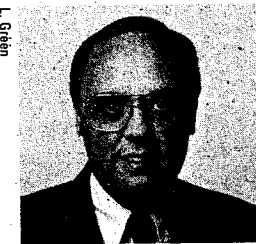




# Risk in Perspective

## Risk Analysis and the EPA Cabinet-Elevation Bill

*"In the long run, implementation of the Johnston Amendment will generate a knowledge base about risks, benefits and costs that will inform Congress and the public as new environmental laws are written and existing ones refined."*



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Congress is considering legislation that would elevate the Administrator of the U.S. Environmental Protection Agency (EPA) to Cabinet status. In the Senate, an elevation bill was passed with a floor amendment attached that requires the new Secretary of the Environment to publish a formal risk analysis with any final regulation relating to human health, safety, or the environment. The House may consider a similar amendment this fall. In this issue of RISK IN PERSPECTIVE, we examine the case for this amendment to the EPA Cabinet bill.

### The Johnston Amendment

The risk-analysis amendment passed by the Senate was introduced by Senator Bennett Johnston (D-LA). It requires each final rule to be accompanied by a risk analysis containing the following information:

1. an estimate of the human health or ecological risk to be addressed by the rule and the rule's anticipated impact on the target risk;
2. a comparative analysis of the risk addressed by the rule compared to other risks to which the public is exposed; and
3. an estimate of the costs associated with implementation of, and compliance with, the rule.

When publishing the risk analysis, the Secretary is required to certify that the best available scientific data have been used, that the rule will substantially reduce the risk that is to be addressed, and that the rule will produce benefits to health or the environment that will justify the cost of the rule. If such an analysis cannot be performed, the Secretary of EPA may still promulgate a desired rule but a statement of reasons for not performing such an analysis must be provided. The amendment does not modify or alter any existing statute implemented by EPA and does not create any new grounds for judicial review.

### Risk Estimates Using the Best Available Science

The Johnston Amendment's provision requiring risk estimates based on the best available science is likely to strengthen the hands of professionals

within EPA who believe that agency policy should be responsive to scientific progress. It will also strengthen the hand of the Agency's Science Advisory Board in discussions with the Secretary of the Environment and key program offices. While it may seem obvious that EPA should use good science, students of the Agency have documented that the Agency's leadership, when preoccupied with public fears and legal pressures, has sometimes allowed good science to be neglected.

The phrase "best available science" should not be overinterpreted. The newest scientific information is not always the best. Technical arguments about what information is best can be complex. The Johnston Amendment permits EPA scientists, in collaboration with the larger scientific community, to define this phrase on a case-by-case basis.

### Comparing Risks

The specific requirement for comparative risk analysis, if implemented creatively, should assist regulators, Congress, and the public understand the magnitudes of risks addressed by EPA rules. While ill-considered risk comparisons can be misleading or esoteric, a growing body of scientific research on risk comparison provides guidance to EPA on how to implement this provision intelligently. Risk comparisons are a useful tool when employed to offer citizens a sense of perspective about the magnitude of target risks. When risk comparisons are used to imply acceptability of risks, they are likely to be controversial.

### Reporting the Costs of Rules

Under current executive orders, EPA is required to report the cost of "major" rules (e.g., those that cost more than \$100 million per year). The Johnston amendment, which requires cost estimates for all final rules, reflects growing public concern about the economic impacts of environmental regulation on both states and localities and the private sector. For example, several environmental ballot initiatives at the state level were defeated in 1990 and 1992, in part because of voter uneasiness about the state of the economy and the

potential costs of stringent regulatory requirements.

Vice President Al Gore has written that the most attractive policies are those that simultaneously promote environmental protection and economic growth. If a final rule is not accompanied by some form of economic impact analysis, it is difficult to understand how the public will be able to discern whether the rule meets the criteria that Vice President Gore has advanced. In the long run, the President, Congress and the public need economic information on regulatory costs to steer environmental policy in a direction that is consistent with economic policy and vice versa.

### Dubious Objections

Although the Johnston Amendment is intended as an informational mechanism, some skeptics have interpreted it as a drastic move to rewrite the decision making criteria contained in all existing environmental laws. If true, the Amendment would certainly justify far more scrutiny than it has received to date. However, the plain language of the Amendment makes clear that the risk-analysis requirement is an informational mechanism that does not modify existing environmental laws.

Some have interpreted the Johnston Amendment to mean that each rule must be accompanied by a precise cost-benefit analysis showing that the dollar benefits of the rule exceed its costs. If true, this would be troubling since it is difficult to place a dollar value on many important health and ecological benefits. Yet the Amendment does not require a strict cost-benefit analysis, does not require all consequences to be expressed in dollar units, and does not require net benefits (benefits minus costs) to be greater than zero. The Amendment simply requires the Secretary of the Environment to certify that "the regulation will produce benefits to human health and safety or the environment that will justify the cost to the Government and the public of implementation of and compliance with the regulation." While a net benefit calculation is one form of justification, the Amendment does not rule out other justifications based on ethical, practical, public health or ecological reasoning.

### Ways to Improve the Johnston Amendment

A legitimate concern is that the Amendment requires EPA to estimate the risks addressed by the rule but does not require EPA to estimate any health or ecological risks that may be created by the final rule. Rather than reduce risks, some environmental policies simply shift risks from air to water, from one chemical to another, or from one region of the country to another. Congress should require that any risks caused by the rule be estimated and reported to the public.

Some environmentalists are concerned that poor quality cost information may discourage adoption of promising environmental rules. Historical experience suggests that the actual costs of EPA rules often prove to be larger or smaller than what EPA projects. It is important that the quality of cost information be scrutinized, perhaps with an external review process similar to that applied to risk information.

Another concern about the Johnston Amendment is that EPA may devote too much time and resources to producing the required analyses. To alleviate this concern, Congress should make clear that the Secretary of the Environment is authorized to tailor the intensity of each risk analysis to the overall importance of the rule in question. There is no need to produce the Cadillac version of risk analysis when something less will do the job. The current language allows EPA to decide how detailed each analysis must be, but it is important for Congress to emphasize that "paralysis by analysis" is not intended.

Finally, some have expressed concern that risk analysis will not promote the welfare of low-income and minority populations. To the contrary, risk analysis is likely to assign high priority to risks (e.g., childhood lead poisoning) that place disproportionate burdens on minority populations.

### Conclusion

The new Secretary for the Environment should be an active player in broad national policy debates, including economic policy. To participate in these debates credibly and intelligently, the Secretary certainly needs to know the risks, costs and benefits of her Agency's policies. Risk analysis is a crucial tool for environmental policy makers that fosters analytical thinking about how scarce resources and public attention should be allocated. Moreover, the results of EPA's risk analyses should provide state and local governments and businesses with the facts they need to justify spending their scarce resources. In the long run, implementation of the Johnston Amendment will generate a knowledge base about risks, benefits and costs that will inform Congress and the public as new environmental laws are written and existing ones refined.

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