



Institute for Policy Integrity

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Subject: Clarifying Net Benefits of the Pre-Publication Coal Combustion Residuals Rule

Greetings:

The unofficial, pre-publication copy of the Coal Combustion Residuals Rule (RIN 2050-AE81),¹ proposed by EPA and reviewed by OIRA, contains a misleading presentation of net benefits, which could interfere both with effective public comment and, ultimately, with rational policymaking. EPA should take this opportunity, before the proposal is published, to correct the mistake.

As the catastrophic and costly containment failure in Tennessee in December 2008 proved, regulation of coal combustion residuals is long overdue and crucially needed. The Institute for Policy Integrity has studied this subject and preliminarily found that better regulation of coal ash could generate net benefits worth billions of dollars.² EPA will soon propose regulation of coal combustion residuals under one of two possible sections of the Resources Conservation and Recovery Act (Subtitles C and D). Unfortunately, EPA's presentation of the net benefits of those policy alternatives is misleading and will likely steer the agency away from adopting what might be the best policy option.

Specifically, EPA estimates the potential impact of the Subtitle C regulatory proposal on the beneficial use of coal combustion residuals—i.e., recycling the waste coal ash in construction, landscaping, or other applications. Tables 10 through 12 of the draft rule explore three scenarios: (1) beneficial use increases, generating substantial economic and social benefits; (2) beneficial use decreases, generating substantial economic and social costs; and (3) no change. Unfortunately, in summarizing the net benefits in Table 1 and generally throughout the draft rule, EPA presents scenarios one and two as equally likely outcomes that define the minimum and maximum points for the range of net benefits (Table 1 does not reflect the “no change” scenario 3).

¹ EPA, Coal Combustion Residuals—Proposed Rule Correction Notice (corrected, unofficial, pre-publication version signed May 18, 2010), *available at* <http://www.epa.gov/wastes/nonhaz/industrial/special/fossil/ccr-rule/fr-corrections.pdf>.

² J. Scott Holladay, No More Excuses: The Economic Case for Coal Ash Regulation (Institute for Policy Integrity Brief No. 3, June 2009).

Such a presentation is misleading and goes against best practices for economic analysis and decisionmaking. For scenario one, EPA calculates a “lower-bound estimate” for what the agency thinks will be the most “realistic” outcome (i.e., an increase in beneficial use).³ For scenario two, EPA calculates a “worst case” estimate for what is implicitly an un-realistic outcome (i.e., a decrease in beneficial use) based on vague, speculative, and unsupported concerns raised by stakeholders.⁴

This treatment of the two scenarios injects two distinct biases into the presentation of net benefits. First, the two outcomes are not equally probable: one is most realistic and based on historical evidence; the other is a low-probability event based on hypothetical claims. Second, the two calculations are not made using comparable assumptions: one number is a lower-bound estimate, presumably reflecting conservative assumptions; the other is a worst-case scenario, presumably reflecting more extreme assumptions. Yet despite these significant differences, the two estimates are given equal weight in EPA’s summary of net benefits.⁵ The best-case estimate for the realistic scenario that would be directly analogous to the worst-case estimate for the unrealistic scenario is never calculated, making an effective comparison of costs and benefits impossible.

Guidance from both OIRA and EPA on proper economic analysis cautions against such unqualified presentation of uncertain outcomes and against the unbalanced use of worst-case scenarios;⁶ instead such guidance instructs agencies to give preference to the most plausible values, to present primary estimates along with minimum and maximum values, and to apply quantitative analysis to uncertain outcomes, using probability distributions with estimates of central tendency.⁷ Failing to do so skews the analysis away from the most rational conclusions.

In this case, by putting a lower bound estimate of the most realistic scenario (which generates significant positive net benefits) on equal footing with a worst-case estimate of an unrealistic scenario, EPA risks not presenting the public with accurate information on the likely net benefits of regulatory alternatives. Moreover, the improper characterization and presentation of an uncertain outcome skews analysis in a way that suggests the Subtitle C regulatory proposal is much less net-benefit justified than it most likely is.

With OIRA’s assistance, EPA should recalculate net benefits and revise Tables 1, 10, 11, and 12—and related text—of its Coal Combustion Residuals Rule before officially publishing the proposed rule. We look forward to submitting additional comments on the rule once it is published, and to working with EPA further on this issue.

Respectfully,

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³ *Supra* note 1, at 186.

⁴ *Id.* at 186-87.

⁵ *Id.* at tbl. 1 (presenting the results of both scenarios in the same table without any additional explanation).

⁶ See Office of Mgmt. & Budget, Circular A-4, at 40 (2003) (explaining that for rules with impacts of over a billion dollars, quantitative analysis should be applied to uncertainties, in particular the use of probability distributions and central estimates); *id.* (cautioning against creating a false sense of precision); *id.* (“worst-case or conservative analyses are not usually adequate because they do not convey the complete probability distribution of outcomes, and they do not permit calculation of an expected value of net benefits”); see also EPA, Guidelines for the Preparation of Economic Analysis 27 (2000) (on the treatment of uncertainty).

⁷ Circular A-4, *supra* note 6, at 40; Guidelines for the Preparation of Economic Analysis, *supra* note 6, at 27 (recommending the use of the “most plausible values”); EPA, Draft of 2008 Update to Guidelines for the Preparation of Economic Analysis 10-5 (2008) (recommending, based on OMB guidance, presenting “primary estimates” along with minimum and maximum values).