

NSR Working Group Meeting

March 11, 2009

Overall Strategy

- Near-term (2009-Early 2010)
 - Legislative Solution
 - Readoption of Rule 1315 and Amending 1309.1 and Rule 1309.2 to exclude new power plants
- Intermediate (Late 2010)
 - Promoting Facility Modernization
 - Administrative Procedures
 - Regulation XIII amendments meeting current SB288 and CAA requirements
- Long-term (Post 2010)
 - Non-traditional credit sources
 - Replacement of offset requirements
 - Potential SB288 and Clean Air Act changes

Guiding Principles

- Basic ground rules
 - Maintain BACT requirement for all new and modified sources
 - Quality offsets - Real, quantifiable, enforceable, surplus, and permanent
- Promote facility modernizations
- Encourage innovative clean technologies
- Administrative efficiency

Objectives

- Resolve permit moratorium
- Increase availability and access to credits
- Enhance offset utilization
- Stabilize price of credits
- Encourage clean growth

Timeline of Events Leading to AQMD Permit Moratorium

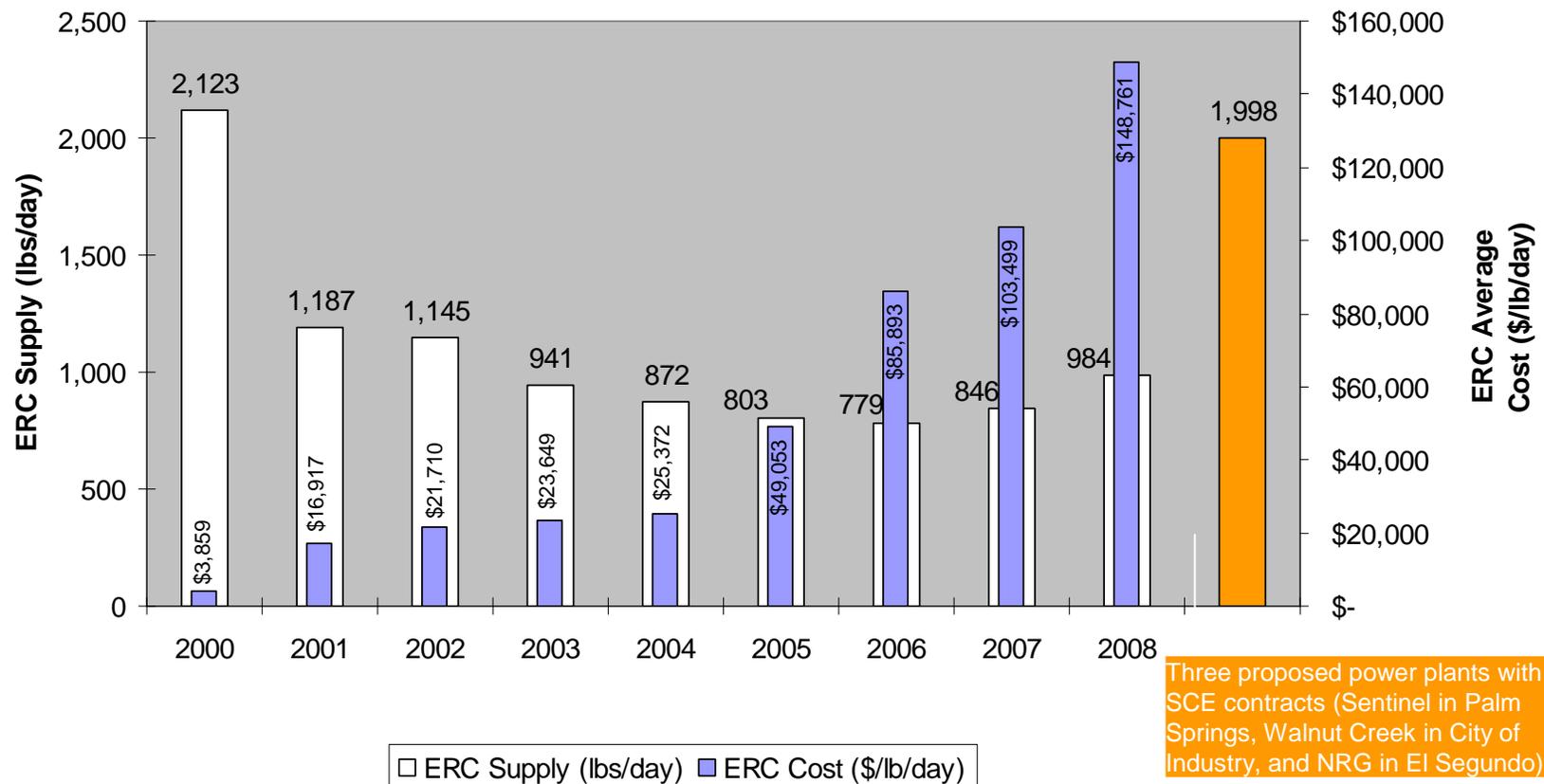
- Sept 8, 2006 Rule 1315 – Federal New Source Review Tracking System Adopted and Rule 1309.1 – Priority Reserve Amended
- Aug 3, 2007 Rule 1315, Rule 1309.1 Re-adopted
- Aug 31, 2007 State Lawsuit Filed
- Aug 18, 2008 Federal Lawsuit Filed
- Nov 3, 2008 Final Judicial Ruling; Judge stopped further use of credits and invalidated ~2000 permits
- Nov 28, 2008 AQMD Appeal
- Jan 2009 Moratorium on Issuing Permits Accessing Rule 1309.1 and Rule 1304

Current Permitting Status

- Up to 2000 permits issued between September 2006 and November 2008 that were subject to Rules 1309.1 or 1304 and were potentially invalidated by the court decision, but are temporarily stayed due to the appeal filed by District
- More than 1,100 pending permits subject to Rules 1309.1 or 1304 cannot be issued unless ERCs are provided by applicants

PM10 ERC Supply & Average Cost Trends (2000-2008)

Supply dropped by 54% since 2000
 Cost increased by 3,755% since 2000
 Highest Price of PM10 ERC sold in 2009 was \$320,000 per lb/day



Potential Interference with Rule Compliance

- Alternative compliance option for coating operations (e.g., after burners)
- R1146, R1146.1, and R1147 – Boilers and Misc. Combustion
- R1421 – Dry Cleaning Operations
- R1470 – Diesel ICEs
- Consent Orders for site clean ups by other agencies

Path Forward

- Governor and Legislature to Address Power Plant Issues
- Governor and Legislature to Address Other Facility Needs or
- AQMD to Re-Open Offset Bank Once All Litigation Resolved

Potential Legislative Solution

- Proposed bill language subject to Governing Board approval
- Objective: To resume AQMD permitting and address power plant issues
- Allow use of credits in AQMD bank for R1304 and R1309.1 (without power plants) if AQMD rules require BACT, toxics protection
- Allow power plant access with the following environmental safeguards in place
 - Thermal power plants must be subject to CEQA review by the State Energy Resources Conservation Committee or other Lead Agency
 - Require mitigation fee for power plants
 - Require additional safeguards similar to Rule 1309.1(2007)
 - CEC finds project is needed
- Urgency clause
- Legislative findings

Concepts to Promote Facility Modernizations

Allow Facility to Aggregate Emission Sources

■ Concept

- Allow facility to generate internal offsets by aggregating two or more emission sources within the facility by pollutant
- New sources at BACT
- No emission increase from aggregated sources
- Existing emission PTE will be adjusted to BARCT, if applicable

■ Discussion

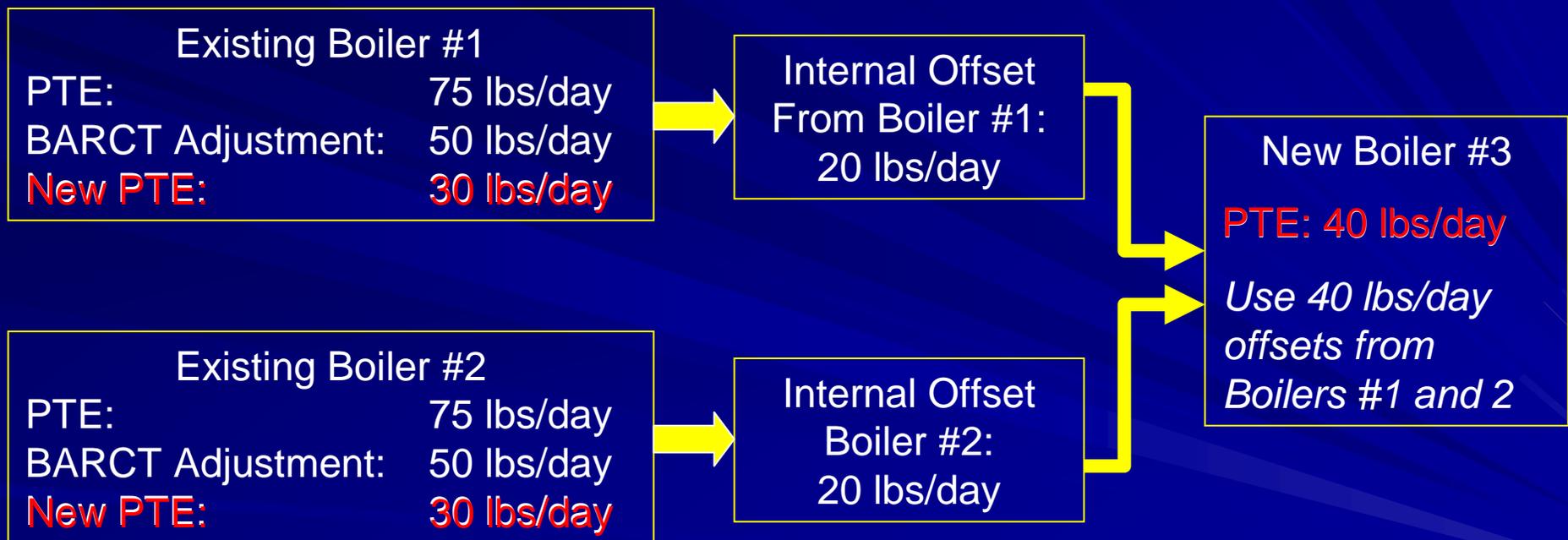
- Encourages facility modernization
- Potentially decreases use of older, higher emitting equipment
- Decreases demand for ERCs
- More efficient use of ERCs

■ Implementation: Requires rule amendment

■ Recommendation

- Further evaluation needed

Example for Aggregating Emission Sources



Original PTE: 150 lbs/day for Boiler #1 and #2 New PTE: 100 lbs/day for Boiler #1, #2 and #3

Equipment Replacement by Equipment Family

■ Concept

- Allow replacement of old source with a new source provided new source:
 - Is same equipment family regardless of size
 - Meets BACT
 - Does not cause an emission increase
- Existing emission PTE will be adjusted to BARCT, if applicable

■ Discussion

- Rule 1304 allows internal netting for “functionally identical replacement”
- Concept limited to similar equipment family for example engine to engine, boiler to boiler at the same rating
- Encourages facility modernization

■ Implementation: Requires rule amendment

■ Recommendation

- Further evaluation needed

Example for Replacement by Equipment Family

Existing Boiler – 40 MMBTU
PTE: 100 lbs/day
BARCT Adjustment: 75 lbs/day



New Boiler – 55 MMBTU
PTE: 50 lbs/day

Equipment Replacement by Pollutant

■ Concept

- Allow replacement of old source with a new source by pollutant
- Old and new sources can be different equipment families
- New equipment must meet BACT
- Existing emissions will be adjusted to BARCT, if applicable
- No emission increases by pollutant

■ Discussion

- Similar discussion points as Equipment Replacement by Equipment Families
- More flexibility than limiting to equipment families, i.e. boiler to engine

■ Implementation: Requires rule amendment

■ Recommendation

- Further evaluation needed

Concepts to Enhance Offset Utilization

Annual Credits

■ Concept

- Issue annual instead of daily credits

■ Discussion

- Allows greater flexibility for ERC use and managing offsets
- Loss of ERCs due to operating factors in Rule 1304
- More equitable

■ Implementation: Requires rule amendment

■ Recommendation

- Issue annual instead of daily credits
- Applicable to all credits – open market and NSR account

BARCT/BACT Discount Approach

■ Concept

- Modify ERC discount approach
- ERCs predetermined at time of issuance as follows:
 - BARCT discount applicable if used within first five years
 - BACT discount applicable thereafter

■ Discussion

- Creates more opportunities for credit generation from over control
- Discourages long-term holding of ERCs
- Will require Rule 1306 amendment

■ Implementation: Requires rule amendment

■ Recommendation

- Further evaluation needed

Adjust NSR Balances to BARCT for ERC Applications

■ Concept

- Adjust positive NSR balance to reflect current BARCT level when applying for ERCs

■ Discussion

- Consistent currency
- NSR Accounting for AQMD bank discounts credits to BARCT
- Potentially increase supply of ERCs

■ Implementation: Requires policy change, possibly rule amendment

■ Recommendation

- Further evaluation needed

Encourage Innovative Clean Technologies

Innovative Credit Approach

■ Concept

- Evaluate additional mechanisms for increasing credit generating opportunities

■ Discussion

- Rule 1625 – Generation of ERCs for Particulate Matter
- Rule 2511 – Credit Generation Program for Locomotive HEP
- Bonnet system to capture emissions from hotelling ships and idling locomotives

■ Implementation: Requires rule development (SIP approved protocols)

■ Recommendation

- Continue to investigate non-traditional ERC generation opportunities
- Develop rule/protocols to generate ERCs

Issue Discrete Credits for Limited Life Reductions

■ Concept

- Issue ERCs as discrete credits for reductions with limited life reductions through protocol specific regulations

■ Discussion

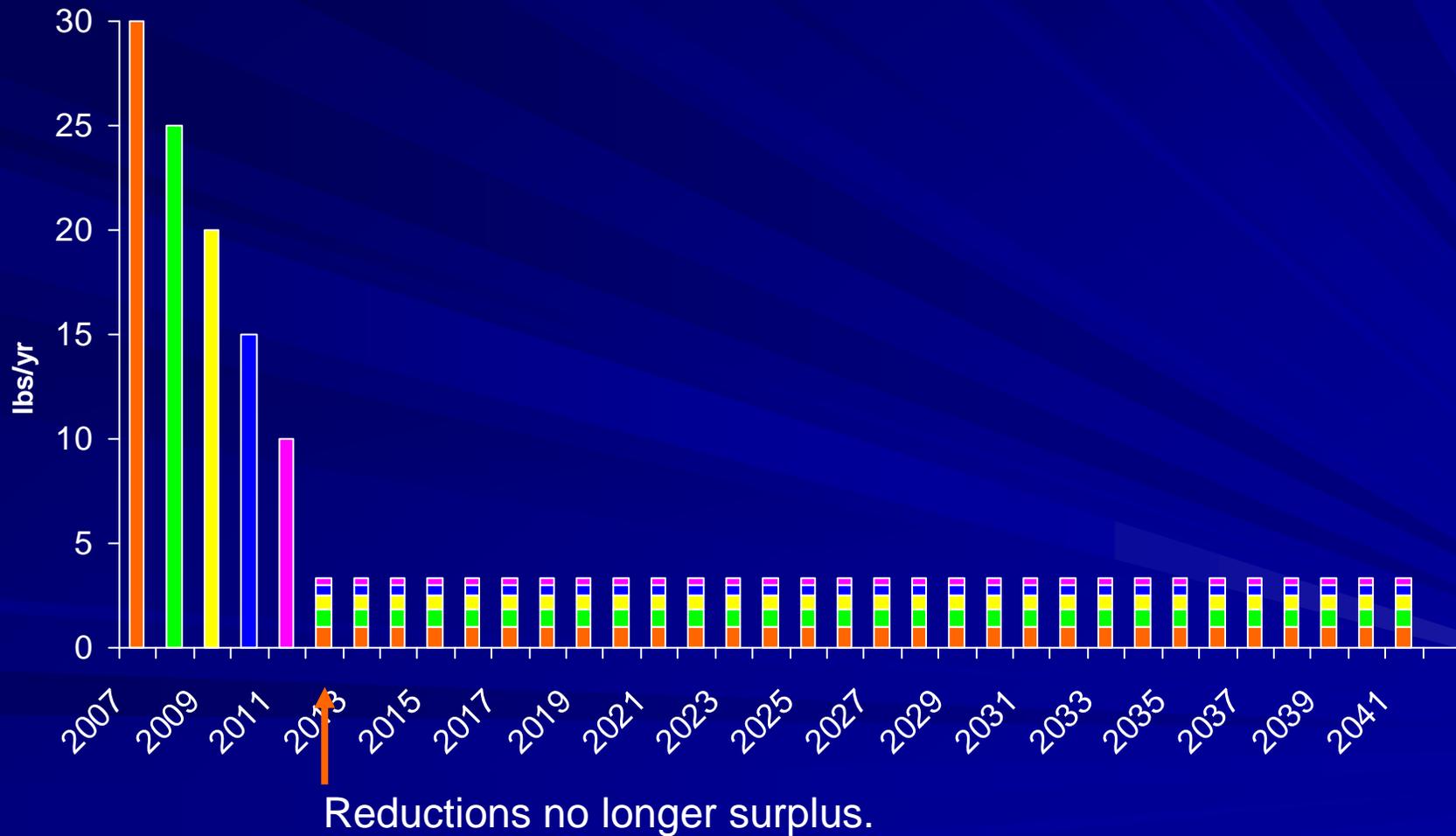
- Greater flexibility of ERC use
- Can encourage generation of credits for equipment with limited life

■ Implementation: Requires rule amendment

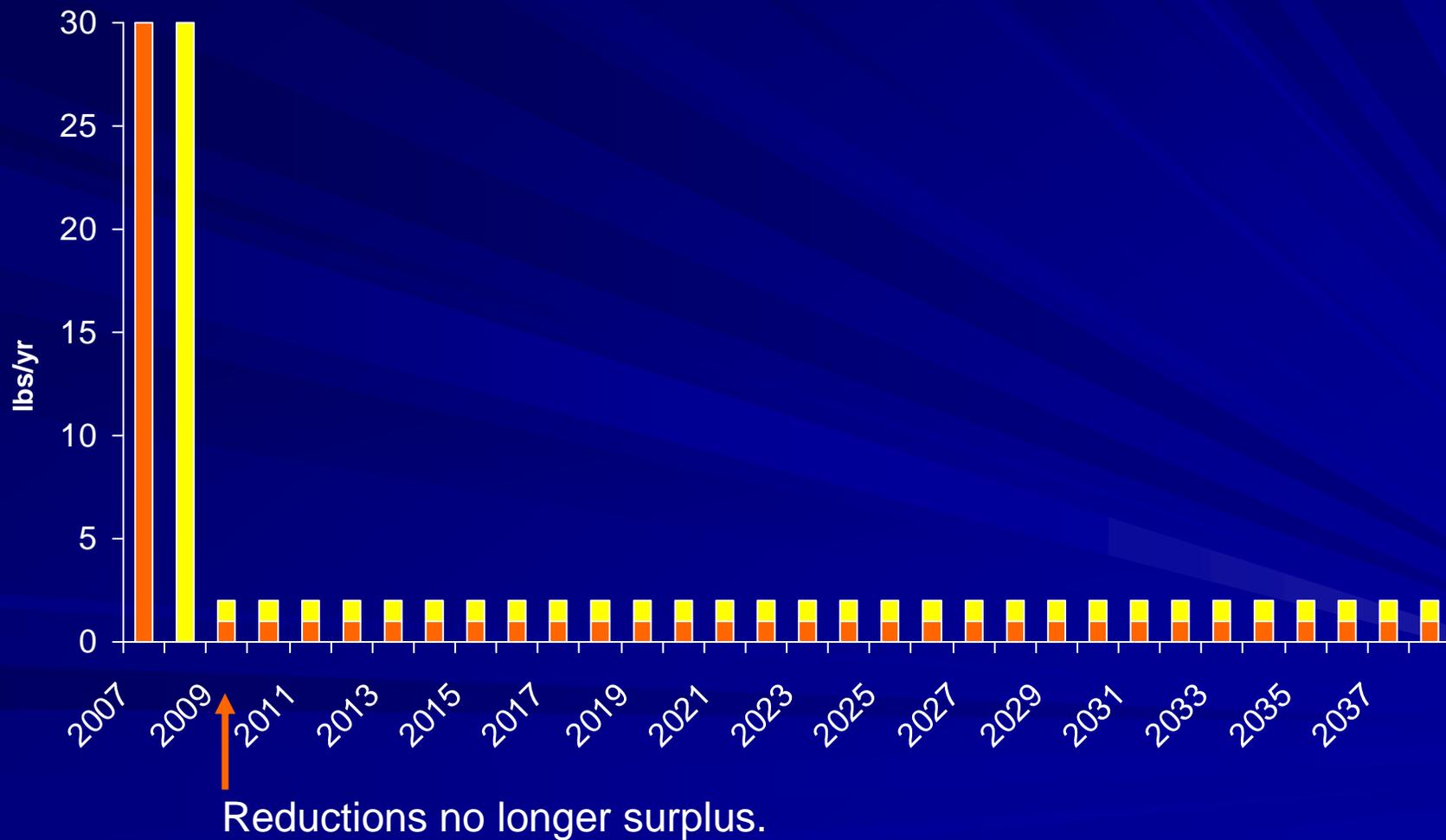
■ Recommendation

- Allow option to generate discrete credits from projects with limited equipment life such as mobile source projects
- Considering limited credit life
- Allow user to specify how credit is distributed to fit their need
- Example: 50 pounds can be distributed over 5 years (i.e., short-term projects) or 30 years provided the discrete amount is the same

Example of Early Reductions



Example of 100 pounds Distributed Over 30 years



Creation of Mobile Source Account

■ Concept

- Create a Mobile Source Account (Discrete Reductions)
- Credits generated prior to use
- Users pay a fee
- AQMD manage Mobile Source Account where credits can be used:
 - For compliance with mobile source offset requirements
 - For non-NSR use such as CEQA mitigation

■ Discussion

- Can encourage generation of credits for non-traditional sources of equipment (e.g., off-road equipment)
- Fee based on technology and transaction costs
- Need to define project life for permitted sources

■ Implementation: Requires rule development

■ Recommendation

- Further evaluation needed

Concept for Overall Credit Market



* Without powerplants.

Administrative Changes

Recall Offsets to AQMD Shutdowns Where No Offsets Previously Provided

■ Concept

- Require offsets generated from shutdowns to be returned to the AQMD if sources permitted prior to adoption of NSR offsetting requirements (non-orphans)

■ Discussion

- Facility did not provide offsets for facility operation, did not access open market
- Shutdown credits can be used in AQMD Account
- Shutdowns from sources that accessed the AQMD Account are returned to the AQMD
- Potentially increase access to AQMD Account

■ Implementation: Rule amendment needed

■ Recommendation

- Proceed with rule amendment

Efficiency Improvements

■ Concept

- Improve efficiency of the District's NSR program by increasing transparency in trading information and ERC price
- Pre-consultation prior to generating ERCs

■ Discussion

- Can potentially lead to more credit generating opportunities
- Provides additional information for market participants
- Potential resource impacts

■ Implementation: Requires policy change

■ Recommendation

- Further evaluation needed

Timing of Surrendering Offsets

■ Concept

- Offsets must be surrendered prior to permit to operate consistent with federal NSR

■ Discussion

- Currently offsets must be surrendered prior to permit to construct
- The time differential between the permit to construct and operate can be multiple years
- Provides additional time for the permittee to secure offsets
- Safeguards needed

■ Implementation

- Requires rule amendment

■ Recommendation

- Further evaluation needed

Mitigation Fee

■ Concept

- Replace offset requirements in Clean Air Act with a mitigation fee
- Mitigation fee to be invested in affected communities
- New sources must meet BACT

■ Discussion

- Generate current reductions to mitigate community specific impacts

■ Implementation: Clean Air Act amendments needed

■ Recommendation

- Seek amendments to federal Clean Air Act

Schedule

NSR Working Group is a ~one-year process

Next Meeting

Wed., April 16, 2009
1:00 PM - 3:00 PM

Tentative Future Meetings

May 21, 2009

June 18, 2009

July 16, 2009

August 20, 2009