Tables (continued)

Auditor's Report

My role as "scientific auditor" for this study is a novel one. It arises from the experience of an earlier life cycle study of detergent builders ("The Phosphate Report"), in which I myself was one of the Delphi panel of 11 British scientists whose task was to evaluate the environmental significance of a range of potentially polluting substances and assign a "score" to each.

This was no easy matter. It called for difficult and even controversial judgements about issues upon which there is, as yet, no scientific consensus. The Delphi technique, with its requirement that all participating experts remain anonymous, is therefore a particularly appropriate method for evaluating environmental impacts: it enables each panelist to exercise his or her judgement conscientiously and free from all external pressures. An honest response is evoked, of a kind which in normal circumstances might be difficult to defend, because full and conclusive evidence is lacking - as is so often the case in complex environmental matters. This, in my view, is the great strength of the Delphi method.

But because of the condition of anonymity, suspicions may be aroused that the panel of scientific experts has been hand-picked to conform to the commercial interests of the sponsor, or that unwelcome opinions have been discarded by those conducting the study. Criticism of a lack of transparency in this respect was made by one British journalist (The ENDS Report No.228), following the publication of "The Phosphate Report" in January 1994, so that I felt moved to declare my own involvement in the Delphi panel and defend its integrity.

So I am pleased to have been asked to audit this present Delphi study and can confirm that the following conditions were met:

1. The scientists who participated in the Delphi consultation process had no knowledge of the ultimate purpose of the study and were unaware of the sponsor's identity. Letters were sent to 45 leading European water scientists at the beginning of the study, of whom 17 agreed to take part. The original list of 45 scientists was compiled in an impartial way and the authors had, in any case, no way of knowing who would respond favourably.

2. The 17 members of the Delphi panel appear to represent a fair cross-section of scientific opinion in Europe with regard to wastewater treatment, sludge disposal and water quality, and include some of the leading experts in the field.

3. All opinions and judgements expressed by the 17 participating scientists were fairly treated by the authors of the report, and none were unfairly excluded or ignored.

I am satisfied, therefore, that the Delphi panel was independent, that the study was properly conducted and that the results reflect the panel's consensus of opinion.

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