

HEALTH AND SAFETY EXECUTIVE

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2 May 1975

Dear Mr Kusnetz

You wrote to Stewart Luxon on the 21st March on the subject of Vinyl Chloride Monomer and in his reply of the 7th April, he indicated that I would reply to you.

I am enclosing, as you requested, a copy of our Vinyl Chloride Code of Practice for health precautions. This was drawn up by a working group composed of manufacturers, trade unions and the Health and Safety Executive. The introduction explains some of the background to the Code and the interim hygiene standard on which it is based is at Appendix I.

You will see that it is stressed in the introduction that the primary aim is to get exposures to VCM as nearly as possible to zero: the ceiling of 50 ppm and the time weighted average of 25 ppm are to be regarded only as outside limits. Therefore the aim of both our standard and the OSHA standard is to get the lowest possible exposure levels but the OSHA standard stipulates outside levels of a ceiling of 5 ppm and the time weighted average of 1 ppm.

One of the key elements in our Code is the monitoring requirement. Part 10 includes a monitoring requirement on a shift basis where exposure levels are liable to be above the interim hygiene standard and in all areas outlined in the monitoring plan, in practice in order to comply with Appendix 3, monitoring is being carried out every few minutes by automatic sequential fixed point samplers connected to computers. This monitoring is supplemented by personal sampler monitoring and any other monitoring stipulated in the monitoring plan required by the Code. The results of the area monitoring have to be displayed for the employees to see. Any excursion above the hygiene standard has to be investigated and remedial action taken. The OSHA standard you will appreciate, requires monitoring of the atmosphere at considerably less frequent intervals.

We have felt that we must insist on a rigorous form of monitoring that would show the true position and then, having recognised the worst, improve control methods so as to genuinely reduce exposure levels. The feed back of information from the multi-point sampling equipment appears to demonstrate that the major problem is with the occasional short duration "peaks" above the ceiling of 50 ppm (not necessarily in the breathing zone of operators). Recent evidence is that the "peaks" have been greatly reduced in number and the vast majority of the monitoring results (involving over 30,000 readings per day in 6 plants)

are well within the time weighted average of 25 ppm. Control measures are being further improved, e.g. as a new plant is installed, and we expect to reduce exposure levels still further.

The OSHA standard appears to rely heavily on the use of respiratory protective equipment although, as I understand the position, until the 1st January 1976, this is not mandatory until exposure levels reach 25 ppm. Our experience has been that it is by no means easy to get employees to wear respirators in the sort of conditions to be anticipated. We expected therefore, that there would be little co-operation in wearing respirators for low level VCM exposures where the risk could not be clearly and immediately demonstrated. If the wearing of respirators was lax, then the protection they provided would be theoretical. At the same time, theoretical reliance on respirators might undermine the policy of controlling vapour at source. We prefer therefore to emphasise the policy of vapour control accepting that there would be in the early stages occasional peaks above the interim hygiene standard.

Longer term work involving epidemiology is of course also being carried out but in the interim, we are laying considerable emphasis on the need to get as near as possible to zero exposures.

I hope this analysis is of some interest to you. I have taken the opportunity to explain at some length the details of our Code because there has been some misunderstanding of it in some quarters.

Far from being lenient it is, we believe, a rigorous Code. The interim hygiene standard is being kept constantly under review in the light of experience and knowledge and we shall not hesitate to amend it if this seems necessary. On a personal basis, I would welcome any comments you might have on our Code (favourable or otherwise) because this is a matter of international concern.

Yours sincerely



J A CATTON
HM Deputy Chief Inspector of Factories
Head of Toxic and Corrosives Substances Branch