step can lead to qualitatively different conclusions (1). In social policy questions it is impossible to separate facts from values. A democratic consensus can be achieved only by a democratic process, even with respect to scientific "facts," when those facts have heavy political import. No elite group—the National Academy of Sciences, Nobel laureates, or anyone else—can decide for the U.S. public what are the right questions and the right answers.

The science court will stifle public debate. It will encourage the public to believe that objective answers have been measured incontrovertibly in the laboratory. This select court will select the issues, select the judges, select the questions, select the protagonists, and give its imprimatur to its answers. Perhaps the science court will establish once and for all that the sun revolves around the earth.

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Notes

1. As a simple linear illustration, suppose there are six steps in an argument and at each step the spread in estimates is from 0.75 to 0.95, which is maybe as close to agreement as one is likely to come in a real controversy. Whereas (0.95)⁶ ≈ 0.66, (0.75)⁶ ≈ 0.1, a two-thirds probability in one case and a mere 10 percent chance in the other.

Clean Air Litigation

In his article on the social impact of pollution control (14 May, p. 631), Wallace Johnson makes a critical factual error. In the current round of litigation of the Environmental Protection Agency's (EPA's) regulations on the preservation of air quality in clean air regions, New Mexico (and a number of other clean air states which have joined in its brief) is not siding against the Sierra Club, but with it—against EPA and major polluters. New Mexico and the Sierra Club share a common perspective that strong and effective national regulation on the preservation of air quality is the only way to protect clean air states against threats by industry that they will go elsewhere if tough air quality standards are enforced. Also, the notion represented in Wallace's subhead that we are talking about "Cleaner than clean air" is misleading; the national ambient air quality standards do not represent "clean air"; they represent air quality just clean enough that damaging health and property consequences have not yet been demonstrated. Even the toughest of the proposed significant deterioration classifications,



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for example, represents a loss of over 100 miles of visibility in the Southwest; the national ambient standards are so lax that they would permit a loss of visibility sufficient that visitors to the Grand Canvon could not see the other side.

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Johnson's statement that nondeterioration regulations promulgated by the Environmental Protection Agency (EPA) are "presently being challenged in the court by the Sierra Club and other environmental groups on the one hand and by the American Petroleum Institute, various oil companies, and the state of New Mexico on the other hand' is misleading at best.

While it is true that New Mexico, specifically the New Mexico Environmental Improvement Agency, is involved in the litigation dealing with the nondeterioration regulations, we are not on the side of the American Petroleum Institute or of the various oil companies.

The position of the oil companies is that EPA's regulations are too restrictive. Both the Sierra Club and New Mexico feel the regulations are not restrictive enough and do not in fact prevent significant deterioration (1).

Nor do I agree with Johnson's assertion that the imposition of nondeterioration principles could operate so as to prevent industrial development in the western states. The best way to ensure full and environmentally compatible development is through the imposition of a uniform Class II ceiling (2) under a nondeterioration designation (3).

New Mexico and other states in the Rocky Mountain West are at the focus of much of the projected energy development occurring in this country. As such, we see daily examples of industries' wanting to develop coal, uranium, and other resources, not by using the best available control technology, but by acting in the same heedless manner that developers have most often employed elsewhere.

Additionally, New Mexico is a state with chronic unemployment and underemployment problems. Given a situation where there are natural resources available for development and strong socioeconomic pressures to promote that development, the historical tendency has been to welcome industry on a firstcome, first-served basis without requiring much in the way of pollution controls. In areas of little development, there is correspondingly little pollution, and environmental quality is thus too

often viewed as the tool with which to bargain.

The difficulty, apart from environmental degradation, is that this approach fails to consider the reality of air quality as a natural resource which is as depletable as any other. Whether one agrees philosophically with national air quality standards, they do exist, and their existence means the end of the age-old concept of an unlimited air resource. Hence using that resource as an inducement to promote development is as short-sighted as would be the reckless use of any other

The imposition of a uniform, nationally designated Class II ceiling rather than limiting development actually ensures more development than would otherwise occur. This is because (i) those states that desire to use air quality as an inducement to development will not be allowed to develop at the expense of neighbors who are interested in maintaining as much of a quality environment as possible, and (ii) a tighter ceiling than that imposed by national standards will help impress on everyone that air is a depletable resource and that new industry must be required to utilize the best control technology in developing new energy supplies.

The question of available technology is the crux of the problem. Existing industry faced with the problems of the retrofit of control devices is finding the job difficult and expensive. In many cases, the result has been an unwillingness to accept the fact that the job of control is even possible. But a difficult job is not synonymous with an impossible one, particularly in the case of new industry where controls can be made an integral part of plant design.

The end result is that, rather than having an air shed used up by three or four inadequately controlled industries, more industry can be accommodated. If done properly, this would ensure that the limitation to development in an area such as New Mexico would be the lack of water—the naturally limiting factor, and not an artificial air pollution limitation.

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Counting tritiated blood samples larger than 100μ l has been a problem owing to severe color quenching by the samples and chemical quenching by the reagents. These problems can now be overcome.

In a procedure recently developed at NEN's LSC Applications Laboratory, up to 1.0ml of whole blood can be incorporated without these problems, at the same time yielding tritium counting efficiencies which are quite reasonable. PROTOSOL® is the solubilizer and BIOFLUOR™ Cocktail is the scintil-

If this procedure would be helpful to you in your work, ask for LSC Applications Note #2: Preparation of Whole Blood for LSC, by Dr. Yutaka Kobayashi.



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