Offsets Presentation Community Advisory Council

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Santa Barbara County
Air Pollution Control District

www.OurAir.org

Overview

- Offsets and Emission Reduction Credits
- Current Issues
- Implications
- Offsets Workgroup
- Initial Analyses & Findings
- Other Potential Solutions
- Next Steps

Offsets and ERCs

- What are Offsets?
  - Mitigation requirements
  - Required under our New Source Review (pre-construction) permit rules
- What are ERCs?
  - Emission Reduction Credits
  - "Mitigation" used when a company requires offsets
  - Actual "in-the-air" reductions in air pollution
  - Surplus to any other regulatory requirement
  - Companies create ERCs and then use or sell to one another
  - District approves ERCs and then tracks their use

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Regulatory Offset Requirements

- State Mandate
  - H&SC §40918: Plans for Moderate Areas of AQ
  - Offsets: “No Net” Program for stationary sources for any nonattainment pollutant
- Federal Mandate
  - Delegated New Source Review Program
  - Current SIP Rule 205.C (from 1979)
  - EPA is still reviewing our Regulation (from 1997)
  - We “effectively” use our current rule

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Offset Thresholds

- State Mandated “No Net” Program
  - Offset PTE increases above 25 tons per year
  - No baseline date
  - Impacts approx. 30 to 40 large sources
- Actual Rules Adopted (Reg VIII)
  - Offset all NEI once you exceed 55 lb/day or 10 tons per year
  - Baseline date: November 1990
  - Impacts many more sources

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Equivalent Program Differences

- Impacts more sources, especially new sources and existing facilities that expand or modernize their operations.
- Less impact on existing large sources
- Was a compromise in 1997 by CAC, regulated community and the public
- District was required by Air Resources Board to show that our alternative approach was “equivalent”
- Key differences are the “NEI” versus “PTE” calculation concept, baseline, mass threshold values and implementation guidelines

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Current Issues

- Principal Issues
  - Costs
  - Availability
  - North/South Zone Disparity
  - Impacts on Essential Public Services
  - Impacts Electrical Peaking Plants

ERC Costs

- Sky-rocketed 2,200%
  - Increased from $5,000/ton NOx in 1997 to $115,00/ton NOx in 2013
- Costs for companies that trigger offset requirement “start” at $1.4 million.
  - Minimum number of ERCs starts at 12 tons
  - Equivalent program requires offsetting down to zero (full mitigation)

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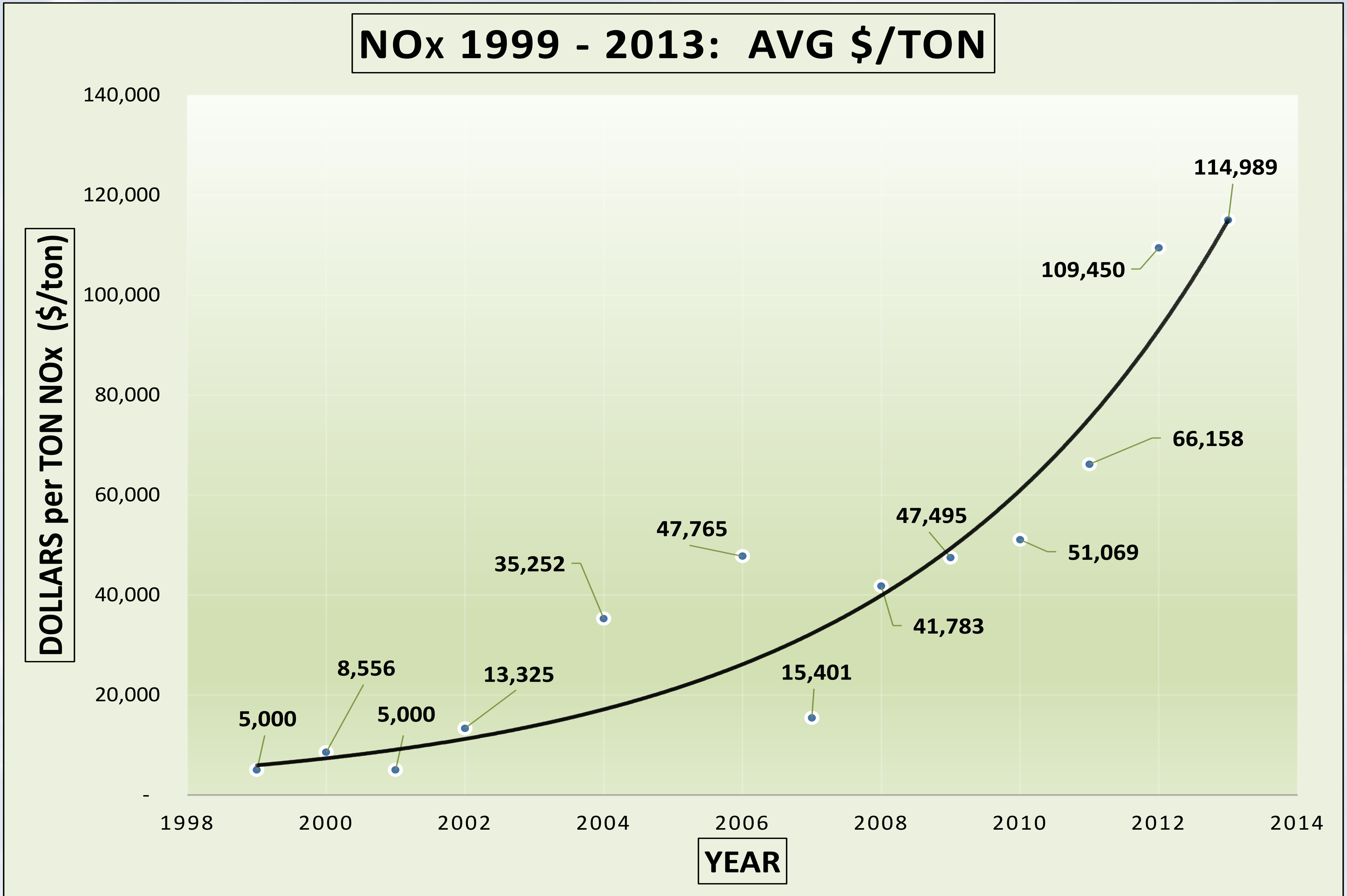
ERC Costs



NOx 1999 - 2013: AVG $/TON
DOLLARS per TON NOx ($/ton)
140,000
120,000
100,000
80,000
60,000
40,000
20,000
-
1998
2000
2002
2004
2006
2008
2010
2012
2014
YEAR
5,000
8,556
5,000
13,325
35,252
47,765
15,401
41,783
47,495
51,069
66,158
109,450
114,989

ERC Availability

- Program was initially very successful !
  - Numerous clean air projects were implemented
  - There was lots of dirty equipment to clean up
- Difficult to obtain
  - Rules have cleaned up the dirty equipment, leaving very few cost effective projects to control
  - Companies quickly secure any ERCs created
  - Those that own ERCs unwilling to sell
  - Know they may need ERCs for their own projects
  - No guarantees that ERCs would be available in the future if they sold now

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North/South Zone Disparity

- Rule 802 impedes transferring ERCs between North and South Zones
  - Typical trading ratio is 1.5 to 1
  - North/South trading ratio is 6 to 1
- Most current active ERCs are in North Zone
  - Virtually none available now in South Zone
  - Project very low availability for the South Zone
- Clean Air Plan does not differentiate b/n Zones

ERCs – as of May 2013

Active ERCs

(units: tons per year)

Zone	NOx	ROC	PM
North	189.4	106.2	76.4
South	38.4	2.0	0.1
Total	**217.8**	**108.2**	**76.5**

Active ERCs *Available for Sale*

(District Estimate)

Zone	NOx	ROC	PM
North	3.3	13.8	42.7
South	0.0	0.0	0.0
Total	3.3	13.8	42.7

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Essential Public Services

- Lack of ERCs may hamper important Essential Public Service Projects

- *Examples*: UCSB, Marian Medical, Santa Maria and Tajiguas Landfills

- Other Air Districts provide ERC solutions for EPS projects

Essential Public Services

Example Definition

South Coast AQMD Rule 1302(m)

(m) ESSENTIAL PUBLIC SERVICE includes:

(1) sewage treatment facilities, which are publicly owned or operated, and consistent with an approved regional growth plan;

(2) prisons;

(3) police facilities;

(4) fire fighting facilities;

(5) schools;

(6) hospitals;

(7) construction and operation of a landfill gas control or processing facility;

(8) water delivery operations; and

(9) public transit.

Electrical Peaking Plants

- South County and North County are vulnerable to prolonged electrical outages
- SCE "Energy Island" peaking plant concept
  - Roughly 200 MW for entire South County
- City of Lompoc peaking plant inquiries
- Very clean units, still trigger daily offset thresholds
- May run up to 2000 hours per year
- Only one peaking plant in the County in Goleta
  - 54 MW. Inefficient and not clean. Rarely used.

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Implications

- If ERCs cannot be obtained, the <u>permit must be denied</u>
- May have to scale back facility expansions, modernizations or move out of the County
- New companies looking to locate in the County may go elsewhere
- ERCs are effectively unavailable in the South Zone
- Essential public services impacts
- Electrical peaking plant obstacles

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Offsets Workgroup

- Informal workgroup of the regulated community, environmental groups and agriculture
- Met Sept ‘12 – March ‘13
- Developed potential solutions
- Presented to APCD Board May ‘13
- District directed to perform detailed analyses and return to the Board
- Members of the Board and public raised concerns with the concepts presented

Offsets Workgroup Roster

Santa Barbara County APCD
Offsets Workgroup Members 10/16/2012

NAME	COMPANY	REPRESENTING
Amy Estrella	Lockheed Martin – SB Focalplane	Manufacturing
Bob Poole	Santa Maria Energy	Oil and gas
Brent Reiswig	Bonipak/Betteravia Farms	Agriculture
David Landecker	Environmental Defense Center	Environmental Community
Glenn Oliver	Plains Exploration & Production Company	Oil and Gas
Katie Wilson	ExxonMobil Production Company	Oil and Gas
Kevin Wright	WSPA	Consultant
Lee Moldaver [1]	Audubon Society	Environmental Community
Marianne Strange	MF Strange & Associates	Consultant
Paul Topinko	Cottage Health Care Systems	Healthcare
Sherri Wentz	Raytheon	Manufacturing
Shams Hasan	E&B Resources	Oil and Gas
Sara Wallon	Imerys Minerals California	Mining/Minerals Processing
Stacey Calloway	University of California	Education
Tony Guy	Zodiac Aerospace	Manufacturing
Tony Lucas	United States Air Force	Military/Space Operations

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Offsets Workgroup Mission Statement

To seek revisions to the District's emission offsets program to address the lack of available mitigation that is required under the New Source Review regulation. Historically, the emissions offsets program was very successful in improving our air quality. Today, however, the default methods of mitigation for the program - Emission Reduction Credits (ERCs) - are very difficult to obtain, due to the high cost and/or lack of availability. This has resulted in both an economic hardship on the regulated community and a substantive impact on their operations. The Offsets Workgroup will investigate and recommend solutions to address these concerns in such a manner that would support responsible economic growth throughout Santa Barbara County without detriment to the environment and the Mission of the District.

Offsets Workgroup Ideas

- Potential new rule – “Clean Technology Fund”
  - Similar to existing Carl Moyer Program
  - Look at many smaller emission reduction projects
  - Set $/ton costs above Moyer limits to get more reductions
  - Track actual reductions “in the aggregate” as opposed to project specific
- Potential new rule – “Community Offsets Bank”
  - Used for qualified essential public services
  - Low or no cost
- Evaluate potential revisions to program implementation guidelines (e.g., policies)

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Analysis Challenges

- Senate Bill 288
- Clean Air Plan Consistency / Growth Allowance
- State No Net Program
- Finding Projects to Fund
- Establishing a Mitigation Fee Value
- Tracking the Success/Failure of the Program
- EPA Approvability
- ARB Approvability

New and untried. No guarantee of success.

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Initial Analyses & Findings

- SB 288: Main Criteria
  - The changes will not impair maintenance of the national ambient air quality standards
  - The changes will not impair progress toward attaining State ambient air quality standards
  - The changes must be consistent with any environmental justice guidance approved by the California Air Resources Board

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Initial Analyses & Findings
(continued)

- Clean Air Plan Consistency / Growth Allowance
  - Growth allowances have been used in prior CAPs
  - Draft CAP forecasts 6,424 ton per year decrease in county-wide ozone precursors from 2008 – 2030
  - This emissions decrease is more than needed to meet the current 8-hour State ozone standard
  - *ARB Criteria*: If the trend line for total emissions slopes downward, it is reasonable to conclude that progress is being made towards achieving the state ambient air quality standards.
  - Prior CAP growth allowances have been targeted for specific projects.

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Initial Analyses & Findings
(continued)

- State "No Net" Program
  - This is our alternative New Source Review offsets program
  - State Mandate is 25 tons per year "PTE"
  - Our Rules are deemed "equivalent" by using a 55 lb/day and 10 tons/year "NEI" threshold
  - Our tracking shows that our rules get equivalent reductions

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Initial Analyses & Findings
(continued)

- Finding Projects to Fund
  - Currently evaluating many types of control projects
  - If the District cannot do the job cost effectively, then don't move forward
  - Establish a Mitigation Fee
  - Types of projects:
    - Lawn Mower Exchange Program
    - Solar Power and/or electrify Agricultural Engines
    - Commercial Leaf Blower trade-in program
    - Old Car Buy-Back Program
    - Repower commercial fishing boats w/ lower emission engines
    - Replace Farm and Construction Equipment

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Initial Analyses & Findings
(continued)

- Tracking the Success/Failure of the Program
  - Track emissions "*in the aggregate*" and not project-by-project
  - Track reductions each year
  - All projects using ERCs report their actual emissions each year
  - Goal is to balance increases and reductions
  - Initial years would require growth allowance to get the program up and running
  - Stop the program if reductions don't catch up to the increases after a set number of years

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Initial Analyses & Findings
(continued)

- EPA Approvability
  - EPA is still working off our 1979 rule
  - When they approve our 1997 rule, it would be our delegated and federally enforceable rule
  - Getting EPA to approve alternative ERC programs is difficult
  - We can write our rule revisions to only apply to non-federal projects
  - This will require changing to Regulation VIII

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Initial Analyses & Findings
(continued)

- ARB Approvability
  - SB-288
  - “No Net” offsets program
  - CAP and growth allowance concept
  - Revised rules

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Current Issues

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Other Potential Solutions

- Do nothing, keep status quo
- Change rule offset threshold to the 25 tpy State Mandated threshold
- Set a cap on ERC transaction costs by rule
- Eliminate North/South Zone 6:1 trading ratio
- Add an offsets exemption for Essential Public Services. Fund with targeted CAP growth allowance
- Add an electrical peaking plant provision. Require mitigation funds for an offset exemption. Fund with targeted CAP growth allowance
- Eliminate the 55 lb per day offset threshold
- Expand trading zones to include Ventura and SLO
- Add a provision for short-term/temporary projects. Require mitigation funds for an offset exemption. Fund with targeted CAP growth allowance.

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Next Steps

- Continue Working on Analyses
- Meet w/ ARB and EPA Staff
- Return to CAC for Input
- Brief APCD Board
- Possible Formal Rulemaking
  - Workshops
  - CAC
  - Board

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Questions?

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