

rules in a particular place. This is the saying of how can we codify alternative rules so that people can think and talk about them without having to be technical experts on how much of a particular pesticide you can afford to have in river water three times a year.

Mr. MOSHER. Somebody has to take the initiative if this is a good idea. Are you suggesting that this subcommittee in its recommendations might begin that initiative?

Dr. TUKEY. I would be glad to see any competent body take the initiative on this, and I think that really pushing it forward is going to have to be a Federal initiative. The professional organizations have not had in this country the experience in participating in this sort of thing to the extent they have in other countries, notably Germany, and so we don't have a possibility, as far as I can see, of the initiative coming from there. That just leaves it in the Federal lap.

This is something that would progress slowly, would certainly have to have much revision, but I think it could provide a framework in which the actual decisions would be made more easily and better.

I would like now to turn to question 50 from paragraph E(5) which is the last one I propose to respond to explicitly.

How far should restoration of environmental quality be carried if costs and benefits cannot be appraised in a free market manner, not most hazards demonstrated to have public health effect?

As indicated in my response to D(7) the largest and most expensive functions of government are carried out without free-market appraisal; there seems to be no reason why environmental quality should be an exception. We should go as far in restoring environmental quality as an informed public is willing to be led; the Congress should take a strong leadership role.

Turning away from the questions for a moment, to mobilize the forces of the private sector it is not enough as I indicated earlier, to stimulate firms and research units. Innovations and insights usually come from individuals. It is important to arrange for as many able individuals as possible to think about ways of reducing pollution. This is one reason why serious consideration must be given to effluent charges. Once the discharge of pollutants becomes a regularly scheduled cost of doing business, proportional to the amount discharged, every technical employee can see how economically justified reductions in pollution discharges can be of real advantage to his firm, and to the technical reputation in the firm of the man who shows how they can be made.

Tax incentives are very much less broadly noticeable within a firm; moreover, they ordinarily apply to a much less satisfactory measure of depollution, to the cost of attempting pollution reduction rather than to the degree of success in reducing pollution.

Thank you for bearing with me.

Mr. DADDARIO. Dr. Tukey, your last statement is a very important one because it reminds me of some work being done in the Department of Defense in determining the benefits of some of the research funds. They were experiencing difficulty until somebody got the idea of going down to the basic level to consult with the fellow you are talking about—the one who really has to get the problem solved, and somehow solves it in an easier fashion than expected because he does have that