**TO: Docket EPA-HQ-OAR-2013-0602**

**DATE: August 3, 2015**

**RE: Consideration of Costs and Benefits Under the Clean Air Act**

Economics offers a rich literature, addressing both theory and methods, relating to the consideration costs and benefits in decision making. Notably, economics distinguishes between an efficiency test, measuring potential improvements in economic efficiency and methods to assess changes in social welfare. The efficiency test assesses the gains or losses in economic efficiency using a well-defined framework commonly known as benefit-cost analysis (BCA). Economics recognizes that a change in economic efficiency (net benefits) can be a factor contributing to a change in social welfare, but does not by itself determine whether a given action makes society as a whole better or worse off. Rather, assessing changes in social welfare requires consideration of a much greater array of economic impacts and consequences of a regulation.

Pollution, a "negative externality" in economic terms, contributes to a well-identified market failure that results in outcomes that are not economically efficient. BCA is intended to help identify what degree of regulation would address this externality, resulting in an economically efficient outcome.[[1]](#footnote-1) There is a well-developed body of economics literature identifying rigorous approaches for conducting BCA, and the EPA’s *Guidelines for Preparing Economic Analyses* and OMB’s Circular A-4 follow and are consistent with this literature. When the EPA conducts a BCA, the agency is assessing, to the extent practicable given available data and methods, whether the regulation will increase or decrease economic efficiency. This efficiency test, however, does not consider many factors that are important for decision making.

For example, BCA does not address equity or distributive justice concerns, which non-economists may refer to simply as "fairness." In a BCA, a dollar’s worth of benefits accruing to a wealthy person is counted the same as a dollar’s worth of benefits accruing to one with no income. Similarly, BCA does not weigh the costs falling on the wealthy differently than costs falling on those with low or no wealth. Such differences in how benefits and costs of a policy change are distributed among different groups of people can be important to policy decision making. Welfare economists recognize that the effects of a policy change on equity, or distributive justice, are as important as economic efficiency in ascertaining whether that policy change is likely to improve social welfare.[[2]](#footnote-2) Other factors that are not readily incorporated in, or that remain entirely outside, the benefit cost framework, but are relevant for social welfare include: economic and social sustainability, intergenerational effects (a special case of distributive justice), risk aversion and uncertainty.

In addition, the performance of the benefit-cost framework in assessing even the economic efficiency dimension of social welfare can be limited due a number of theoretical and practical limitations. These limitations include, for example, unavailability of – or uncertainty in – fundamental information about costs and benefits, heterogeneity in peoples’ values and economic preferences and important differences in susceptibility to risk.

Given the foregoing, it is not surprising that Congress, in the Clean Air Act (CAA), did not require benefit-cost analysis as the method for considering potential economic effects, including cost impacts, when making environmental policy and program decisions.[[3]](#footnote-3) Instead, the EPA has relied upon and implemented a number of other approaches across multiple Administrations. For example, the EPA has examined the cost-effectiveness of possible options, how costs are passed onto consumers, distributional impacts of costs, and effects of costs on the total costs and profitability of regulated entities. Specific approaches to the consideration of costs under CAA section 111 are discussed at greater length in the preamble for this action.

1. N. Kaldor, “Welfare Proposition of Economics and Interpersonal Comparison of Utility,” ***Economic Journal***, Vol. 49, pp. 549 – 551. September 1939. [↑](#footnote-ref-1)
2. See, e.g., D. Jorgenson, “Aggregate Consumer Behavior and the Measurement of Social Welfare” in Jorgenson, Welfare, Vol 2, The MIT Press, Cambridge, Massachusetts, 1997. [↑](#footnote-ref-2)
3. In particular, the U.S. Court of Appeals has held, since the inception of the CAA section 111 program, that cost-benefit analysis is not required when considering costs under CAA section 111 (a). *Portland Cement v. EPA,* 486 F. 2d 375, 387 (1973); *Essex Chemical Corp. v. EPA,* 486 F.2d, 427, 437 (1973). [↑](#footnote-ref-3)