March 6, 1972

Dr. James J. Manion
Chairman, Science Division
Carroll College
Helena, Montana 59601

Dear Dr. Manion:

I am forwarding under separate cover the sample of Aroclor 1254 you requested in your letter dated March 3. There is no charge for this material.

If I can be of further service please let me know.

Sincerely,

W. B. Papageorge
Manager
Environmental Protection

WBP/bt

EXHIBIT
WBP M-81

DSW 171889

March 7, 1972

Dr. Donald I. Mount
United States Environmental Protection Agency
National Water Quality Laboratory
6201 Congdon Boulevard
Duluth, Minnesota 55804

Dear Dr. Mount:

Thank you for the invitation to participate in the PCB work session scheduled for May 22 and 23.

I plan to be present and look forward to an interesting discussion. As additional information develops please let me know.

Sincerely,

W. B. Papageorge
Manager
Environmental Protection

WBP/bt

EXHIBIT
WBP M-81.1

OSW 010005

LEXOLDMON000662

May 24, 1972

Mr. Al. Wilson
US EPA
Sabine Island
Gulf Breeze, Florida 32561

Dear Mr. Wilson:

I am sending under separate cover the sample of Aroclor 1016 you requested.

I I can be of further help, please let me know.

Sincerely,

W. B. Papageorge
Manager
Environmental Protection

WBP:cc

EXHIBIT
WBP M-81.2

OSM 010334

LEXOLDMON000663

May 31, 1972

Dr. James Lichtenberg
U. S. Environmental Protection Agency
National Environmental Research Center
Cincinnati, Ohio 45268

Dear Jim,

I am sending under separate cover the sample of Aroclor 1016 you requested.

I have enclosed a copy of Monsanto's analytical methodology for the determination of polychlorinated biphenyls which I hope you find useful.

If I can be of further service, please let me know.

Sincerely,

W. B. Papageorge
Manager
Environmental Protection

WBP:cc
Enclosure

OSW 010335

EXHIBIT
WBP M-81.3

7.

June 1, 1972

305-238-6110

Mr. Stuart Reid
Environmental Protection Agency
PPL Laboratories
P. O. Box 490
Perrine, Florida 33157

Dear Mr. Reid,

I am sending under separate cover the sample of Aroclor 1016 you requested from Mr. Jack Garrett.

If I can be of further service, please let me know.

Sincerely,

W. B. Papageorge
Manager
Environmental Protection

WBP:cc

EXHIBIT
WBP M-81.4

DSM 010336

LEXOLDMON000665

June 2, 1972

D
Dr. W. Nimmo
US EPA
Sabine Island
Gulf Breeze, Florida 32561

Dear Dr. Nimmo:

I am sending under separate cover the samples of Aroclor 1242 and Aroclor 1254 you requested.

Sincerely,

W. B. Papageorge
Manager
Environmental Protection.

WBP:cc

EXHIBIT
WBP M-81.5

DSW 010337

LEXOLDMON000666

July 10, 1972

Dr. Ronald G. Webb
Contaminants Characterization Program
Environmental Protection Agency
National Environmental Research
Center, Corvallis
Southeast Water Laboratory
Athens, Georgia 30601

Dear Dr. Webb:

I am sending under separate cover the sample of Aroclor 1016 you requested.

If I can be of further service please let me know.

Sincerely,

W. B. Papageorge
Manager
Environmental Protection

/bt

Ipt. Aroclor 1016
#1370

EXHIBIT
WBP M-81.6

DSW 010350

July 11, 1972

Mr. George Bawden
Department of Mines, Resources
and Environmental Management
Environmental Protection Branch
1015-401 York Avenue
Winnipeg 1, Manitoba

Dear Mr. Bawden:

Enclosed you will find copies of articles concerning PCBs which you requested in your letter dated June 27.

The Monsanto Technical Bulletin you requested, O/PL-306, is no longer available but I have included a copy of its replacement, O/PL-306A.

I hope you find this information interesting and informative. If I can be of further service please let me know.

Sincerely,

W. B. Papageorge
Manager
Environmental Protection

WBP/bt

Enclosure

MON-MT-008721

EXHIBIT
WBP M-81.7

July 19, 1972

Dr. Lawrence A. Wapensky
Technical Support Branch
Surveillance and Analysis Division
Region VIII
Environmental Protection Agency
Suite 900
1860 Lincoln Street
Denver, Colorado 80203

Dear Dr. Wapensky:

I am sending under separate cover samples of Aroclor 1221, Aroclor 1242 and Aroclor 1254 as requested in your letter dated July 5.

I regret I cannot include the remaining Aroclors listed. Manufacture of these mixtures was discontinued long ago and our supply of samples has been depleted.

I hope the lack of some of the Aroclors does not seriously inconvenience you. If I can be of further service please let me know.

Sincerely,

W. B. Papageorge
Manager
Environmental Protection

WBP/bt

A-1221 #1377
A-1242 } #1377
1254 }

MON-MT-008722

EXHIBIT
WBP M-81.8

LEXOLDMON000669

August 31, 1972

Mr. Robert Solotke
Pesticides
Environment Protection Agency
1 North Wacker Drive
Chicago, Illinois 60606

Dear Mr. Solotke:

In response to your request for information about Monsanto's polychlorinated biphenyl (PCB) incinerator, the following information may be of interest:

1. Capacity - Incinerators of this type are normally rated for a given heat release. The nominal capacity of the Krummrich Plant incinerator is 1,250 lbs./hr. of Aroclor 1242. This corresponds to a heat release of 13M BTU/hr.

2. Feed Types - This incinerator was designed for a full range of chlorinated and non-chlorinated products. Still bottoms, solvents of various sorts, material containing lime--virtually any flowable material can be fed to this incinerator.

   Because some of the feed material was to contain lime (up to 2%), the refractory had to be carefully chosen. The original refractory proved unsatisfactory. A high alumina (high cost) brick is now being considered for replacement following an extended test period. PCBs caused leaching of silica from original brick and thus caused premature failure.

3. For HCl Gas Disposal - A scrubber system was installed. A venturi scrubber is used to assure wetting of particulates. A packed column following the venturi is used to scrub out the HCl.

4. Oxidation Temperatures - This must be coupled with residence time in the oxidizer. Both are needed for complete PCB destruction. Higher chlorination levels require higher temperatures for destruction.

DSM 010356

EXHIBIT
WBP M-81.9

LEXOLDMON000670

The Krummrich incinerator is designed for 2,800°F (for Aroclor 1260). Normal operating temperatures are in the range of 2,200-2,500°F. Residence time is about 2.5 seconds.

5. Supplier of Equipment - John Zink Company, P. O. Box 7388, Tulsa, Oklahoma 74105. Each incinerator is custom designed.

I hope you find this information useful. If I can be of further service please let me know.

Sincerely,

W. B. Papageorge
Manager
Environmental Protection

WBP/bt

DSW 010357

November 16, 1972

Dr. H. J. Rodriquez
U.S. E.P.A. Laboratories
25 Funston Road
Kansas City, Kansas 64115

Dear Dr. Rodriquez:

Enclosed is the Request for Sample of Product Containing PCB which I offered to send you. If you will return the completed form to me I will make arrangements to have the samples you request forwarded to you.

If I can be of further service please let me know.

Sincerely,

W. B. Papageorge
Manager
Environmental Protection

WBP/bt

Enclosure

EXHIBIT
WBP M-81.10

DSW 010366

793

LEXOLDMON000672

November 28, 1972

Dr. H. J. Rodriquez
U.S. E.P.A. Laboratories
25 Funston Road
Kansas City, Kansas 64115

Dear Dr. Rodriquez:

We are sending under separate cover the sample of Aroclor 1016 you requested on our sample request form, which is intended to apply only to materials containing PCBs. The other materials you have requested; which are Therminols, Alochlor, Propachlor, Butachlor, Lasso and Ramrod; do not contain PCBs. I am arranging for samples of these materials to be mailed to you from the appropriate individuals within the Monsanto organization.

If I can be of further service please let me know.

Sincerely,

W. B. Papageorge
Manager
Environmental Protection

WBP/bt

A-1016 S/N 1547

EXHIBIT
WBP M-81.11

DSW 010367

LEXOLDMON000673

November 30, 1972

Ms. Joyce Goldstein
United States Environmental
Protection Agency
4770 Buford Highway
Chamblee, Georgia 30341

Dear Ms. Goldstein:

I have received your letter of November 15 requesting information relative to Aroclor 1016 and Aroclor 1242 and am enclosing copies of the following:

Aroclor 1016 Chromatogram
Typical Properties of Aroclor 1016
Typical % Composition of Polychlorinated Biphenyl Products.

I hope you find the enclosed information interesting and informative. If I can be of further service, please let me know.

Sincerely,

W. B. Papageorge
Manager
Environmental Protection

WBP/bt

Enclosures

EXHIBIT
WBP M-81.12

OSW 010368

LEXOLDMON000674