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STATE OF CONNECTICUT
DEPARTMENT OF HEALTH
HARTFORD, 1

January 8, 1947

Dr. Robert A. Kehoe
Kettering Laboratory of Applied Physiology
College of Medicine
University of Cincinnati
Cincinnati, Ohio

Dear Doctor Kehoe:

As a part of the program instituted by the Committee on Standard Methods of the American Conference of Governmental Industrial Hygienists, we have been asked to act as referee on methods for the sampling and laboratory determination of chlorinated hydrocarbons. This program consists of deciding upon the most satisfactory methods in common use and later in the evaluation of these procedures in various selected laboratories. At this time, we are enclosing a questionnaire, which is largely self-explanatory, for obtaining certain necessary preliminary data.

We shall appreciate it very much if you will provide the answers to the questionnaire and return it to us at your earliest convenience.

We know that you have done considerable work in the investigation of methods for the determination of toxic materials in industry and wonder whether you would be interested in participating in the present program.

Very truly yours,

Allan L. Coleman

Allan L. Coleman
Chief Industrial Hygienist

ALC:scw
Enc.

CHLORINATED HYDROCARBONS

The following are typical of the two groups which are encountered:

1) Aliphatic chlorinated hydrocarbons
   - Chloroform
   - Carbon tetrachloride
   - Ethylene dichloride
   - Tetrachlorethane
   - Pentachlorethane

   - Dichlorethylether
   - Dichlorethylene
   - Trichlorethylene
   - Tetrachlorethylene

   - Vinyl chloride
   - Chloroprene

2) Aromatic chlorinated hydrocarbons

   - Monochlorbenzene
   - Dichlorbenzene
   - Chlorinated naphthalenes
   - Chlorinated diphenyls

Atmospheric Determinations

1) What type of method do you prefer for sampling and determination of the above:

   a) Catalytic combustion in the field
   b) Absorption and combustion later in the laboratory
   c) Absorption and splitting off the chlorine by reflux with suitable reagents
   d) Portable field instrument wherein the sample is analyzed by physical properties

   Tabulate all four <u>in order of choice</u>

2) What method have you been using for the collection and analysis of chlorinated hydrocarbons?

3) What criticism do you have of the method you have been using?

4) Indicate for each of the above methods whether your experience has been limited, moderate or extensive.

Determination in Solvents

1) What chemical tests do you use for identification of various chlorinated hydrocarbons in organic solvent mixtures?