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September 4, 1970

Dr. Jerry Birdsall
Vice President
WARF Institute, Inc.
506 N. Walnut Street
Madison, Wisconsin

Mr. Lloyd Lueschow
Wisconsin Department of Natural Resources
Pi R Square Building
Madison, Wisconsin

Mr. Doug Duby
Wisconsin Department of Natural Resources
Pi R Square Building
Madison, Wisconsin

Gentlemen:

The attached letter is my suggestion for the opening gambit in our survey. I felt it should stand alone. Specific and general questionnaires should be separate. Therefore the first question should not be "Are you currently using any of these products", but "Are you currently using any of the brand name products in the cover letter?".

I'll be looking forward to your comments on proposed letter and also receiving the questionnaires you've been developing.

Lloyd, I presume you have talked with Don Mount re. Pest. Comm. Chicago Meeting 9/21-22. I need that list of industries we worked on to make up my map. Please send pronto.

Sincerely,

WATER RESOURCES COMMISSION

Carlos M. Fetterolf, Supervisor
Water Quality Appraisal Section

CMF/mf



cc: Dr. Donald Mount, Nat'l Water Quality Lab., FWQA



DSW 345589

STLCOPCB4084190

Suggested Letter of Inquiry Relative to Uses of PCB's.

Carlos Fetterolf

Mich. Bur. Water Mgt.

Dear

The nature of your business leads us to suspect you may have losses of polychlorinated biphenyls (PCB's) to the environment. As you probably know, current research in many parts of the world indicates that PCB's may be as important as DDT in the environment as ^a toxicant causing significant physiological imbalances, especially in reproductive processes.

Like DDT, PCB's contain chlorine, hydrogen, and carbon, ^(chlorinated hydrocarbons) are virtually insoluble in water but soluble in fat, are extremely persistent, in fish and birds accumulate through food chains, and are found worldwide.

PCB's have a wide variety of uses because of their unique properties such as low volatility, adhesion, and resistance to fire, chemicals, oxidation, and hydrolysis. They are included in many products and formulations such as electrical insulation, fire-resistant heat transfer and hydraulic fluids, lubricants for use at high temperatures and pressures, sealants and expansion media, natural and synthetic rubber, floor tile, printer's ink, coatings for paper and fabrics, brake linings, paints, varnishes, waxes, asphalt, adhesives, resins, elastomers, and pigments.

Brand names of products containing polychlorinated biphenyls are:

American made

Arochlor 1100 series

1200 series

4000 series

Thermal FR series

Chlorextol

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Dykanol

Interteen

Noflamol

Pydraul

Pyranol

Foreign made

Clophen

Fenchlor

Kannechlor

Pyrallene

Sovol

While you may not be using any of the above products directly you may be using products containing them as additives.

PCB's have been found in Lake Michigan water, sediments, fish and birds. The Federal-Interstate Conference on Pollution of Lake Michigan and its Tributary Basin recognized the importance of each State inventorying the use of and possible losses of PCB's in the Lake Michigan Basin and have asked us to initiate the following questionnaire survey. Your response by mail will save the necessity of having a staff member call on you for an on-site investigation. It is not our intent at present to ban the use of these materials, but we must become knowledgeable of possible sources to the environment.

Please answer the attached questions. Thank you for your anticipated cooperation in this matter.

Yours truly,

Ralph W. Purdy, Deputy Director
Bureau of Water Management

DSW 345591

September 10, 1970

Mr. Carlos Fetterolf
Department of Natural Resources
Stevens T. Mason Building
Lansing, Michigan 48926

Dear Mr. Fetterolf:

I have completed the questions for the questionnaire on PCB use by industries. These questions offer some specificity and overall coverage of the uses by industries.

This questionnaire will follow the letter written by Mr. Fetterolf, explaining the survey.

Carlos, in your search for industry location may I suggest a book that is equal to the Classified Directory of Wisconsin Manufacturers. I think Michigan must have one like it.

Very truly yours,
Bureau of Standards & Surveys

Douglas J. Dube, Chemist
Department of Environmental Protection

DJD/pjb

cc: Dr. John Birdsall
Dr. Donald Mount
Lloyd A. Lueschow
Donald R. Winter

DSW 345592

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QUESTIONNAIRE

1. Are you currently using any of the afore mentioned brand named products in your products or operations?
2. Have you used any of these products in the last three years? (If no refer to question number 6)
3. How do you use these compounds?

<u>Product</u>	<u>Pounds Per Year</u>	<u>Use of Product</u>
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4. Estimate your losses of these products to the environment in pound per year.

- A. Atmosphere
- b. Sewers
- c. Soils
- d. Dumps
- e. Incinerators
- f. Industrial Waste Collectors
- g. Other Disposal Procedures

5. Comment on disposal techniques or loss characteristics.

6. The following products do or may contain PCB's. Do you produce or utilize any of these products in your operations?

<u>Product</u>	<u>PCB Component</u>	<u>Trade Name</u>	<u>Loss to Environ- ment-# per year</u>
Adhesives, Glues and Pastes			
Air Conditioning Sys- tems, Units and Accesso- ry	Capacitors, Con- densors & Trans- formers		
Capacitors and Con- densors	Fluids		
Compressors	Fluids		

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(QUESTIONNAIRE cont.)**2.**

<u>Product</u>	<u>PCB Component</u>	<u>Trade Name</u>	<u>Loss to Environ- ment-# per year</u>
Cutting Machines and Tools	Oils		
Die Casting	Oils		
Electrical Wire and Cable	Coatings		
Food and Kindered Products	Heat Transfer Fluid		
Furniture and Fixtures	Coatings		
Ink	Additives		
Lighting Fixtures and Equipment	Balasts		
Molded Rubber Products (Synthetic)	Additives		
"O" rings	Additives		
Oils (Cutting-Hydraulic and Industrial)	Additives		
Paints and Allied Pro- ducts	Additives		
Plastic Molding Com- pounds	Additives		
Printing Chemicals	Additives		
Resins	Additives		
Rubber Lined Products	Synthetics		
Rubber Packing	Glue		
Rubber Specialities	Additives		
Rubber - Synthetic			
Rust Inhibitors Preventive and Removers			
Sealants and Sealers	Adhesives		
Seals	Adhesives		DSW 345594
Shoe Finishes and Polishes	Additives		

(QUESTIONNAIRE cont.)**3.****Loss to Environ-
ment-\$ per year**

<u>Product</u>	<u>PCB Component</u>	<u>Trade Name</u>
Sponge Rubber		
Transformers	Oils	
Vinyl	Additives	
Waxes and Polisher	Additives	
Agricultural Chemicals and Fertilizers	Dedusters	
Asbestos and Fire Resistant Curtains	Fireproofing	
Awnings	Fireproofing	
Batting	Fireproofing	
Candles	Fireproofing	
Canvas Products and Specialities	Fireproofing	
Castings	Oils	
Cloth and Burlap	Fireproofing	
Cosmetics and Toilet Preparations	Dedusters	
Preparations Cushions	Fireproofing	
Detergents and Soaps	Dedusters	
Draperies and Curtains	Fireproofing	
Drawing Compounds		
Duck	Fireproofing	
Extruded Rubber		
Foundry Machinery - Equipment and Supplies	Hydraulic Fluid	
Equipment and Gaskets	Additives & Adhesives	
Gummed Tape	Adhesive	
Heating Equipment and Parts	Fluids	

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(QUESTIONNAIRE cont.)

4.

Loss to Environ-
ment-# per year

<u>Product</u>	<u>PCE Component</u>	<u>Trade Name</u>
Hydraulic Cylinders	Fluids	
Hydraulic Drivers	Fluids	
Hydraulic Presses	Hydraulic Fluid	
Industrial Curtains	Fireproofing	
Intercommunicating Systems	Electrical Equip.	
Labels and Seals	Adhesive	
Laminated Wood Products	Glues	
Lubricators, Lubrication Systems and Components	Additives	
Miscellaneous Chemicals	Additives	
Motors (Hydraulic)	Fluids	
Paints (Strippers and Primers)	Additives	
Particleboard	Glue	
Pesticides (Insecticides)	Carriers	
Petroleum Products	Additives	
Plasticizers	Additives	
Plastisols	Additives	
Plastic Coated Clothing	Vinyls & Plastics	
Plastic Coated Gloves	Vinyls & Plastics	
Plywood	Glues	
Pressure Sensitive Tape	Adhesive	
Printed Circuit Boards	Coatings	
Radar Equipment	Electrical Equip.	
Reinforced Tape	Adhesive	
Rubber Cement	Additives	
Rubber Covers	Additives	

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(QUESTIONNAIRE cont.)

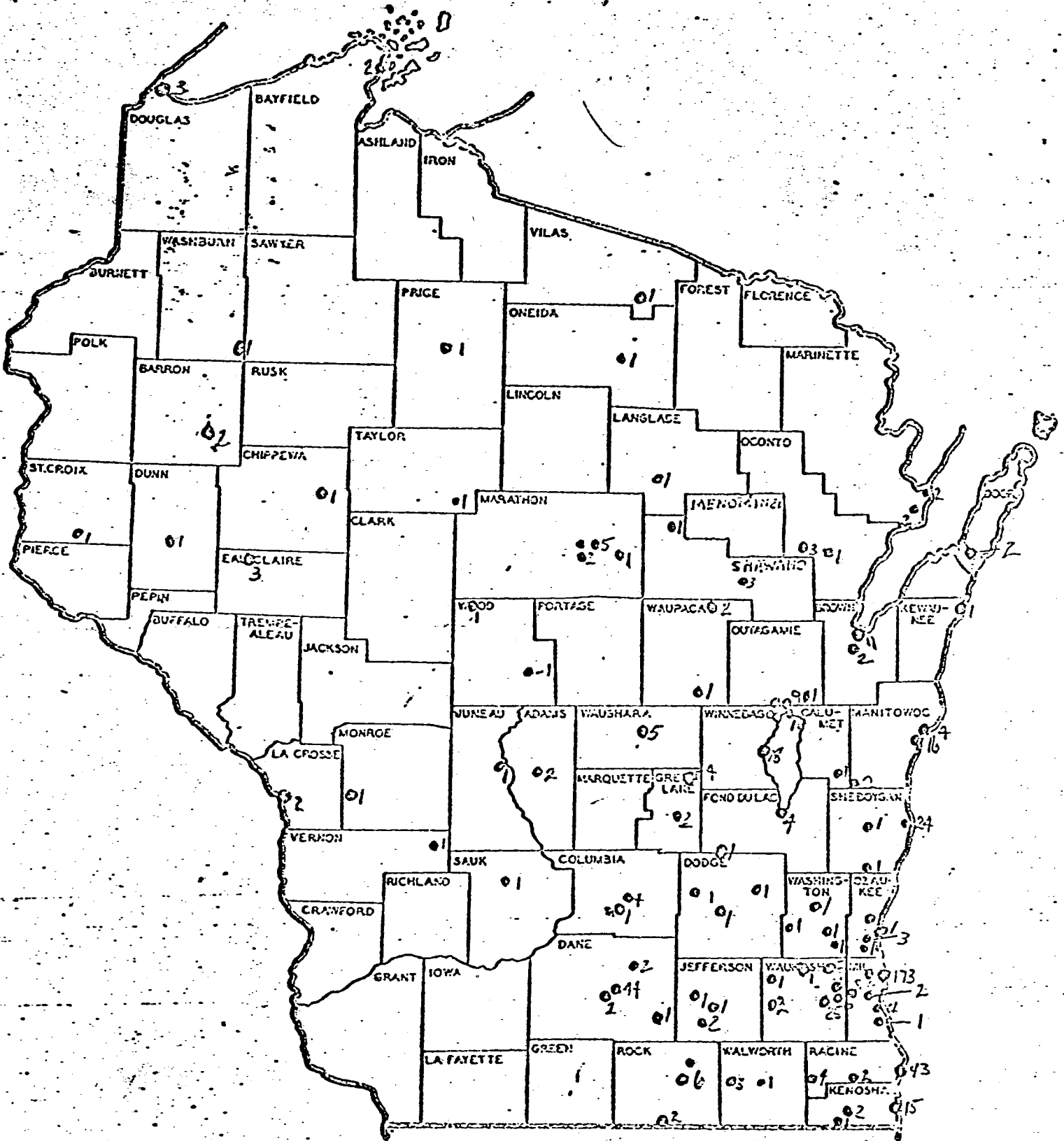
5.

<u>Product</u>	<u>PCB Component</u>	<u>Trade Name</u>	<u>Loss to Environ- ment-\$ per year</u>
Rubber Metal Bonding	Adhesives		
Rugs and Carpets	Fireproofing		
Sealing Compounds	Adhesives		
Silk Screen Printing	Ink		
Silo and Parts	Coating		
Solvents	Additives		
Stains	Additives		
Tarpaulins	Fireproofing		
Tents	Fireproofing		
Textile Specialities	Fireproofing		
Upholstery	Fireproofing		
Utilities	Oils		
Vacuum Pumps and Plating	Capacitors, Transformers		
Varnishes	Additives		
Veneer	Adhesives		
Veterinary Biological and Pharmaceutical Prepa- ration Pharmaceutical P			
Waxed Paper	Coatings		
Wood Fiber and Product	Glue		

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STLCOPCB4084199

Locations of Possible PCB Use



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STLCOPCB4084200