

IMPERIAL CHEMICAL INDUSTRIES HEAVY ORGANICS DIVISION

SAFETY NEWSLETTER NUMBER 1

By Trevor Kletz

1/1 TRAINING

Those of us who have children at school know that methods of teaching have changed since we were at school ourselves. The following quotation from an article on education illustrates the change that is taking place.

“(There is a) growing concern that children should play a more active part in learning..... Class teaching is no longer the appropriate model.By contrast many of the new curricula assume that it is as important for children to find out for themselves as from a teacher, to discuss among themselves as to answer a teacher’s questions. Nuffield science and maths, for example, put the emphasis on learning by discovery, working in ones and twos; while recent developments in English teaching stress the value of discussion, of the kind of interchange and inquiry that suits small groups of five to fifteen.”

Can we learn from this how to improve our safety training?

We cannot let each manager, supervisor and operator blow up his own plant and then discuss the result with him.

But we can get groups of managers, supervisors and operators (mixed or separate) to discuss the causes of accidents that have happened and decide what they would do to prevent a recurrence. They will learn far more in this way than they will learn by listening to someone talking or by reading reports.

I have written up about 50 accident case -histories for discussion in this way. All are illustrated by 35 mm colour slides. Many of the case histories deal with fire and explosion hazards but others are of interest to any Works, whatever their processes. Copies of the case-histories and slides are available to those interested and I am willing to take initial discussions myself.

1/2 PERMITS-TO-WORK

As you know, it is an instruction now in all works that

- (a) Before any item of equipment is given to maintenance it must be isolated by slip-plates unless the job is so quick that fitting slip-plates would be as long as the main job and be as hazardous.
- (b) Before any line is broken, even to insert a slip-plate, the valves isolating the line must be locked shut. (Blow-off valves between double isolation valves must, of course, be locked open.)

Despite these clear rules several dangerous incidents have occurred recently.

In one incident a branch had been covered in lagging and was over-looked. While a fitter was dismantling the main line, process liquid came along the branch and was spilt.

In another incident a line was isolated correctly with slip-plates but a plumber broke into the wrong line. This would not have happened if a numbered label had been fixed to the line at the point at which it was to be broken and the number of the label put on the Permit-to-Work.

These incidents show that the price of safety, like the price of freedom, is eternal vigilance.

1/3 Stopping leaks by squashing pipe-lines is an attractive idea. It is done already on Power and Ammonia Works in a rather special situation. Oil Works have agreed to sponsor some trials of the P & A equipment to see if it is suitable for wider use.

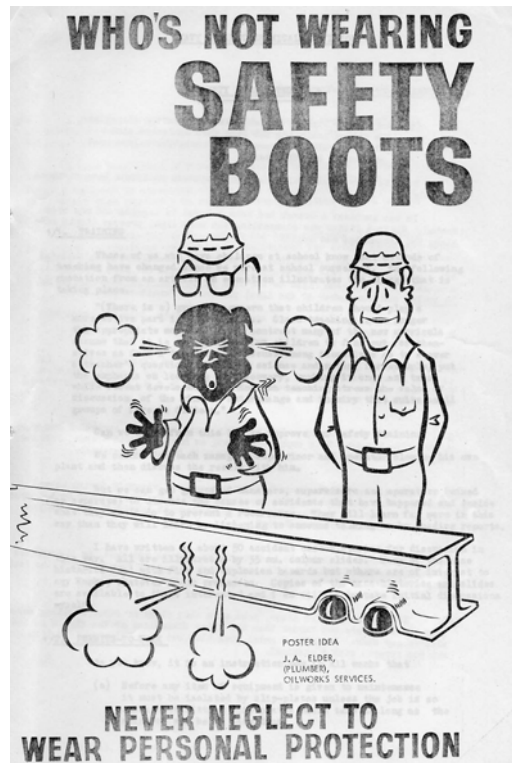
1/4 A hose, fastened by a Jubilee clip, came apart and sprayed a man with a corrosive liquid. This

emphasises that, as has been said before, Jubilee clips are not suitable for industrial use with hazardous materials.

- 1/5 The blades on an air-cooler fan sheared off recently during normal running. This incident was the result of bearing failure, caused by incorrect installation by the manufacturers and by inadequate lubrication. Have you got any air coolers on your Works?
- 1/6 Oil Works stick little posters, like the one attached, to the outsides of Permit-to-Work books. Details and copies of others from L.H. or J.C.
- 1/7 If you use plastic lines, make sure that plugs or other fittings screwed into the lines are not harder than the lines themselves or the thread in the plastic may wear. Recently a metal plug blew out of a polypropylene line and a man was sprayed with a chemical.
- 1/8 A good review of asbestos and its risks has been published by the Factory Inspectorate, "Problems arising from the use of Asbestos", HMSO, 1967, price 3/9d.

I have been asked if fire-resistant suits made from asbestos should be used. I am sure it is safe to do so as the asbestos is totally enclosed by aluminium on one side and by cloth on the other, but inspect them regularly to make sure the protection is not broken.

- 1/9 The Oil Works Safety Compendium has been revised. It includes all the safety instructions and explains the reasons for them. There are copies on each Works but if you have difficulty in getting hold of a copy, 'phone L. H.



In the original poster the man on the left is bright red.

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