LEIT 1163

CALL REPORT

Company		**Date Called**	**Date Typed**
The English Electric Co. Ltd., Liverpool Works, East Lancashire Road, LIVERPOOL, 10.		27.7.65	30.7.65
		Interviewed	
		Mr. C. Johnson, Asst. Accident Prevention Offic	
Other Addressees of Interest		**Salesman**	
		PJ AM	
		Circulated To	**Copies To**
Affiliations			J.M.Campbell R.G.Birrell D.Wood D.V.N.Hardy A.Hodgson N.Roberts File

Personnel	Status	Location
Mr. E. Norton	Accident Prevention Officer	
Mr. C. Johnson	Asst. Accident Prevention Officer	
Mr. F. Brennan	Asst. Accident Prevention Officer	

GRP/Product

Engineering Chemicals

PYROCLOR

A visit was made to this firm at their request following an accident which occurred to one of their employees whilst welding a transformer coil which had previously been immersed in Pyrocolor. This accident happened some time ago on 14th May, 1963 and at that time they contacted us. (See JMC's letter of 3rd July, 1963).

The full details of this accident are as follows:-

The transformer coil had been immersed in Pyroclor in the transformer tank and under test was found to have a fault, it was then removed, placed in an oven at 70°C. for 2 hours, taken out and allowed to cool. Two welders, Pollock and Dandy, were then instructed to carry out some flame work, welding and brazing on the coil tappings and at their request they were issued with canister type face masks, serial number AOR2031 manufactured by the American Optical Company. It should be noted here that these canister masks are suitable for protection against low concentrations of vapours arising from common solvents, but are not listed as giving protection against either HCl or chlorinated diphenyls. After the work on the transformer coils had been finished, duration approximately ½ hour, both men complained that their throats felt dry and that they felt a tightness of the chest. Also Dandy stated that he had a headache. The following day

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Pollock did not return to work and was admitted to the local chest hospital, he was discharged from hospital 6 day's later and was officially stated to be suffering from pneumonia due to toxic gas inhalation. He returned to work approximately 1 month later, 17th June 1963.

This accident was reported by English Electric to the factory inspector on the form 43 and it appears that it was coincidental that the chest specialist who treated Pollock in hospital, Dr. Ansell, was also the appointed government officer who visits English Electric's factory every 2 weeks on behalf of the factory inspector. Recently, Dr. Ansell has reported that Pollock is suffering from some kind of mental deterioration which manifests itself as a general slowing up of his facilities and he is concerned as to whether this could be a long term effect of the overdose of Pyroclor or its decomposition products which Pollock received back in 1963. Dr. Ansell has therefore queried with Norton whether anything of this nature is known to have occurred before with askarel fluids.

Further than this, immediately after the accident in June 1963, English Electric received a claim from Pollock's solicitors for damages in respect of injuries sustained during this accident and the position here is that English Electric are covered against such claims under the Employers Insurance Association with the Iron Traders Insurance Company of Corn Exchange, Liverpool and they have passed all the facts of the case on to their insurers for their consideration. To date, however, no decision has been made as to whether damages will be settled outside of court or a claim will be contested. At this point, Mr. Johnson indicated that there was a feeling that if the case was contested in court, we may be concerned as manufacturers of the fluid although he did not say whether he thought we were liable in any respect. (A copy of the solicitor's letter is attached to all copies of this Call Report).

In view of this situation which looks as though it could develop into something distasteful from both English Electric's and our point of view, it was unfortunate that I could not see Mr. Norton. However, Johnson informed me that he had been called away at the last moment to some other accident. Johnson assured me that he would report fully in writing on our interview to Norton and that should he have any queries he would

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get in touch with us in London. He also stated that he would keep us fully informed of the situation as it developed. I then gave Johnson an account of the extent of the toxic hazards of Pyroclor detailing both the effects of its ingress into the body and on the surface of the skin. I further gave him details of our recommendations on what safety precautions should be taken to prevent inhalation of the vapour and sustained contact of the liquid with the skin. With regard to the long term effects of Pyroclor, I emphasised to Johnson that our knowledge was based on past evidence and that as far as we were aware, liver damage was the only internal lasting effect of overdoses of Pyroclor and that we had no knowledge of either Pyroclor or its decomposition products having any effect on the brain.

With regard to this particular accident, I told Johnson that in general, we recommended that the inhalation of Pyroclor vapours or the products of decomposition should be avoided at all times and I quoted him the threshhold limits set by the American Conference of Government Hygienists at 1.0 mg. of the lower chlorinated Aroclor compounds per cubic metre of air and 0.5 mg. of the more highly chlorinated compounds such as Aroclor 1254 per cubic metre of air. I explained that if it was still necessary to carry out work where there was a danger of either Pyroclor vapours or the decomposition products being inhaled, it would be necessary to provide adequate breathing mask protection and we would recommend for protection against:-

1. Pyroclor vapours mainly with low concentration of HCl, Siebe Gorman type OC.

2. Pyroclor vapours with high concentration of HCl, Siebe Gorman type COC.

Failing this, I stated that a free breathing mask such as a Bloman fresh air respirator or a self contained breathing apparatus could be employed if necessary.

With regard to the necessity of having to do flame work on material contaminated with Pyroclor, I stated to Johnson that we would recommend that everything possible should be done to remove the Pyroclor in the first place. This was normally best achieved by washing with a solvent such as trichlorethylene followed by a long oven drying period.

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Mr. Johnson seemed quite pleased with our explanations and was very pleased to receive our advice on future practice and I also promised to send him our new bulletin on the toxicity and safe handling of Aroclor/Pyroclor as soon as it was published.

Unfortunately, the factory was partly closed down for its two weeks annual holiday and I was unable to meet any of our contacts in the Purchasing Department except to say a brief hello to Mr. Griffiths who seemed to be weighed down with work as he was the only person in his department who was not on holiday.

ACTION

1. Send English Electric our new bulletin on toxicology and handling of Aroclor/Pyroclor when ready.

✓2. PJAM to write to Norton, copy to Johnson, confirming our offer to be of any further assistance if it should be necessary.

3. Dr. Hardy - any comments please?

P.J.A. MARSH

ECS/PJAM/VH