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Does a Use Attainability Analysis Require Least-Cost Attainment?

Robert Wieland, Main Street Economics

UAAs have traditionally held polluting entities to a least cost standard. That is, a polluting entity¹ who asks for consideration of substantial and widespread economic impacts that might follow paying the costs of attaining a standard has been expected to present as low a cost for attainment as is technologically feasible.

Traditional UAAs have focused on a single polluter or a single, well-defined group of polluters. This limitation simplifies the analysis, relative to the new, expanded UAA, such as currently is being undertaken for the Chesapeake Bay. In particular, focusing on a single pollution source limits the range of practices that might be employed to meet a standard. Similarly, it limits the range of payment options that must be considered. In this limited framework, it is clear that the polluting entity should select technologies that would do the job most cheaply.

Under an expanded UAA, the range of pollution sources, abatement technologies and payment options is significantly broadened. Assessing the costs of attainment for an expanded UAA is, consequently, more complicated. Measuring attainment costs in an expanded UAA requires cost estimates of a wide range of practices, summed over a large area and a wide range of sources. The question of this paper is, should those costs and practices be optimized with respect to cost-efficiency? If they are not, then the least cost standard for attainment is not likely to be met.

The paper will examine cost minimization under an expanded UAA with specific attention to:

- C Which costs count. (When should the analysis use factor prices and when do purchase prices need to be accounted? Can all the benefits that accrue to abatement practices be netted out of their costs?)
- C How funding sources matter. (Should offsets count when there is uncertainty about funding in future years? Can the abundance of public funding programs with their abundance of distinct objectives be considered as a single budget constraint?)
- C Whether, given cost efficiency expectations for market-based mechanisms and command and control approaches, any set of administratively determined practices could ever be represented as least-cost attainment. (Command and control systems limit innovation and, through inflexibility, squander cost-savings that could be achieved under different regimes. Could a central decision-maker choose a least-cost combination of abatement practices and maintain it over time?)

¹Or, more correctly, the entity who pays the cost of meeting the standard.