

“Retrospective Study of the Costs of EPA Regulations: An Interim Report of Five Case Studies” (March 2012)

**Public comments prepared on behalf of American Petroleum Institute by
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As input to SAB-EEAC’s advisory review of EPA’s white paper “Retrospective Study of the Costs of EPA Regulations: An Interim Report of Five Case Studies” (March 2012), this document offers some general points and observations about the endeavor of improving EPA’s estimates of costs of regulations.

1. The stated goal of this study is to “determine if sufficient information can be gathered on individual rules to make a ‘weight of evidence’ determination about whether ex ante costs are higher or lower than ex post costs.”¹ Such a goal has merit if EPA will use the study’s findings to identify ways that its ex ante analysis *methods* can be improved, and to implement those changes in its actual performance of ex ante analyses of future regulations. To its credit, EPA acknowledges that if the case study approach is deemed successful in this regard, the study could lead to “improvements in the way in which ex ante analyses are done.”² An alternative and unconstructive way that this study’s results risk being used, however, would be to conclude that ex ante cost estimates are inherently different from ex post estimates, and therefore should be discredited as unreliable, or subjected to some default “bias adjustment factor.”

To limit the possibility of the latter unconstructive use of this study, EPA should carefully structure the case studies to clearly identify the structural reasons for any differences that may be identified, and to impose consistency in this matter across all the individual case studies, so that *systematic* reasons for differences can be identified, if they exist. The white paper and accompanying materials do not indicate any efforts at such structuring. It is not too late for EPA and the SAB-EEAC to scrutinize whether even the existing five case studies could be improved in this regard. Also, EPA should plan to make the primary output of its study be a summary section that makes specific recommendations for how to change its ex ante cost analysis methods to mitigate any issues that the study may identify.

¹ White paper, pp. 6-7.

² White paper, p. 7.

2. The white paper acknowledges that EPA has experienced some challenges in its initial efforts on ex post case studies, especially in establishing a clear counterfactual, and in separating regulation-specific costs from other simultaneously-occurring changes that also entail costs.³ The parallels of these problems to challenges that ex ante analyses face ought to be recognized. For example, the difficulty of identifying the counterfactual in an ex post analysis is analogous to the difficulty of identifying the baseline in the ex ante analysis. Untangling the effects of simultaneously occurring costs also is an element of baseline uncertainty in an ex ante analysis. It is good that EPA is recognizing these difficulties and considering whether they can be mitigated methodologically before proceeding to Phase II of the study. However, the implications of these parallels between these challenges and those faced by ex ante studies should be more fully contemplated. For example, what does it imply about our confidence that ex post estimates would be any more reliable than ex ante estimates? If EPA's comparisons of ex post and ex ante estimates find a systematic difference, can that bias be attributed entirely to the ex ante analyses' limitations, or might it also be due to limitations in the ex post analyses? It seems to be an implicit assumption in what EPA has written that any detected differences will be attributed entirely to failings of ex ante analysis, yet that would be inappropriate.

EPA appears to have recognized this problem to some extent when it states that the purpose of the case studies "is NOT to estimate ex post costs reliably."⁴ However, in its very next sentence, EPA states that it will explore "whether ex ante cost estimates tend to be higher or lower than ex post cost estimates."⁵ The problem of unknown relative reliabilities undercuts the usefulness of *comparison* of the two types of cost estimates, and so EPA does not have a study approach that is consistent with its apparent acknowledgement of the problem of obtaining ex post estimates that are reliable. If the relative reliability of the two types of cost estimates cannot be resolved as a theoretical matter, the study should avoid its current emphasis on *comparative* cost estimates; its goal should be restated as identification of ways to systematically improve ex ante cost methodologies.

3. It is difficult to identify and include *all* of the ways that a regulation can cause costs at an affected facility. For example, cost analyses tend to focus just on the costs of installing and running the technologies that will control the emissions/effluents that are the target of the regulation. However, the implementation of a certain type of control technology may create secondary costs by interfering with other functions of the total plant system. Both ex post and ex ante analyses may fail to identify these costs. An ex post case study that does not consciously ask whether these events

³ White paper, p. 8.

⁴ White paper, p. 6 (emphasis in original).

⁵ White paper, p. 7.

have occurred likely will fail to be any more comprehensive than the ex ante analysis. But it is at least possible in the ex post mode to seek evidence of such indirect cost impacts of control technologies or process changes, and the case studies should be designed to give such questions a specific role.

4. It is also difficult to identify and include *all* of the ways that a regulation can cause costs across the economy as a whole. The total macroeconomic cost of a policy is not just the sum of the costs absorbed at each affected facility, plus directly-related market impacts. For example, there are also long-term effects on overall economic productivity. Analysis of costs of regulations rarely, if ever, address macro-level effects. This omission will not be addressed at all by the current study, as long as the ex post case studies limit their focus to the scope of costs considered in the ex ante analysis. The study should acknowledge that it cannot and does not address the question of overall macroeconomic implications of regulatory spending on productivity and economic growth, even though these also are relevant components of a total cost estimate.