

Scope of Socioeconomic Assessments for Proposed Amendments to NO_x RECLAIM



**NO_x RECLAIM
Working Group Meeting
January 8, 2015**

Purpose

- Implement Abt Recommendations
- Stakeholder Concerns
 - Adequate review time to provide comments
 - Seeking stakeholder input early in the process
 - Better documentation of assumptions and methodology
- Committed to Provide:
 - Socio Scoping with CEQA Scoping
 - Identify Key Socioeconomic Issues and Potential Alternatives
 - 45 –day review period for the draft socio for a significant SIP related rule

Legal Mandates

General Rules/Amendments

- Health and Safety Code 40440.8 (a) and (b) require Rules/Amendments with Significant Emission Reductions
 - Affected Facilities
 - Range of Probable Costs, Including Those to Industries
 - Emission Reduction Potential
 - Necessity of Adopting, or Amending the Rule
 - Availability and Cost-Effectiveness of Alternatives to the Rule
 - Impacts on Employment and the Economy of Basin

Legal Mandates For RECLAIM Amendments

- Health and Safety Code 39616 (c) (1)
 - A Comparison between Cost and Employment Impacts of RECLAIM Amendments with those of Command and Control Regulations
 - Lower Cost & Job Impacts
 - No significant Shift from Higher to Lower Skilled Jobs
- AB 1054 (Sher) Market-Based Incentive Programs
 - Achieve Greater Air Quality Improvement
 - Strengthening the State's Economy and Preserving Jobs.

Scope

- Command and Control
 - Applicable Sources of Emission Reductions to the BARCT Level
 - BARCT Installation
 - Implementation Schedule for various Equipment Categories
- RECLAIM
 - Least Cost Combination Approach
 - Compliance Options by using:
 - Excess allocations currently available
 - Market selection of least cost controls first
 - Actual emission reductions
 - Unpredictable/unquantifiable cost mitigation factors
 - BACT
 - Equipment shutdowns
 - Cross cycle trading

Proposed Control Categories

- Refineries Subject to BARCT
 - FCCUs/Boilers, Turbines/Duck Burners, Coke Calciner, Sulfur Recovery Units, Boilers/Heaters
- Non-Refineries Subject to BARCT
 - Sodium Silicate Furnace, Container Glass Furnaces, Metal Heat Treating Furnaces, Update on Cement Kilns, ICEs, Gas Turbines

Key Input Assumptions

- Compliance Costs
 - One-time Capital/Equipment Costs (Range of Costs)
 - Annual Operating and Maintenance Costs
 - Other costs (Contingencies, Administrative, Monitoring, Permitting, etc)
 - Cost of CEQA Alternatives)
- Analysis Horizon (2016-2035)
- The Proposed Amendments Implementation Schedule
- Equipment Life/Discount Rate

Cost Input Assumptions

Command and Control (CAC)

- CAC Costs as an Upper bound Cost of the Proposed Shave
 - Equipment Counts by County, by Industry, by Equipment Category, and Equipment size
 - Capital cost and operating and maintenance costs for the appropriate equipment category and size are multiplied by the number of equipment to arrive at the total annualized (at 4% Real Interest Rate, and various equipment life)
 - Cost input beginning based on one-three years prior to assumed compliance schedule
 - Cost effectiveness not a direct input parameter

Key Output Elements

- Employment Impacts by Using Regional Economic Model (REMI)
 - Employment Impacts by Industries in the Region
 - Employment Impacts by Occupational Wage Group (High- vs Low-Paying Jobs)
 - Employment Impacts of CEQA Alternatives
- Competitiveness
 - Impacts on Relative Cost of Production
 - Impacts on Price Index
- Potential Impacts on Small Businesses/Emitters

Key Issues

- Sensitivity Analysis
- Equipment Life
- Stranded Assets
- Impacts of Shaving Methodology
- Alternatives
- Others?