

haps excessive solicitude, "Do not use in excess".

Two other attempts by detergent makers to get out of phosphates have also fallen under the zealous scrutiny of environmentalists and Washington politicians. Enzyme detergents, a business now worth \$25 million a year, first appeared in American supermarkets in 1968. It was only in February this year that the Food and Drug Administration, stirred by the complaints of consumer advocate Ralph Nader to the Federal Trade Commission, set about seeing whether enzyme detergents present a hazard to users. As a result of meetings with the FTC, the FDA has asked the National Academy of Sciences to undertake a six month study of the enzyme question.

Another phosphate substitute that has come more rapidly to grief is the skillfully named Ecolo-G. Launched last July in leafy green packets by the North American Chemical Company, the detergent was soon being distributed in 25,000 stores throughout the United States and promised to gross its manufacturer \$15 million worth of sales within the first year. "Stops pollution, no phosphates!" claimed the slogan on each packet of Ecolo-G. The large detergent manufacturers acidly commented that Ecolo-G and the several other no-phosphate detergents on the market were merely reformulations of old ingredients whose high alkalinity could irritate the housewife's hands. "It's all just sour grapes from the phosphate establishment", Mr Louis D'Almeida, Executive Vice-President of North American Chemical, was quoted as saying last December. Ecolo-G had brought him thousands of thank-you letters from housewives, because "people were looking for something that could help them do their bit for ecology". Ecolo-G seemed off to a more propitious start than a previous North American product, a dishwasher detergent ordered off the market by the FDA in 1969. The colourful company had had another brush with authority in the mid-1960s when a sales company it had hired was accused of having Mafia connexions and threatening arson to potential stockists.

Surprisingly, in view of the thousands of thank-you letters from housewives, FDA officials were less than happy with Ecolo-G and an identical brand known as Bohack No Phosphate. "They're toxic, corrosive to intact skin and produce, on contact, a severe eye irritation," an FDA official said this month after cases of the two detergents had been seized by federal marshals. "They create an open wound on the skin, an actual burn. I've never seen anything like it," he added. North American officials testily replied, "This product is only for clothes and washing machines.

It doesn't matter whether it's toxic or not. What are you going to do, eat it?"

The harmful ingredient of Ecolo-G, according to the tests conducted by the FDA, is sodium metasilicate. Last week the agency announced that Ecolo-G and Bohack No Phosphate would be allowed back on the market provided each packet carries a label warning of its toxicity, together with the encouraging instruction, "If swallowed, give large quantities of water or milk. Follow with citrus juice or dilute vinegar. Call physician immediately."

The detergent story is all good soap

opera, but is it good government? As with cyclamates and the SST, it is a story of a solution to an environmental problem, doubtless a necessary and in the end correct solution, being achieved by costly and inefficient means. The case is one of environmentalists overstating their arguments, in the belief that this is the only way to get a hearing, while politicians and rival government departments compete for a piece of the action. The decisions made in such an atmosphere often give the impression of being designed more to kill technology than to control it.

## MEETINGS

### Post-mortems on AAAS

How can scientific meetings be protected from minority groups determined to disrupt them? The problem has surfaced with particular vehemence at the last two annual meetings of the American Association for the Advancement of Science, at the latter of which the radical group coordinating the disruptions issued the warning "No scientific societies will meet again without our collective voice being heard".

Some suggestions on how to cope with disruptions have been proposed by Joseph F. Coates, a staff associate at the National Science Foundation. The sessions chaired by Coates at the AAAS meeting in Chicago last year were the scene of persistent and violent dissensions, including the widely reported assault on a demonstrator by a professor's wife with a knitting needle. Writing in the March newsletter of the Science and Public Policy Studies Group, Coates says that while a court injunction may be the ultimate defence against disrupters there are several more constructive counter-measures that may obviate so extreme a measure.

One step is for societies to arrange for the participation of dissenters when planning their programmes and to encourage dissident groups to set up their own sessions. Chairmen of sessions "should not resort to trickery, or what can be interpreted as trickery, to discourage or suppress uncongenial discussion". The rules governing changes in the programme and the handling of disruption should be made clear beforehand so as to make clear who is breaking and who is subscribing to them.

Coates comments that general anti-establishment radicals (a class from which he excludes blacks and women) are "usually without analytical, intellectual preparation and generally behave so as to suggest that they are incapable of going beyond the disruption . . . these zealots are by no means children. Their average age was about 28 at the AAAS meeting. They are well-trained men, or

in some cases long-term practitioners of the scientific enterprise. The most alarming aspect of their behaviour was . . . the complete overriding of the wishes of the people and their institutions coupled with baseless, relentless litany of wild charges and an absolute unwillingness to engage in, or to permit, rational discussion."

One point on which both Coates and his disrupters agree is that the latter's tactics, at least in their more extreme form, are counterproductive. SESPA (Scientists and Engineers for Social and Political Action), the group which organized the disruptions at the AAAS meeting, confess in the February issue of their publication *Science For The People* "we learned that moralistic *ad hominem* attacks are self-defeating—we must do our homework and analyse the institutional framework of science. . .". The SESPA article claims, however, that the intervention at the session on crime, violence and social control chaired by Dr Coates "succeeded in changing the structure and stimulating participation". The chairman was "replaced", the meeting opened up, and "long-constrained ordinary people full of life experience" rose to speak in place of the "usual sterile reading of a paper".

Disruptions at the sessions chaired by Coates were probably the least rational of any at the AAAS meeting, and the manifestations of the same SESPA group at the American Physical Society meeting in New York in February were considerably more restrained. But the more unreasoning forms of student dissent continue. Edwin H. Land, chairman and research director of the Polaroid Corporation, recently cancelled a lecture on colour theory at Harvard University because of threats to break up the meeting, and last week a lecturer at a pro-Administration seminar on the Indo-China war was prevented from speaking at the Sanders Theater, Harvard, by the chanting of a group in the audience.