



From: Chemical Hazards Handbook

Section: [4 Prevention and control of chemical hazards - Safety representatives -](#)

True Stories: Substituting solvent-based paints

The best means of controlling exposure to a hazardous substance is to remove it from the workplace, and use something safer. It sounds simple, but as some painters have found, arguing the case for switching from solvent- to water-based paints is not always easy.

Painter and UCATT safety rep Peter Farrell has spearheaded substitution campaigns in two north London councils. This is his advice.

While working for Camden Council in the early 1990s, someone showed Peter a copy of newspaper cutting that worried him. The story was about a report from the International Agency for Research on Cancer that linked working as a painter with an increased risk of developing cancer, particularly lung cancer. IARC said, "Occupational exposure as a painter is carcinogenic (Group 1)."

Peter began looking for more information, and with the help of the London Hazards Centre and Camden Occupational Health Project found plenty. Peter remembers, "I got information from all sorts of sources, including a report of two Japanese painters who had died after using eggshell paint in enclosed premises, and another from the United States, much along the lines of the IARC report, which came to much the same conclusions."

He also gained heart from Danish colleagues after travelling to Denmark for an international safety reps conference. Concerned about the neurological effects of solvent-based paints, Danish unions had already campaigned against them, and by 1987 over 90% of construction paints used in Denmark were water-based. Peter says, "Having visited Denmark and seen the quality of their paints 15 years on, I couldn't tell the difference between water- and solvent-based paints, and in the Scandinavian countries they have retrained their painters to use these products, which have a different feel."

But back in Camden, Peter was having trouble convincing management to tackle the issue. "We had handed out some leaflets before, but things dragged on, so we decide to take some action," he says. Council painters met and demanded a ban on eggshell plus a phase-out of gloss paint.

As well as convincing the Council, Peter had also had to win over some of the painters. While the Council had been mainly concerned about the cost of substitution, some painters worried that they would be harder to use. Peter says, "Oil-based paint allows you to bodge things. Water-based paints won't allow you to paint over dirt and grease - you have to do your preparation right. I think it's a small price to pay for your health." Other advantages of water-based paints are that they dry faster, brushes last longer and, because they are less hazardous, joinery can be painted before it leaves the joinery shop.

When he joined Islington Council in 1994 they were still using solvent-based paints, so Peter started campaigning all over again. This time management were much more receptive. Peter says, "By that time I had mountains of information, and just took out the most relevant. Because they were so far behind with their COSHH assessments, they realised they had to sort themselves out, so we got agreement from management, which we had never had at Camden." Peter had to counter all the old arguments about cost and durability, but feels these issues would be much easier to deal with if surveyors and

architects were more aware of the hazards of solvent-based paints. "One of the biggest stumbling blocks has always been surveyors and architects, who do not like being told what to do by the shop floor. We never sit on the same bodies, and never see them at safety meetings [where at least we] could try to educate them. They are not being affected by these paints, so they don't think about the consequences of what they are specifying."

UCATT's surveys Also as a result of the IARC report, in 1991 UCATT published the results of a survey of over 250 painters. It found that 93% reported health effects which they thought were due to solvent-based paints. The most common health effects were headaches, giddiness, nausea and running eyes or nose.

The union launched a national campaign for substitution. It said, "The first priority is to see all solvent-based paints replaced by water-based paints throughout the construction industry ... For the most part there remains little excuse for manufacturers and employers to continue to insist on using potentially hazardous solvent-based paints." Their second priority, as Peter has highlighted, was to get clients, architects and designers to start thinking about the health hazards of the materials they were specifying.

UCATT also negotiated a tripartite statement of intent with the Paintmakers' Association and the National Federation of Painting and Decorating Contractors. Published in 1991, it said they would educate architects and contractors, publish safety information on correct use of all decorative paints, publish a summary of manufacturers' alternatives to solvent-based products, promote substitution over ventilation or personal protective equipment, and develop and promote alternative paint technologies.

A 1998 UCATT safety survey asked:

Have you been involved in negotiating any changes in the use of hazardous substances, for example changing to water-based paints? Yes 24% No 76%

Have you had any problems finding out information on the chemicals you work with? Regularly 13% Occasionally 37% No, we are given good information 50%

Does your employer provide on-site training on the risks of hazardous substances and their health effects? Yes 35% No 65%.

More needs to be done. Although water-based products now account for almost 70% of the UK retail trade in decorative paints, their use has increased little since 1992 according to the British Coatings Federation. In 1992 water-based paints accounted for 68.3% of the market, and in 1997 68.6% (*Some organic solvents, resin monomers and related compounds, pigments and occupational exposures in paint manufacturer and painting*, IARC 1989; M. K. Hansen et al, *Waterborne paints: a review of their chemistry and toxicology and the results of determinations made during their use*, *Scandinavian Journal of Work, Environment and Health* 1987, 13, 473-485).

