

pure-bred animals to extend knowledge of toxic effects of residues. These studies are carried on by veterinarians working with representatives of the Technical Services Section of Cyanamid of Canada's Agricultural Products Department. Second and later generations are studied in a process that is naturally comprehensive and slow, in the case of larger animals, to yield the data sought on the toxicity of a pesticide compound. It should be noted that all research costs in this area have increased at least 60 per cent in the last five years. Therefore, this section of Cyanamid's continuing study of pesticide toxicity can be described as a major expense item in the cost-of-production of a Cyanamid pesticide.

Cyanamid's toxicity studies include development of data on antidotes to lessen fatalities and injuries resulting from accidental exposure to organo-phosphate poisoning. This information is distributed in Canada wherever it can be of possible use. Noteworthy in this connection is the fact that Cyanamid research in this direction is most advanced. Our knowledge of the types of antidotes and their use in medical treatment has in many cases been adopted as basic information by public health authorities. The Province of Ontario is an example of an area where data supplied by Cyanamid of Canada forms the standard reference for the treatment of organo-phosphate poisoning.

Industrial Hygiene as a Factor in Greater Safety.

Because many of Cyanamid's pesticide products reach the consumer or applicator in formulations produced by companies other than Cyanamid, constant vigilance is maintained over formulating conditions. The Industrial Hygiene Section of Cyanamid of Canada's Technical Services has developed specifications governing the handling of its toxic materials, standards for adequate equipment, ventilation and safe procedures. Prospective and established formulators are inspected to see that these specifications and standards are met, and can be adhered to at all times.

The object of this program of inspection is to reduce as much as possible the occupational health hazards present in the formulation process. A formulator's location is also examined, because exhaust fumes in areas of high population density can be a potential cause of danger. Therefore, a formulator must be satisfactorily located before being approved to process Cyanamid pesticides. The experience of Cyanamid's Industrial Hygiene Section is relied on by many formulators for guidance in determining whether claims by workers under the Workmen's Compensation Act are valid or are based on psychosomatic reactions to odors, particularly of the pesticide compounds.

Conclusion

The information contained in the foregoing pages is supplied by Cyanamid of Canada Limited in an effort to co-operate with the Special Committee on Food and Drugs in its studies. Complete frankness has governed the presentation of this material in all its details. If further development of any section of this Reference Paper will aid the Special Committee, Cyanamid of Canada is prepared to provide more information in greater detail.

Submitted to the Special
Committee on Food and Drugs,
by Cyanamid of Canada Limited,
November 21, 1963.