Bay Area Air District

Policy for Socioeconomic Impact Analyses in Regulatory Development

The Board of Directors of the Bay Area Air District considers potential socioeconomic impacts of rules and regulations it adopts in order to minimize adverse socioeconomic impacts on Bay Area residents, households, businesses (including small businesses), and workers. To assist the Board of Directors in considering such impacts, Air District staff prepare a Socioeconomic Impact Analysis report for proposed rules and regulations in accordance with the requirements of Section 40728.5, California Health & Safety Code. The Board of Directors considers these Socioeconomic Impact Analysis reports in deciding whether to adopt new or amended rules and regulations.

To address concerns regarding the need for comprehensive socioeconomic analyses of Air District rules and regulations, as well as requests from members of the public for enhanced analyses, the Board of Directors has adopted this policy to establish clear requirements for Socioeconomic Impact Analysis reports for proposed new or amended rules and regulations – including enhanced requirements for rules and regulations with a heightened potential for significant adverse socioeconomic effects. Air District staff are directed to prepare Socioeconomic Impact Analysis reports in conformance with the requirements of this policy.

Requirements for All Socioeconomic Impacts Analyses

Every Socioeconomic Impact Analysis report will include (at a minimum) the following six components, in accordance with the requirements of Health & Safety Code section 40728.5:

1. Need for Action will provide a clear explanation of how a proposed regulation will address the air quality or public health issue and the applicable legal requirements. This may include achieving or maintaining air quality standards, reducing health impacts from air pollution exposure, addressing disparities in air pollution exposure, and/or reducing climate-harming air pollution.

2. Baseline Conditions are defined as expected conditions in the absence of the proposed rule ("without rule" scenario). The baseline should enable comparison with proposed outcomes and reflect current economic and environmental conditions.

3. Affected Entities section will identify facilities, equipment, and processes subject to the rule. It will also determine the distribution of facility sizes, small businesses impacted and, where appropriate, the geographical distribution of affected sources in relation to overburdened communities.

4. Compliance Costs will be estimated using publicly available data, peer-reviewed methods (e.g., EPA guidelines), and validated models and datasets. All assumptions are to be transparent and well-documented, including:

- Capital and operating costs
- Downtime and engineering expenses
- Financing assumptions
- Reporting and recordkeeping costs

5. Cost-Effectiveness will be calculated in terms of cost per ton of emissions reduced ($/ton), using established methodologies (such as CARB guidance). In addition, other regulatory approaches could be evaluated and used, if appropriate and meaningful; a justification for the selected option will be provided.

6. Economic Impact Analysis will assess broader economic impacts, including:

a) **Regional Economic Effects,** a measure of impacts to the area-wide economy, will be estimated by:
   - Using input-output or established macroeconomic models, such as IMPLAN, REMI;
   - Estimating impacts on employment and economic output; and
   - Including indirect and induced effects.

b) **Impacts on Businesses and Workers** will be estimated by:
   - Evaluating impacts on small businesses;
   - Identifying any relevant and possible mitigation measures, where needed (such as financing, phased implementation); and
   - Assessing potential effects on employment, wages, and income.

c) **Consumer Impacts,** if any, will be assessed by:
   - Estimating impacts on household costs; and
   - Evaluating effects on a range of representative households in the region.

Where data is limited such that any of the above quantitative analyses are not possible or not meaningful due to data limitations or high degrees of uncertainty, a sensitivity analysis shall be performed or qualitative estimates shall be provided. In cases where data limitations or uncertainty are so great that even sensitivity analysis or qualitative estimates are not possible, a full explanation of the reasons for any resulting gaps in the analyses shall be provided.

Enhanced Requirements for Regulatory Actions with Heightened Potential for Significant Socioeconomic Impacts

An enhanced Socioeconomic Impact Analysis of a proposed rule is required when one or more of the following conditions apply:

- Compliance costs exceed $10 million in direct annual costs;
- The affected sector has experienced significant regulatory costs in the past 10 years;
- Significant costs are expected to fall on small businesses or the general public;
- Impacts affect a broad range of businesses; or
- The rule may significantly influence energy or housing costs.

In addition to the requirements outlined above for all socioeconomic analyses, an enhanced analysis will provide a more detailed assessment to support Board decision-making. For each county within the region, the analysis must include:

- Cumulative cost impacts from Air District rules on effected regulated entities, if these costs are not captured in the baseline;
- Impacts on households, including significant household costs and affordability-impacts by income, race, ethnicity, and gender (where data is available from the U.S. Census);
- Relationship of costs to income and housing burden;
- Differences across populations and communities; and,
- Impacts on businesses, employees, and customers.

Methods, Data Standards, and Implementation

The Air District will use the methodologies described below for estimating costs and cost-effectiveness. As improved methods and tools are developed, the Air District will evaluate and adopt them as appropriate to better measure the impacts of regulations on businesses and the public.

For *Costs and Cost Effectiveness,* CARB capital recovery factors/cost effectiveness conventions will be used as appropriate and cost per ton and incremental CE will be presented (see 2017 Carl Moyer Program Guidelines, Appendix C: Cost-Effectiveness Calculation Methodology).

For *Economic Impact Modeling*, IMPLAN/REMI or equivalent models and input-output frameworks will be used, with elasticities, market conditions, impact on market, cost pass-through assumptions, and multi-sector linkages clearly documented and presented.

For *Distributional Analysis*, *CalEnviroScreen, US Census data,* and other relevant and appropriate tools will be used to determine impact on any overburdened community within the scope of analysis as appropriate. Results will be reported stratified by income, race/ethnicity (using US-Census-tract-level data).

All technical documentation and data sources must be listed, accessible and clearly marked.

Public Participation and Public Input

Draft Socioeconomic Impact Analysis reports must be released sufficiently early to allow meaningful public review. Public comments on the draft report and staff's responses shall be included in the final report. Beginning in 2027, draft reports for all rules requiring an enhanced analysis must be released at least **90 days** prior to Board consideration of the regulatory action to allow adequate time for public review and comment.