

Tables (continued)

3.1	West European countries with low freshwater availability	73
3.2	West European countries with high freshwater availability	73
3.3	Mediterranean water exploitation index	74
3.4	Declining water availability in six north European countries	78
3.5	Typical composition of wastewaters	83
3.6	P & N standards for effluents discharged to sensitive waters	84
3.7	Sludge disposal in the European Union	89
3.8	Emission standards for incinerator flue gases (mg/Nm ³)	91
3.9	Heavy metals limits for agricultural sludges (mg/kg dry solids)	93
3.10	U.S. metal limits (1993)	93
3.11	Median concentrations of metals in UK sludges to land (mg/kg dry solids)	95
3.12	Metals values for soil conditioners, composts and sludges (mg/kg dry solids)	99
3.13	Heavy metals content of commonly-used fertilisers (spot samples)	101
3.14	Maximum limits for metals in Swedish sludges, 1973 & 1995	105
3.15	New Swedish standards for metals in sludges used in agriculture	106
3.16	New Swedish standards for heavy metal limits in the soil	106
3.17	European, Swedish and Dutch sludge metal limits (mg/kg dry solids)	109
3.18	Summary of modelling results in five countries	122

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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