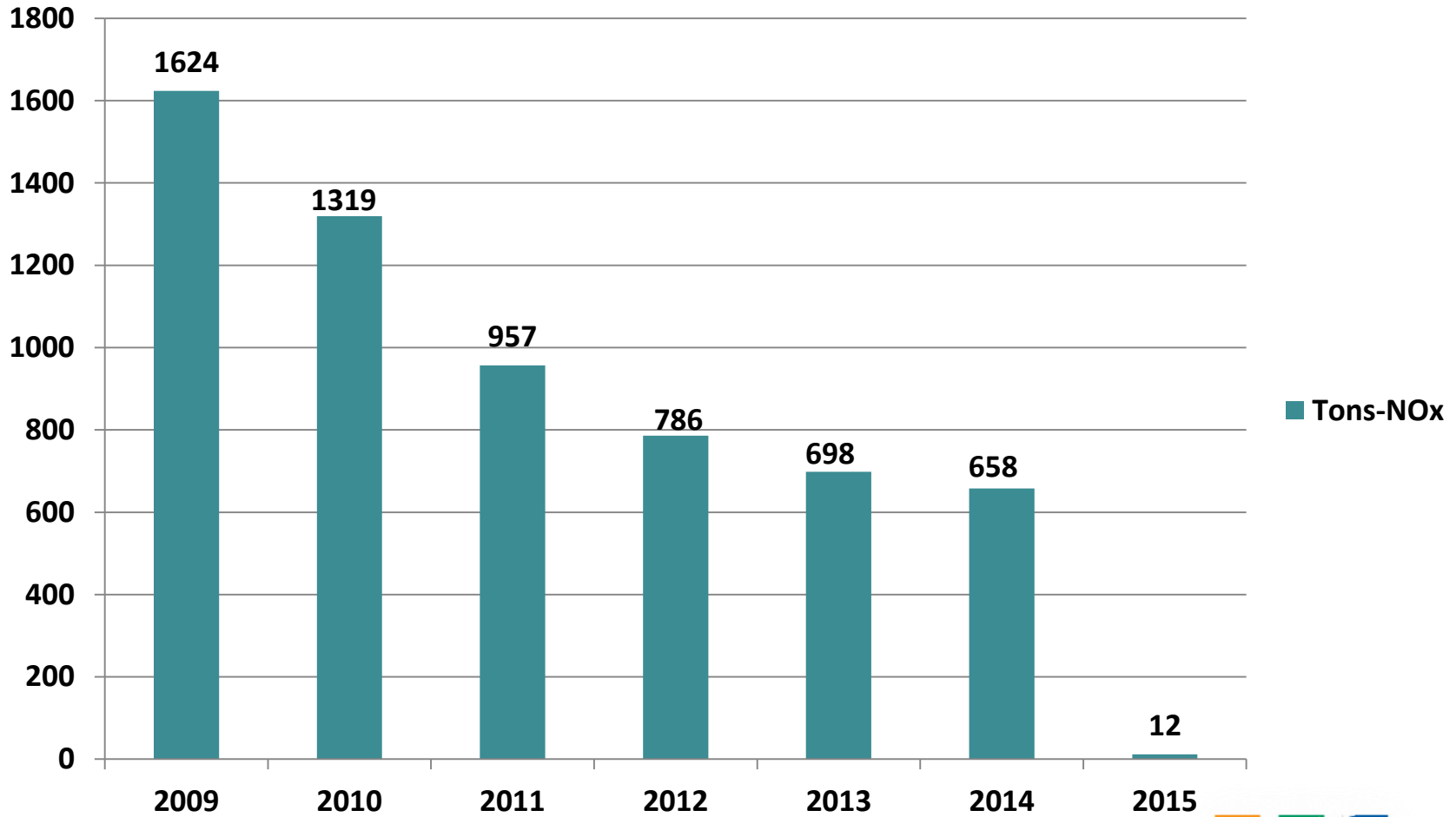
- Annual equivalency demonstration period is August 20 to August 19
- Report due to EPA on November 19 of each year
- All reports available on District website, valleyair.org



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



Offset Equivalency Demonstration

- Successful for the last thirteen years for all pollutants
- Tracking system likely to fail 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



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
 - Estimated only 5% of NO_x ERC credits available for surplus-at-time-of-use



Options to Avoid Failure

- Surrender of, retire, existing surplus ERCs
 - Voluntary?
 - Mandatory – Likely requires rule change
 - Inter-pollutant – Difficult to demonstrate for NO_x, precursor for both ozone and PM
- Modified Rule 2201
 - Increase cut of banking actions from current 10%
 - Lower NO_x offset threshold – currently at 10 tons per year, same as major source threshold, so no “extra” NO_x credits required by District rule 2201



Options to Avoid Failure

- Adopt RECLAIM-type rule
 - Implements a cap-and-trade program
 - Air basin assigned an emissions budget
 - Emissions budget distributed to permitted facilities
 - Emissions budget decreases over time
 - Facilities that over-control can sell excess to those that can't achieve required reductions
 - Issues:
 - Difficult to establish in air basin with well-controlled sources
 - Existing programs facing challenges on multiple fronts



Options to Avoid Failure

- Establish process to fund and generate credits
 - Funds would be invested in District's emission reduction incentive program
 - Reductions generated would be surplus
 - Reductions would go directly to offset equivalency
 - Currently no source of funds available
 - Considerations: limited life of reductions from mobile sources, may not be usable
- Revamp federal NSR mitigation concept?
 - probably requires federal and state legislative action
- Other ideas?



Comments/Questions

- If you have comments, questions, answers:
errol.villegas@valleyair.org
- District's next steps:
 - March 17, 2016: draft staff report incorporating comments received by 5:00 pm, Friday - February 26, 2016
 - March 31, 2016: next meeting

