INDIANA PESTICIDE PROFILE

E.P.A. REGION V

PESTICIDES BRANCH

August 1973

Compiled & Edited by John H. Jordan, Ph.D. Technical Support Section Tele. 312/353-6861



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#### **Acknowledgement**

Appreciation is gratefully extended to the Lead Agencies, State Departments of Agriculture, State EPA, Departments of Natural Resources, and other State and Federal Agencies for providing information in this (first) draft of the Pesticide Profile.

The individuals included in this Profile, and others, also contributed valuable information for which gratitude is sincerely extended.

In some cases the situation analyses in Section III were made by the various State and Federal contributors, in others the evaluations are the Technical Services Coordinator's or staff.

We are circulating a limited number of the Pesticide Profile for your review; we want your comments, corrections, and additions.



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# August 1973

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### Attachments

Senate Enrolled Act No. 559

House Enrolled Act No. 65 (Commercial

Fertilizer Law, 1953)

Refuse Disposal Act, 1972

Indiana Hazardous Household Product Act, 1959

- (a) Application for Exemption of a Household Product
  Registered Under FIFRA
- (b) Hazardous Household Product Formulation Data

INDIANA PESTICIDE PROFILE

PART I

August 1973

#### A. SYNOPSIS STATE PESTICIDE AUTHORITIES - INDIANA

"Indiana Pesticide Law"

(Senate Enrolled Act No. 559 (1971) Amendment to Sec. 1

I.C. 1971, 15-3 by adding Chapter 3.5 Pesticides) The

new law regulates the distribution, sale, and use of

pesticides and provides for appointing a Pesticide Review.

Board; Indiana's first pesticide act.

"Indiana Environmental Management Board Act"

(Senate Bill No. 100 (1972), new Article added to Indiana Code (I.C. 1971,)Title 13, Article 7) that "provides for evaluating policies for comprehensive environmental development and control on a state-wide basis; and to unify, coordinate, and implement (environmental) programs..."

(Chapter 5, Sec. 1, (e) has a provision that the Board shall have power to "...act for the state in the adoption of standards pursuant to any federal law regarding environmental protection..."

"Indiana Herbicide Law"

(Burns Ind. Stat. Ann. (1969), s 15-2401 to 15-2416)

This is primarily a "registration and labeling" law relating to herbicides.

<sup>&</sup>quot;Indiana Hazardous Household Product Act"



(Burns Ind. Stat. Ann. (1969), s 35-4214 to 35-4228)

Exempts pesticides registered under the Federal Insecticide,

Fungicide and Rodenticide Act of 1947.

"Uniform Indiana Food, Drug, and Cosmetic Act"

(Burns Ind. Stat. Ann. (1969), s 35-3101 et seq.)

Regulations (14-109) of the Indiana Aeronautics Commission require "aerial applicators" of chemicals (including pesticides) to register with the Commission and to furnish reports upon request.

#### B. LEGISLATIVE DEFICIENCIES

Indiana does not have a law regulating commercial or private pesticide applicators or operators. Senate Enrolled Act No. 559 (passed in 1971) mentions pesticide use and disposal as a Board responsibility but does not specify how it is to be accomplished.

Indiana (Pesticide Review Board) plans to submit enabling legislation to the 1974 General Assembly on (1) an applicator law and (2) disposal.

The Board believes that clarification of the definition of a "private applicator" is needed before enabling legislation is submitted.



#### C. TIMETABLE FOR ENABLING LEGISLATION

The Pesticide Review Board Indicated that EPA guidelines and a model enabling act are needed by September 1973 so that legislation can be drafted, cleared by committee, and introduced to the 1974 legislative short session.

The chairman of the Indiana Pesticide Review Board was notified by the Governor's Office that proposed 1974 applicator legislation should be submitted by September 15. The Board will probably request an extension of the September 15 deadline.

A review of needed enabling legislation is being conducted by the Board (special drafting committee). A draft will be sent to the Governor's Office by September 15 if time permits adequate draft preparation and prior approval by important state groups (e.g., Farm Bureau and others)

#### D. INDEX OF STATE AGENCIES

- Department of Natural Resources
   State Office Building
   Indianapolis, Indiana
  - a. Scope of Responsibilities

The Department of Natural Resources is charged with the responsibility of using Indiana's natural resources wisely. Objectives related to pesticides are:

- (1) Prevention and control of plant diseases and pests of agricultural and horticultural crops. (Division of Entomology)
- (2) Investigation of sites proposed for solid and hazardous waste materials - Certification of sites.

### b. Key Contact

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- (1) S. Donald Durfee, Director
- (2) Richard (Gene) Bass, Director
  Fish & Wildlife Division
  317/633-5587



- (3) John J. Favinger
  State Entomologist
  Division of Entomology
  317/633-6993
- (4) Edwin J. Hartke
  Environmental Geologist
  Geological Survey Division
  Bloomington, Indiana 47401
  812/337-7428
- c. Manpower and Funding
  - (1) Manpower
    - (a) The Division of Fish and Wildlife has a total of 124 full-time and 96 seasonal employees. Sixty of the 124 are professional biologists.
    - (b) The Division of Entomology employees 6 entomologists, two plant pathologists, one horticulturist and one agriculturist. Six aides are employed during the summer.
    - (c) The Geological Survey Division employs 44 full-time professionals and 12 temporary assistants. There are 20 geologists, 3 geophysicist, 3 geochemists and other

## (2) Funding

(a) Fish and Wildlife Division

Approximately \$2,000 is spent annually for labor, salaries, equipment, per diem, etc. for application of herbicides, and about \$7,000 for materials.

(b) Division of Entomology

The annual budget is approximately \$150,000. Only about \$2,500 is spent annually for pesticide purchase and application.

(c) Geological Survey Division

No specific portion of the budget is earmarked for location of landfills for obsolete or excess pesticides.

- d. Operational Programs and Commitments
  - (1) Fish and Wildlife Division

Pesticide programs consist primarily of regulation of herbicides for use on aquatic vegetation (Sec. 5-10) Indiana Fish and Wildlife Code 1972.

## (2) Division of Entomology

The Division is the principal plant regulatory agency of Indiana and has charge of prevention and control of insect pests and plant diseases e.g., Japanese beetle, gypsy moth and other programs.

## (3) Geological Survey Division

Programs designed to assist in the certification of landfills capable of receiving hazardous wastes, including excess or out dated pesticides, are the principal pesticide related activities.



- Indiana State Board of Health
   1330 W. Michigan Street
   Indianapolis, Indiana 46206
  - a. Scope of Responsibilities
    - (1) General Sanitation Branch is responsible for sanitary landfills and is also involved in hazardous wastes.
    - (2) Hazardous Products Section

The Hazardous Products Act is administered by this group. Indiana is the only state that requires registration of hazardous household products. (Refer to Appendix for details.)

#### b. Key Contact

- (1) Bureau of Food and Drugs Frank E. Fisher, Director 317/633-4708
- (2) Roland P. Dove, Chief General Sanitation 317/633-4393

(3) Robert J. Murray, Chief Hazardous Products Section 317/633-4830

## c. Manpower and Funding

(1) General Sanitation Branch

There are ten professional employees and one clerk-typist employed. No budget figures are available now.

(2) Hazardous Products Section

There are three employees in the Section; two professional and one clerk-typist. The budget is approximately \$30,000 yearly.

- d. Operational Programs and Commitments
  - (1) General Sanitation Branch

Programs are geared to technical assistance to towns and municipalities in their sanitary landfill problems. Also, they are assisting the Indiana Pesticide Board, and others, with selection of suitable excess pesticide landfills.

## (2) Hazardous Products Section

Programs are geared to acquiring hazardous product ingredient information in carrying out the Hazardous Household Products Act.

The information is sent, monthly, to the Poison Control Center in Indiana and to the Food and Drug Administration and National Clearinghouse for Poison Control Centers in Washington, D.C. (a complete activities report is available)

### INDEX OF OTHER FEDERAL AGENCIES

Dr. William H. Garman

U.S. AID

Senior Agr. Chemicals Specialist

Washington, D.C.

202/632-7936

Mr. Edward Estkowski

U.S. DOL, O.S.H.A.

300 S. Wacker Drive

Chicago, Illinois

312/353-4717

Dr. Philip C. Kearney, Chief

U.S.D.A., ARS

Pesticide Degradation Laboratory

Agricultural Center West

Beltsville, Md. 20205

301/344-3082

Dr. James B. Elder

Bureau Sports Fisheries &

Wildlife

Federal Building

Twin Cities, Minnesota

612/725-3536

Mr. Gordon Lindquist

Regional Administrator

National Highway Traffic

Safety Adm.

Chicago, Illinois

Dr. L. L. Danielson, Chairman

U.S.D.A., ARS

Agricultural Environmental

Quality Institute

Agricultural Research Center, West

Beltsville, Md.

301/344-3030

Dr. Charles Walker, Acting Chief
Office of Environmental Quality
U.S.D.I.
Bureau Sport Fisheries
Washington, D.C.
202/343-6394

#### E. INDEX OTHER STATE AGENCIES

- Office of the State Chemist
   Department of Biochemistry
   Purdue University
   West Lafayette, Indiana 47907
  - a. Scope of Responsibilities

Senate Act 559 assigned registration, inspection, analysis, enforcement and administration of public pesticide management to the State Chemist; the Governor also designated the State Chemist as "Lead Agency".

Indiana Hazardous Product Act (1959) also requires registration of certain household pesticide products with the State Chemist.

- b. Key Contact
  - (1) Dr. E. D. Schall
    State Chemist & Seed Commissioner
    317/749-2391
  - (2) Mr. George L. Hutton
    Pesticide Administrator
    317/749-2391



### c. Manpower and Funding

Six persons full time plus administrative support; no budget figure available now. Pesticide budget will be calculated for next report; functions of personnel are distributed throughout the organization on part-time or fractional basis.

## d. Operational Programs and Commitments

Programs and commitments are all directed toward carrying out responsibilities assigned by law in pesticides and pesticide fertilizer custom mixes (refer to Appendix for more information on custom mix fertilizer - pesticides)

The State chemists operates specific programs of pesticide registration, inspection, analysis, enforcement and administration.



- Cooperative Extension Service
   Purdue University
   West Lafayette, Indiana 47907
  - a. Scope of Responsibilities

Responsible for developing and administering a state-wide informal educational program identifying and solving problems through a field staff and technical specialists.

- b. Key Contact
  - (1) Dr. H. G. Diesslin, Director 317/749-2413
  - (2) Dr. Eldon Ortman, Head

    Department of Entomology
    317/749-2917
  - (3) Mr. David L. Matthew, Jr. Pesticide Coordinator 317/749-2405
  - (4) Dr. James L. Williams
    Pesticide Coordinator
    317/749-2948



- (5) Dr. Donald H. Scott

  Professor of Plant Pathology
  317/749-2948
- c. Manpower and Funding
  - (1) Manpower
    - (a) Purdue Entomology Extension

There are seven people part-time (four full-time equivalent) in entomology.

(b) Botany and Plant Pathology

There are six person part-time in plant

(2) Funding

Estimates of funding for the various pesticide programs will be prepared for the next profile revision or update.

d. Operational Programs and Commitments

pathology.

- (1) Entomology Extension
  - (a) Fully operative programs in existence for several years are: educational and information state-wide. Also, problem

solving.

- (b) Six state Cooperative Extension project with Ohio, Illinois, Iowa, Missouri and Nebraska on "Corn Pest Management Program Procedures."
- (2) Botany and Plant Pathology

Fully operative educational and informative herbicide and plant pathology programs (including problem solving) state wide for a number of years.

- Indiana Pesticide Review Board
   Mr. Richard E. Bass, Chairman
   607 State Office Building
   Indianapolis, Indiana
  - a. Scope of Responsibilities

Senate Act 559 established the State Pesticide Review Board to consult, advise, and recommend policy on classification, handling and disposal of pesticides; 13 members, 9 voting.

- b. Key Contacts
  - (i) Mr. Gilman O'Neal

    Public Representative on Pesticide

    Review Board

    Columbus, Indiana
  - (2) Dr. R. B. Wilson (Board Member)
     Deputy Director
     Purdue Agricultural
     Experiment Station
- c. Manpower and Funding

The Senate Act 559 Sec. 12, describes the members and funding as follows:

There is created the Indiana Pesticide Review Board, hereinafter referred to as the Board, and consisting of one (1) representative of the State Board of Health; the State Toxicologist; the State Veterinarian; one (1) representative of the Department of Natural Resources; one (1) representative of the Purdue University Agricultural Experiment Station; one (1) representative of the Indiana Cooperative Extension Service; two ecologists with earned doctorate degrees, one (1) a terrestrial ecologist and one (1) an aquatic ecologist, no more than one (1) of whom may be from a state supported university or college and no more than one (1) of whom may be a plant ecologist and one (1) public representative, each with full voting power; one (1) representative of the pesticide industry and one (1) representative of producers of agricultural crops or products on which pesticides are applied or which may be affected by the application of pesticides and two (2) public representatives from conservation organizations, as advisory, non-voting members.

Per Diem and Travel Expenses - State officials and staff members of state offices as well as Purdue University Agricultural Experiment Station and

Cooperative Extension Service staff members appointed to the Board shall serve without compensation but shall be entitled to receive per diem payments at rates and under conditions incident to these positions. Other members shall be paid a per diem of twenty-five dollars (\$25) per day or per part of each day of actual attendance at called meetings or hearings. In addition, each Board member shall receive mileage expense to and from his place of business and the place where official business is transacted.



## THE INDIANA PESTICIDE REVIEW BOARD

	Name	Representing	Address
1.	Frank Fisher	State Board of Health	1330 W. Michigan Street Indianapolis, Indiana
2.	R. B. Forney	State Toxicologist	Indiana University School of Medicine, 1100 W. Michigan St. Indianapolis, Indiana
3.	D. L. Smith	State Veterinarian	State Office Building Indianapolis, Indiana
4.	R. E. Bass	Dept. Natural Resources	State Office Building Indianapolis, Indiana
5.	R. B. Wilson	Agric. Experiment Station	Purdue University Lafayette, Indiana
6.	Eldon Ortman	Coop. Extension Service	Dept. of Entomology, Purdue University, Lafayette, Indiana
7.	Gilman O'Neal	Public Representative	Columbus, Indiana
8.	Durward Allen	Ecologist	Dept. Forestry & Conservation Purdue University Lafayette, Indiana
9.	William Eberly	Ecologist	Manchester College North Manchester, Indiana
10.	Glen Klingman	Pesticide Industry	Eli Lilly & Company Indianapolis, Indiana
11.	Acord Cantwell	Pesticide User	Indiana Farm Bureau Coop. Assn., Inc., Indianapolis, Indiana
12.	Arvill Bertsch	Conservation Organization	Indiana Assoc. Soil and Water Conservation Districts, Connersville, Indiana
13.	Roy B. Crockett	Conservation Organization	Isaac Walton League of America Marion, Indiana

## d. Operational Programs and Commitments

The "Board" meets at least annually and on call by the Chairman or a majority of the Board.

The "Board" determines the nature and extent of any restrictions to be imposed on the purchase, distribution, and use of any pesticide.

The Board operates in three specified areas. may adopt regulations restricting or prohibiting the use of certain types of containers or packages for specific pesticides. It may adopt rules providing for the safe handling, transportation, storage, display, distribution and disposal of pesticides and their containers. And finally, the Board may, if it deems it necessary for the protection of persons, animals, wildlife, crops, or vegetation, classify specific pesticides either as "restricted use" or "for use by prescription only". The Board may include in the regulation the time and conditions of sale, distribution, or use of such restricted pesticides and may, if it deems it necessary to carry out the provisions of this Chapter, require that any or all such materials shall be purchased possessed or used only under

permit of the State Chemist and/or under certain
conditions or in certain quantities or concentrations.

INDIANA PESTICIDE PROFILE

PART II

August 1973

#### INDIANA PESTICIDE PROFILE

#### Part II

## A. INDEX INTRASTATE REGISTERED PRODUCTS

d. Pesticide Companies with Products

Registered for Indiana Only

## Lime-0-Sol Company

- P. O. Box 278, Garrett 46738 (Federal number may be applied for)
- 1. Liquid Toilet Bowl Cleaner, 5965
- 2. Industrial & Institutional Bowl & Urinal Cleaner, 5965

#### Albert G. Maas Company

155 E. Maryland St., Indianapolis 46204 (two additional products federally registered)

- 1: . Sudden Death
- 2. Super Strength

## Pest Control Services, Inc.

,, 2228 N. College Ave., Indianapolis 46205 (all five Intra)

- · 1. Pesco, Chlordane Insecticide
  - 2. Pesco, 75% E.C., Chlordane for Termite Control
  - 3. Pesco, Pyrethrum Insecticide
  - 4. Pesco, Diazinon-Pyrethrin Insecticide
  - 5. Rat & Mouse Bait with Fumarin

#### Reliable Exterminators, Inc.

- P. O. Box 31, Lafayette 47902 (all three Intra)
- 1. Reliable Household Spray/Diazinon
- 2. Reliable Household Spray/Chlordane
- 3. Reliable Rat & Mouse Bait/Pivalyl

#### Ulrich Chemicals, Inc.

398 Division St., P. O. Box 21156, Indianapolis 46221 (one Intra)

1. Bleach (Sodium Hypochlorite 15%)

#### Windler Pest Control

- P. O. Box 666, Fowler 47944 (three additional products federally registered)
- 1. Windler Insect Spray
- 2. Windler Industrial Aerosol Insecticide

# b. Experimental Permits

Dr. George F. Warren, Horticulture Department,
Purdue University is the IR-4 coordinator.

The State Chemist's Office has listed some fifteen experimental permits. The list is included on the following page:

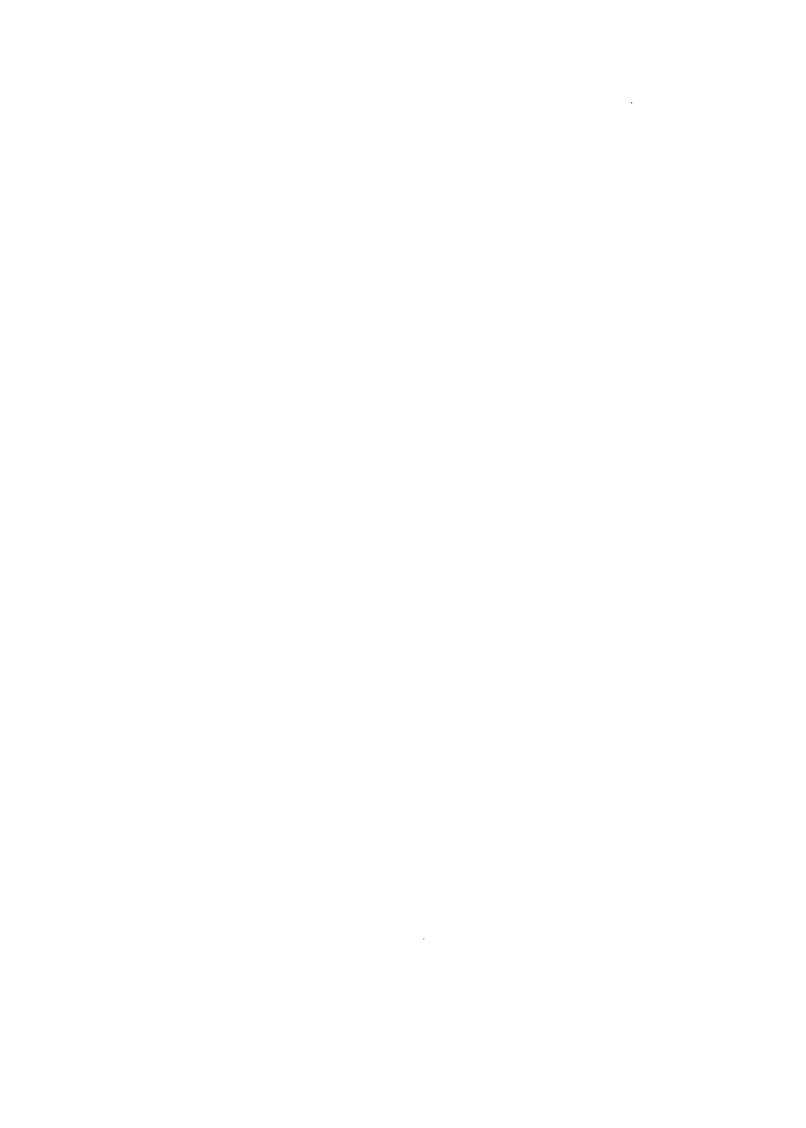
Index of Experimental Permits and Registrations

	Company	Product	Type	USe		Monitor	ክ
٦.	American Cyanamid	Counter 15,6	Limited	F. Corn	0	D. Matthew	2
2	BASF-Wyandotte	Bentazon	General	Soybeans	9	Tech.	Reps.
æ.	BASF-Wyandotte	Basagran	General	Soybeans	=	=	=
4.	Chemag <b>ro</b>	Sencor 50W	General	Soybeans- Potatoes	=	<b>5</b>	z
Ω	Dow	Premerge	General	Soybeans	2	2	=
٠.	DuPont	Benlate	Limited	Pome Fruits	=	=	=
7.	Elanco	Treflan & Sencor	General	Soybeans	=	=	=
œ	Rhodia	Chipco Spot Kleen	Limited	Grass	=	=	=
	Uniroyal	Dyanap & Lasso	General	Soybeans	=	=	=
10.	Rohm & Haas	Dithane M-45	General	Soyheans	=	=	=
11.	Velsicol	Cobex	Limited	Truck Crops	=	=	<b>:</b>
12.	Velsicol	Phosvel	Limited	Truck Crops	=	z	=
	Staff Con	Staff Controlled Experimental Applications (Research)	ntal Applicatio	ns (Research)			
13,	Rohm & Haas	Dithane M45	Very Limited	Sweet Corn	Ċ.	Scott	
14.	DuPont	Manzate 200	Very Limited	Sweet Corn	Ď.	Scott	
15.	Geigy	Simazine	Aquatic Exp.	Algaecide Aquatic weeds	ບໍ	Lembi	

# B. INDEX PRODUCERS, MANUFACTURERS, FORMULATORS THAT REGISTER (FEDERAL) IN INDIANA

Company Id. Number 1215	ARNOTT CHEMICAL & EXTERM COMPANY INCORPORATED 353 MASSACHUSETTS AVENUE INDIANAPULIS, INDIANA 46204
106	BRULIN & COMPANY P.O. BOX 270-8 INDIANAPOLIS, IN 46206
. 10300	BUD ZIEGLER'S ALBERT G MAAS CO. 155 E. MARYLAND STREET INDIANAPOLIS, IN 46204
9902	C L ALEXANDER CO INC P D BOX 444 FORT WAYNE INDIANA 46801
8291	CALCO INDUSTRIES, INC. 1624 WAUPIKA STREET ELKHART, INDIANA 45514
5011	CARMEL CHEMICAL CORPORATION P.O. BOX 406 WESTFIELD, INDIANA 46074
2332	CARSON CHÉMICALS INC. P. O. BOX 465 NEW CASTLE, INDIANA 47362
2078	CHEMICAL SPECIALTIES CORP. P. O. BOX 4086 EVANSVILLE, IN 47711
271	COMMERICAL SOLVENTS CORP 1331 S FIRST ST TERRE HAUTE INDIANA 47808
8822	CONSOLIDATED CHEMICAL CORPORATION 1020 SIXTEENTH STREET BEDFORD, INDIANA 47421
7960	CONTINENTAL CHEMICAL CORP 1439 ASH STREET TERRE HAUTE, IN 47808
1183	CORVEL DIVISION ELI LILLY CO. INDIANAPOLIS IN 46206
9972	CURTIS DYNA-PRODUCTS CORPORATION P D 8DX 297 WESTFIELD INDIANA 46074
7283	DESCO CHEM. DIV. DEISCH-BENHAM, INC. P. O. BOX 109 NAPPANEE, INDIANA 46550 -27-

1471	FLANCO PROD DIV ELI LILLY RALPH HILL P. O. BOX 1750 INDIANAPOLIS, IN 46206
2528	ERBRICH PROD CO. FOOD & CHEM PROD P. O. BOX 55134 INDIANAPOLIS, IN 46205
<b>554</b>	FEDERAL CHEMICAL COMPANY INC 2530 WINTHROP AVENUE   INDIANAPOLIS, IN 46205
9281	H & S EQUIPMENT & SUPPLY CD. 926 N. HAMPTON STREET SHELBYVILLE, INDIANA 46176
142	H B MEYER & SON INC C/O HUNT LAB-P FRANKE P. O. BOX 710 HUNTINGTON, IN 46750
10061	HAYNES MILLING CO INC
	PORTLAND INDIANA 47371
12461	HEAT POWER ENGINEERING COMPANY, INC. 2709 BROOKLYN AVENUE FORT WAYNE, IN 46804
10304	HOOSIER VETERINARY LABS., INC. P. O. BOX 38 THORNTOWN, INDIANA 46071
5602	HUB STATES CORPORATION 2002 NORTH ILLINOIS STREET INDIANAPOLIS, INDIANA 46202
2700	HULMAN & COMPANY 900 WABASH AVE. TERRE HAUTE, INDIANA 47801
303	HUNTINGTON LABS. INC. P. O. BOX 710 HUNTINGTON, INDIANA 46750
1222	INDIANA FARM BUREAU COOP ASSO. INC. 47 SD. PENNSYLVANIA ST. INDIANAPOLIS, IND. 46204
1751	INDIANAPOLIS PAINT & COLOR CO. 640 NORTH CAPITOL AVE. INDIANAPOLIS, IND. 46204
1174	INDUSTRIAL SANITATION CO. P.O. BOX 471 EAST CHICAGO, IN 46312



10032	INTEC MANUFACTURING COMPANY BARTH & PALMER INDIANAPOLIS IN 46203
1947	JOHN SEXTON & COMPANY P.O. BOX 1531 INDIANAPOLIS, IN 46206
2695	KINNEY & COMPANY 1327 CALIFORNIA STREET COLUMBUS INDIANA 47201
2144	KOR-X-ALL COMPANY INC 215 N W 10TH STREET EVANSVILLE INDIANA 47701
8043	LOWMAN COMPANY PO BOX 265 WATERLOO IN 46793
110	MADISƏN CHEVICAL COMPANY P Ə BOX 382 MADISON INDIANA 47250
5402	MARIAH RODENTISIDE CO., INC. RFD 1 HGHWY 41 N. VINCENNES, INDIANA 47591
9364	MARVEL CHEMICAL COMPANY P U BUX 645 LOGANSPORT, INDIANA 46947
7537	MONROE GRAIN & SUPPLY INC. BOX 300 MONROE, INDIANA 46772
	NEW PLANT LIFE DIV., CHAS. FINLEY & CO. P.O. BOX 45 LAPORTE, IN 46350
9503	PERFECTION PAINT & COLOR COMPANY 715 FAST MARYLAND STREET INDIANAPOLIS IN 46202
1455	PRO TEX ALL COMPANY INC 223 N W SECOND STREET EVANSVILLE INDIANA 47708
2192	RED SPOT PAINT AND VARNISH CO., INC. ONE TEN MAIN STREET EVANSVILLE, IN 47708
10794	REDBUD PRODUCTS COMPANY INC. 3812 FERNWAY DRIVE ANDERSON, IN 46014

1456 REP. CREDSOTING CO. DIV. REILLY TAR & CHEM. 11 SOUTH MERIDIAN ST. INDIANAPOLIS, IN 46204 70 RIGO CHEMICAL COMPANY 1200 FORT WAYNE NATIONAL BANK BLDG FORT WAYNE, IN 46802 9675 S. R. WILSON & ASSOCIATES P. O. BOX 556 NEWBURGH, IN 47630 SAFETY PRODUCTS COMPANY 5145 1180 WEST 29TH ST INDIANAPOLIS INDIANA 46208 9789 STANDARD BRUSH & BROOM CO BOX 1027 PORTLAND, IN 47371 11509 THE DOW CHEMICAL COMPANY POST OFFICE BOX 1656 INDIANAPOLIS, IN 46206 THE DUKE LABS 9294 301 ELKS COUNTRY CLUB RD RICHMOND IN 47374 13890 THE WORLD'S BEST PRODUCTS, INC. 800 SOUTH-UNION CENTER AVE. UNION MILLS, IN 46382 3146 TRI STATE SCHOOL SUPPLY CO. 901 NORTH GOVERNOR STREET EVANSVILLE, INDIANA 47711 7874 UNIROYAL INC 312 N. HILL ST. MISHAWAKA IN 46544 8719 VEPSATEK CHEMICAL IND. INC. 4301 HULL ST. INDIANAPOLIS, IND. 46226 2230 WARSAN CHEMICAL COMPANY INC. P 0 BOX 168 WARSAW INDIANA 46580 13812 WATCON INCORPORATED 2215 MAIN STREET SOUTH BEND, IN 46613 WESTERN TAR PRODUCTS CORP 2458 P 0 90X 6C5 TERRE HAUTE INDIANA 47803



WINDLER PEST CONTROL INC 116 FAST FIFTH STREET FOWLER IN 47944

YARGER SUPPLY CO BOX 136 WARSAW IN 46580

C. USE DATA ON PESTICIDES (CROPLAND)
 (Continued on next page)

# FIELD CROPS TREATED WITH INSECTICIDES: ESTIMATED ACRES TREATED AND RATE OF APPLICATION INDIANA, 1969-1971

		AVE	RAGE RAT	E OF	EST]	MATED A	CRES
CROP AND INSECTICIDE	UNIT	APPLICA	ATION PE	R ACRE	TREATE	TREATED (THOUSANDS)	
		1969	1970	1971	1969	1970	1971
Corn, preemergence, All	Wp-lb. Gp-lb. Lc-qt.	7.4 5.6 1.2	5.2 5.7 1.7		1,780	1,946	
Aldrin	Wp-lb. Gp-lb. Lc-qt.	7.4 5.6 1.2	5.1 5.7 1.7		1,424	1,689	
Bux Diazinon Heptachlor Phorate	Gp-lb. Wp-lb. Gp-lb. Gp-lb.	8.7  5.1 7.0	6.8 6.6 5.0 5.0		39  232 14	35 43 274 14	
Corn, postemergence, All	Wp-1b. Gp-1b.	1.9 7.0	2.0 8.1		49	47	
Carbaryl	Wp-1b. Gp-1b.		2.2 8.0			12	
Diazinon	Gp-1b.	7.4			21	~-	
Soybeans, All	••••					22	
Small grains, All	Wp-1b. Lc-qt.	1.7	1.8 1.9		29	30	
Carbaryl Malathion	Wp-1b. Wp-1b. Lc-at.	1.7 2.0 1.0			19 10		
Hay, All	Wp-1b. Lc-qt.	1.8	2.2 1.4		109	55	
Diazinon & methoxychlor Malathion Malathion & metho-	Lc-qt. Lc-qt.	1.6	1.8		55 31	12 	
xychlor	Lc-qt.	1.0			15		

WP=Wettable powder (in pounds LC=Liquid concentrate (in quarts) GP=Granular product (in pounds)



#### D. REGISTRATION AND CLASSIFICATION INFORMATION

- 1. Registration Information
  - a. A review of registrations during 1972 revealed a few areas where some confusion was indicated regarding registration procedures. The following guidelines were issued by the State Chemist:
    - (1) The 1961 Herbicide Law of Indiana was cancelled when the 1971 Pesticide Law became effective.

      Herbicides are registered on the application (form) for registration of pesticides. The sale, use, or distribution of the highly volatile herbicides remain prohibited in Indiana.
    - (2) The initial registration fee covers the registration of one through four products.
    - (3) Discontinued products are those which have been discontinued within the last two years. Registration is requested until a two-year period has lapsed during which no further manufacture or distribution by the producer has occurred. Obsolete items are those for which production and distribution has ceased

for a period of more than two years.

Registration is not required for obsolete

items. Dealers will be instructed to remove
obsolete items from sale and eliminate

stocks.

- (4) Current labels giving active ingredients, claims, use directions and safety precautions are required for all products to be registered. If current labels were submitted for the same product during the previous registration, and there have been no changes, resubmittal of the labels will not be required unless specifically requested.
- (5) If an item registered for 1972 was dropped from 1973 registration, it should be noted as a newly discontinued or obsolete item (as outlined in 3, above).
- b. The Indiana Pesticide Act of 1971 includes insecticides, rodenticides, fungicides, germicides, nematocides and plant regulators, defoliants and dessicants.
  The Indiana Pesticide Review Board has approved a regulation (included in Appendix) to extend this

coverage to bird, fish, reptile and other small
animal control agents including dog and cat
repellents.

These items are to be included in all 1973 registration submissions. The general use or sale of pesticide compounds containing thallium sulfate, alkyl mercury, or any mercury compounds, for aquatic uses in Indiana, are now prohibited (See Regulations in Appendix)

- (1) Number of companies registered 1972 483; 4,220 products
- (2) Number of companies registered 1973 522 (as of July 1, 1973); 4,863 products

2. Classification Information

There are three pesticide classifications:

- a. General use (no list available)
- b. Restricted use (no list available)
- c. Prescription only
  - (1) There are two state regulations in effect for pesticide use by <u>prescription only</u>.
    - (a) Alkyl mercury products and all mercury products for aquatic uses are placed in a "prescription only" category without further guidelines for use (See Appendix for regulations).
    - (b) Thallium sulfate used as a rodenticide is also placed in a"prescription only" category - without further guidelines for use. (See Senate Enrolled Act 559 p. 11 Sec. 10 item (1) for details on <u>Restricted</u> <u>Use of Pesticides</u>)

INDIANA PESTICIDE PROFILE

PART III

August 1973

		,	

- A. REGIONAL/STATE SPECIAL PROBLEMS ON PROGRAM OPERATIONS
  - Problems Limitation on minor crop uses of Federally registered pesticides -

Several truck crops and small acreage crops are not covered by currently federally registered uses for those crops. IR-4 Programs efforts can only meet a small number of these needs. Additional authority is needed for state registration of pesticides to be used on minor crops that parallel major approved uses.

- 2. EPA actions on proposed standards (drafts) involving State interest or actions are straining limited state administrative and technical facilities. Longer action lead times on proposed actions are necessary.
- Pesticide disposal assistance is needed in providing states with approved EPA incinerator design plans, chemical deactivation programs, and site selection criteria.
- 4. Private applicator training requirements remain one of the principal concerns. How can State resources accommodate a large demand? - i.e., a statement made by an EPA official to the National Farm Editors Association Meeting that nearly every farmer will be

"a certified private applicator."

5. PASS. The Indiana State Chemist has reported a number of verified pesticide accidents, but the Indiana State Board of Health has reported only one or two accidents. Generally, Indiana personnel do not want to report unverified pesticide incidents.

We expect better cooperation with the Indiana Health Board if only verified incidents are to be reported, and some other changes are made according to suggestions forwarded to headquarters.

 Indiana has no Department of Agriculture; this situation creates a shift in responsibility to other agencies,
 e.g., to the State Chemist, Extension, or Board of Health.

The Indiana State Board of Health does not seem to have the personnel nor the experience with which to assist in implementation of FEPCA. Consequently, we have received very little response from them.

The Abt Associates, Inc. study (included in Appendix)
recommended that environmental protection activities
in the Health Board be transferred to a separate agency.

An adequately staffed State EPA would speed up our implementation efforts in Indiana.

## 7. Excess and Obsolete Pesticide Disposal in Indiana

The situation in Indiana is similar to that in most States of Region V with respect to pesticides disposal programs; there are none in operation. However, Purdue University is anxious to set up a workable State-wide system to collect and eliminate waste pesticides. The extension services of Purdue receive many inquires from farmers and homeowners about what to do with excess and recentlybanned pesticides; they distribute disposal publications. In Tieu of unavailable incineration, the University generally recommends that these chemicals to be used according to package directions and sometimes suggest that small containers of pesticides be wrapped thickly in newspaper and placed with other solid waste for collection. Purdue disposes of its own pesticides by placing them in fiber barrels for quarterly shipment to a permanent storage site in Illinois.

The Indiana Pesticide Review Board, at the 28 June 1973 meeting, requested the Indiana Geological Survey and the General Sanitation Division to re-examine a number of sanitary landfills. The purpose of re-evaluation would be for possible disposal of excess or obsolete pesticides



and other hazardous wastes. This is a first step toward locating State Certified Landfills.

There are 140 Sanitary landfills approved by the Stream Pollution Control Board but only 84 are operational. Public Health estimated that approximately one-third of these could be used for pesticide disposal. Some sanitary landfills have refused to accept wastes from outside the county, e.g. the contracted sites. Most of the better sites are located in Southern Indiana; eight to ten existing landfills could possibly be designated for pesticides, some of which are county operations and some contracted. (The Department of Health estimated that landfill cost average about \$7.00 per person per year in Indiana.)

The State Geological Survey indicated that about 20 feet of clay bank (in depth) is needed for establishing a sanitary landfill. Each site is evaluated individually for suitability. Underground water resource data is not available for Indiana, however, it is doubtful if the "no hydraulic connection" portion of the EPA disposal procedures can be met.



# B. SPECIAL LOCAL NEEDS ( PESTICIDES)

# 1. Custom Blending and Tanks Mixes

Custom mixing (blending) of commercial fertilizers with pesticides and tank mixing of liquid (nitrogen) fertilizers with pesticide is state approved in Indiana, without registration. However, all fertilizer and pesticide materials have received prior registration.

(Please refer to Appendix page for more details in Interpretation of the "Commercial Fertilizer Law of 1953" by the Indiana Attorney General)

Custom mixing, or blending and tanks mixes are serving a very useful purpose in Indiana and should be considered as a Special Local Need.

# 2. Experimental Permits

A list of experimental permits is included under Part II, A and is also considered as a Special Local Need.



# C. REGIONAL/STATE PROBLEMS ON POLICIES, PROGRAM STRATEGIES

Indiana and some of the other states in the Region V are voicing the opinion that some guideline drafts from Washington (EPA) are not designed for field implementation. Several State regulatory personnel (including Indiana) have indicated that in order to facilitate implementation, the states, Region, Washington EPA (headquarters) should confer before a draft is circulated for general comment; a longer lead time for comment would also be desirable.

State staff and financial inadequaces seem to be the main concern about implementation of FEPCA, especially implementation certification and training of applicators.



#### INDIANA PESTICIDE PROFILE SUMMARY

Indiana will submit enabling legislation to the Indiana General Assembly in January 1974 on pesticide use and application and disposal of excess pesticides and containers. Senate enrolled Act No. 559 (1972) mentions that use and disposal is a Pesticide Review Board responsibility but does not specify the agency or procedures. Legislation has been delayed until the Federal Act was passed and interpreted.

The Indiana pesticide law requires registration of pesticides that control insects, weeds, rodents, nematocides, fungi, algae, bacteria, viruses and animal repllents, plant regulators, defoliants, and dessicants are also registered. The Indiana State Chemist registers most of the above classes of chemicals, but the Indiana State Board of Health registers hazardous household products. Approximately 4,500 pesticides were registered in 1972; about 15 of these did not carry an EPA registration number, and were not registered for specific local needs. The State Chemist prefers to continue registration of all pesticides used in the state and a charge of \$25.00 per product (\$100.00 minimum for four products) is made. The complete budget for the pesticide control program comes from registration fees.



Present Indiana law gives authority for restricted use and classification of pesticides by licensed or certified applicators or by "user permits." Sale of pesticides can also be restricted to dealers with a permit or licence or by "prescription" only. However, Indiana does not certify or licence pesticide applicators at present, and no provision has been made for reciprocity.

Experimental permits are now issued and the State Chemist is interested in EPA authorization in a cooperative experimental permit program. Authority to suspend registration of a pesticide is granted to the State Chemist when a pesticide presents an imminent hazard to the environment. Producers and dealers are not required to register or be licensed but producers and dealers can be required to maintain books and records. Pesticides are sampled from the manufacturers labeled containers being offered for sale at establishments, dealers or at the users site of storage or application. Tank samples are not analyzed. Approximately 300 samples are analyzed each year; the target is 1,000.

The Indiana law provides authority to require private applicators to maintain records, but it is not enforced and pesticide use inconsistent with labeling is illegal. Stop sale and civil penalties are also provided as well as authority to promulgate regulations controlling pesticide transportation, storage, and disposal.



Purdue University monitors pesticide residues in soils and the Stream Pollution Control Board monitors water. The State Veterinarian also monitors pesticides in animals. Research in the development, analysis and evaluation of pesticides is conducted by Purdue, and Manchester College is involved in evaluating the aquatic effects of herbicides.

The pesticide act of 1972 gives authority to enter into cooperative enforcement programs with the Federal Government, other states, state agencies and county or municipal districts. Training and certification programs will be prepared jointly by the Extension Service, and Indiana State Chemist.

# INDIANA PESTICIDE PROFILE APPENDIX

AUGUST, 1973



# MEETING INDIANA'S ENVIRONMENTAL PROTECTION NEEDS: ORGANIZATIONAL AND STAFFING REQUIREMENTS

(A Study By Abt Associates, Inc.)

#### EXECUTIVE SUMMARY

## Background of the Study

In January, 1972, Governor Edgar Whitcomb of Indiana and Francis Mayo, Regional Administrator for Region V of the U.S. Environmental Protection Agency, agreed that a study of Indiana'a environmental protection programs should be undertaken. The objectives of the study were:

- determine the manpower staffing requirements for the State of Indiana's environmental protection functions
- determine the most efficient and effective organizational structure for the state's environmental protection programs
- review and comment on the adequacy of Indiana's current legislative authority for comprehensive environmental protection
- develop a plan for the implementation of recommendations resulting from the study.

The study was jointly funded by the Region V Office of EPA; the Manpower Development Staff of the Office of Water Programs, EPA; and the Control Agency Procedures Branch of the Office of Air Programs, EPA.

Governor Whitcomb also announced the formation of a bipartisan Steering Committee composed of state legislators and representatives from state agencies which would be instrumental in implementing the results of the study. The Steering Committee was to provide advice and direction during the course of the study.

On June 16, 1972, a contract to conduct the study was awarded to Abt Associates Inc. of Cambridge, Massachusetts. As the contractor began work, three important features of the study became evident:

- There were strict time constraints on the period of performance of the study. In order that it be completed in time for consideration by members of the Indiana Legislature before the 1973 legislative session, the study was to be completed in sixteen weeks.
- Because of these time constraints, it was necessary to confine the scope of the study to water pollution control, air pollution control, solid waste management, and the protection of public water supplies.

• Although the study would be of value to other states in the examination of their own capabilities to meet environmental protection needs, the focus of the study was on the specific needs of the State of Indiana. This was reflected in the approach and methodology of the contractor, both of which were designed to produce recommendations which would be most relevant to Indiana.

#### Methodology

In meeting the objectives of the study, the contractor utilized the following approach. First, there was a thorough review of relevant state and federal statutes and administrative regulations. In addition to providing the basis for a review of the adequacy of Indiana's legislative authority, this task also provided a basic understanding of the nature and scope of Indiana's environmental programs. Second, the contractor developed and implemented a methodology for determining the manpower needs of Indiana; this methodology consisted of a task review of the functions involved in Indiana's environmental protection programs. Data were collected from interviews with employees currently responsible for those functions in Indiana, and these data were reviewed by Indiana supervisory employees and technical staff in the Region V Office of the EPA. Third, the contractor conducted extensive interviews with administrative officials, legislators, and client and interest groups in order to qather data for the analysis of the organizational structure of Indiana's environmental protection programs.

#### Summary of Findings and Recommendations

#### Manpower

### Findings:

- 1. We found that current staffing levels were inadequate to perform the work required by Indiana's environmental protection statutes and administrative regulations. The most significant manpower needs derived from the passage of the Environmental Management Act which provided for a permit program for the operation of pollution control facilities. The activities involved in reviewing applications for permits, issuing permits, inspecting control facilities and reviewing operations reports to assure that these facilities are in conformity with the permit requirements, will require substantial increases in manpower.
- 2. We found that certain staff functions -- notably planning and evaluation, provision of legal services to program staff, technical information systems, public information, and man-power planning and development -- were being performed inadequately because of staff shortages. In a related finding, we found a serious shortage of various types of professionals who

are needed for effective implementation of environmental programs, particularly lawyers and planners.

#### Recommendations:

- 1. Increase staff responsible for water pollution control, air pollution control, solid waste management, protection of public water supplies, and related staff services, from 93 to 289.
- 2. In order to attract capable and qualified personnel, implement the proposed salary and grade recommendations proposed by the Board of Health.

Implementation of these recommendations will bring the estimated annual cost of these environmental protection programs to \$4.8 million. Of this total, approximately \$1.9 million is attributable to the costs of operation of the new permit system for the construction and operation of pollution control facilities; the Environmental Management Act provides that these costs can be covered by permit fees. Also, the state can expect more than \$1.3 million in federal assistance in FY 1973.

Note that the salary levels used in estimating these costs were levels which have been proposed by the State Board of Health, but not yet adopted by the State Personnel Division or the Legislature.

Note also that the cost estimates include overhead and travel, but that overhead rates were calculated on the basis of overhead rates from previous years. Such rates may not be sufficient to cover the costs (in terms of equipment or building space) of significantly expanded programs. Indeed, the State Board of Health has requested, for 1973, the construction of an additional 46,000 square feet of space to house anticipated personnel increases. The total capital cost for the construction of this space is \$1,845,000, and estimated annual operating expenses will amount to \$51,122. Increases in the environmental protection area will account for approximately onethird of this space.

#### Organizational Structure

# Findings

1. Under the current structure, there are three policy-making boards (the Stream Pollution Control Board, Air Pollution Control Board, and the Environmental Management Board). In carrying out their powers and duties, these boards rely on personnel and services of the State Board of Health, particularly the Bureau of Engineering. The Bureau of Engineering reports to an Assistant Commissioner for Environmental Health who also has responsibility for the Bureau of Food and Drugs.



- 2. Environmental protection is the fastest-growing function in the State Board of Health. Its concerns and operations have become increasingly differentiated from the traditional public health operations of the Board of Health.
- 3. The expected increase in environmental protection staff will create serious management problems for the Assistant Commissioner of Environmental Health if he continues to be responsible for both environmental programs and also the Bureau of Food and Drugs, one of the largest Bureaus in the Board of Health.
- 4. The current structure of the Bureau of Engineering is around program Divisions. There is no provision for staff organizations. This inhibits the development of certain functions which are not part of the routine operations of these program Divisions, or which cut across Divisions. These functions include: planning and evaluation, the provision of legal services to program staff, technical information systems, standards development, public information, and manpower planning and development.
- 5. There are certain related environmental functions located in the Department of Natural Resources. These support, but do not overlap, the environmental functions of the Board of Health. Cooperation between the two agencies is satisfactory.
- 6. There is some ambiguity in the Environmental Management Act regarding the division of powers and duties between the three Boards responsible for environmental protection policy. This ambiguity is a serious potential problem.
- 7. Local health and pollution control agencies play an important role in protecting the state's environment. The Board of Health currently cooperates with these agencies, but there has been little systematic division of responsibilities between the state and local governments.

#### · Short-Range Recommendations:

- 1. The Assistant Commissioner for Environmental Health should be retitled Assistant Commissioner for Environmental Protection.
- 2. The radiological health, industrial hygiene and food and drug programs should be removed from his jurisdiction.
- 3. The new Assistant Commissioner should have the following organizational units reporting to him:
  - three Bureaus, for Air Pollution Control, Water Pollution Control and Water Supply, and Sanitary Engineering.

 an Office of Special Services to perform required staff functions.

We recognize that there are potential difficulties inherent in the combination of water pollution control and water supply functions. We believe that these difficulties can be overcome, but recommend further study of this question during implementation of these recommendations.

#### Long-Range Recommendations:

- 1. A separate environmental protection organization should be established outside the Board of Health.
- 2. The powers and duties of the Stream Pollution Control Board and Air Pollution Control Board should be transferred to the Environmental Management Board. The EMB should be empowered to hire its own staff, and purchase supplies and services, apart from the budget of the Board of Health. When these changes are made, the EMB will constitute the separate environmental protection organization recommended above. It will have a Board and Commissioner and be similar in form to the current Board of Health.
- 3. An environmental protection regional field office should be established in northwest Indiana. Consideration should be given to the possible creation of a larger regional field office structure.

#### Implementation

## Short-Range Recommendations:

- 1. A Special Committee on Manpower Staffing should be created. The most pressing concern in the short-range is the implementation of the recommended manpower increases. These involve a tripling of the number of environmental protection staff, and therefore must be carefully planned and executed.
- 2. The Director of the proposed Office of Special Services should be hired immediately, and should be designated as Secretary of the Special Committee.
- 3. Operating procedures, establishing reporting requirements and lines of communication, should be developed for the new organizational structure.

# Long-Range Recommendations:

1. Legislation should be introduced to amend the Environmental Management Act, transferring to the Environmental Management Board all powers and duties vested in the Stream Pollution Control Board and Air Pollution Control Board, and authorizing the EMB to

hire staff, purchase supplies and services separate from the Board of Health appropriations.

- 2. A committee should be appointed by the Governor to plan and supervise the separation of environmental protection functions from the Board of Health. This committee should also consider the timing of the implementation of all long-range recommendations.
- 3. After the environmental protection functions have been located in a separate agency, the executive of that agency should appoint a committee to study the questions of regional field offices and further internal reorganization.

#### Adequacy of Legislation

#### Findings:

- 1. We found that there is generally sufficient authority to exercise the following powers necessary for a comprehensive and effective environmental protection program:
  - Power to establish and enforce environmental quality standards.
  - Power to prescribe and regulate the use of pollution control facilities.
  - Power to secure detailed information on sources and effects of pollution.
  - Power to enforce regulations against violators, through administrative orders and judicial remedies.
  - Power to meet requirements of, and to secure benefits available under, federal law.
- 2. The following powers are not as fully realized as they should be in existing statutes:
  - Power to override failures of local governments to exercise their responsibilities.
  - Power to secure joint or regional action for environmental protection.
  - Power to coordinate strategies for all media.

#### Recommendations:

Legislation should be introduced to provide additional authority to the Environmental Management Board to meet these needs.

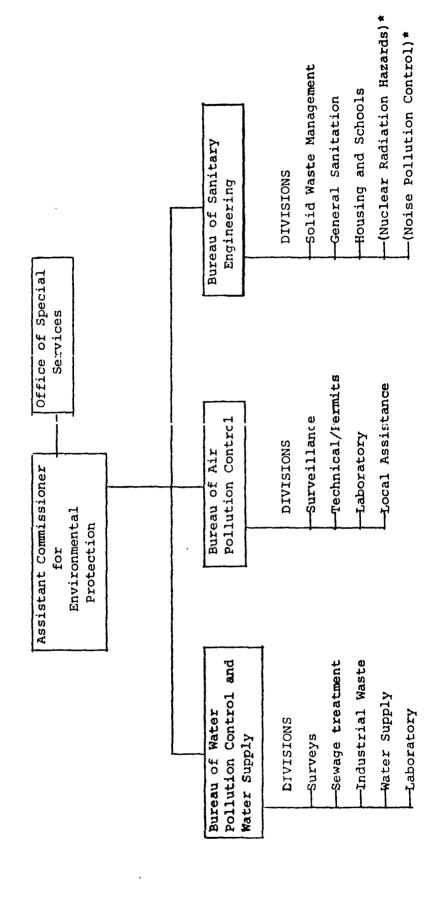


Water Pollution Division of Industrial Special Projects Control Disposal Sewage Surveys Waste Division of Engineering Sanitation Sanitary Personne1 General & Schools Housing Water Supply Area FOR ENVIRONMENTAL HEALTH ASSISTANT COMM.:SSIONER BUREAU OF ENGINEERING Division of Radiological Health Division of Industrial Hygiene Air Pollution Division of Enforcement Control Assistance Laboratory Technical & Survey

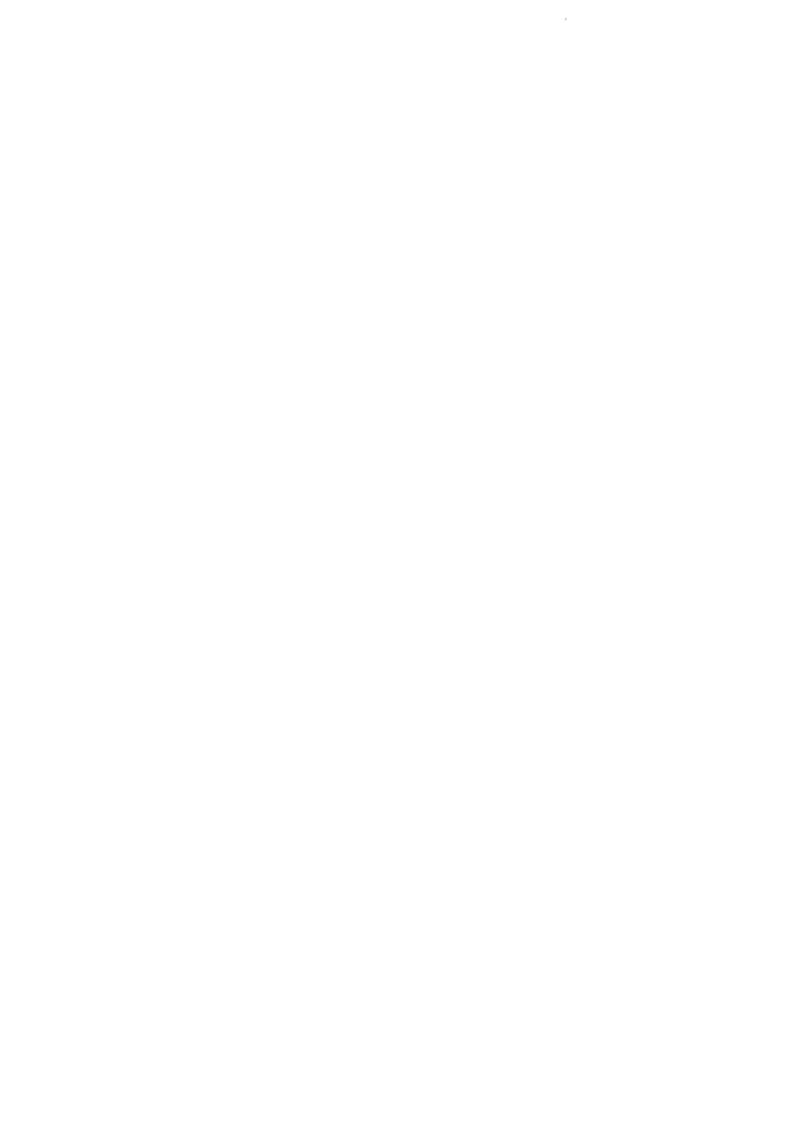
Current: Structure, Bureau of Engineering



Proposed Organization Structure for Indiana Environmental Protection Activities



\*Possible Divisions for future consideration



# INTERPRETATION OF THE "COMMERCIAL FERTILIZER LAW OF 1953" BY THE INDIANA ATTORNEY GENERAL

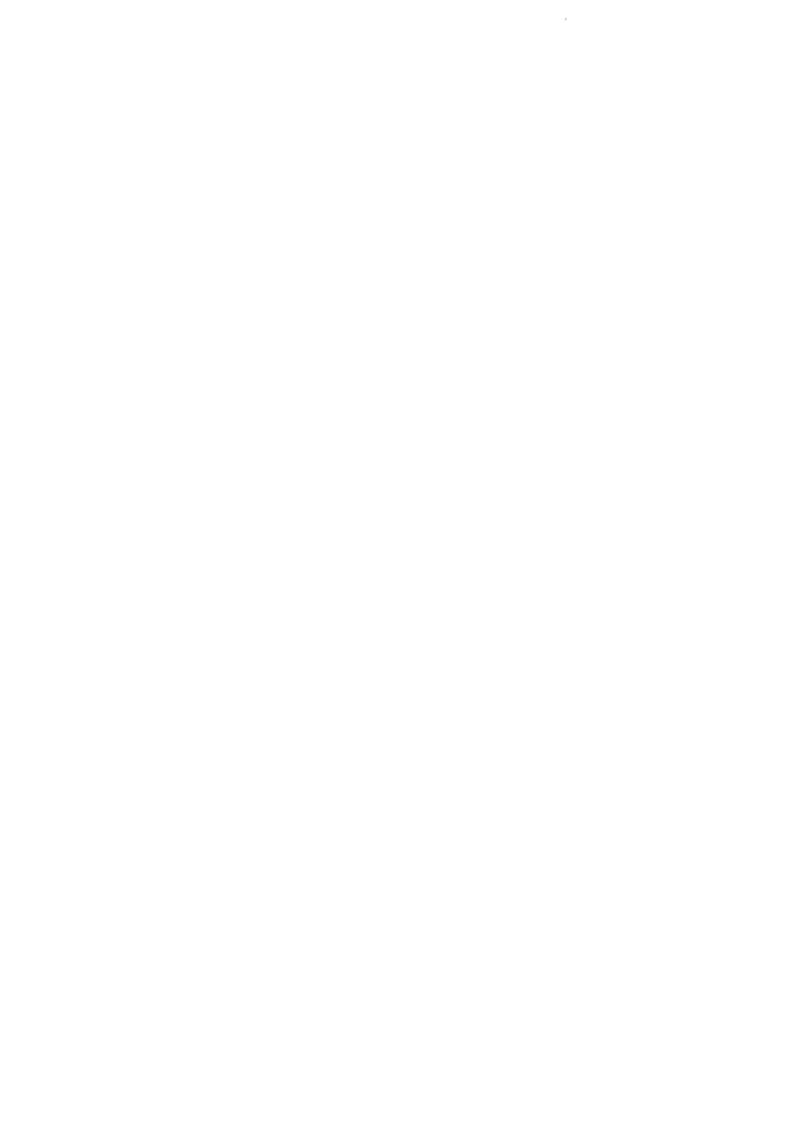
# Custom Mixing, Labeling, and Registration of Fertilizers and Pesticides

"Custom mixed fertilizer is defined as a mixture of two or more fertilizer materials at the specific request of a consumer. Mixtures of this type, by their very nature, are of small batch size, and result in a multitude of analyses. Their purpose is to satisfy the specific requirements for a soil and crop as determined by the farmer.

Custom mixed fertilizer is not required to be registered. However, all fertilizer materials used to prepare the mixture must have received prior registration and the analysis of this mixture must be guaranteed upon the delivery statement or label.

The buyer must have actual possession before the fertilizer can be custom mixed without registering and labeling. A custom mixed fertilizer can be resold only when registered and labeled as a mixed fertilizer.

Pesticides such as insecticides and herbicides, may be incorporated in fertilizer. If they are incorporated, the percentage by weight of the active ingredient(s) must be stated together with directions for use and caution or warning statements sufficient to protect the public."



Rule 7 of the Indiana Commercial Fertilizer Law requires the label (or delivery statement) of a bulk mixture of fertilizer with pesticide to guarantee the kind and percentage of each pesticide, and plant nutrient. Strict compliance with this requirement has appeared to some dealers as extremely difficult.

The "kind" of each pesticide additive refers to the active pesticide ingredient. This means that the pesticide must be noted upon the delivery statement, or label, in the form of the chemical compound or acceptable common name. Trade names or brand names are not acceptable for this purpose unless they coincide with the acceptable common name. This interpretation is parallel to that used by the Federal Government and also required by the 1971 Indiana Pesticide Law.

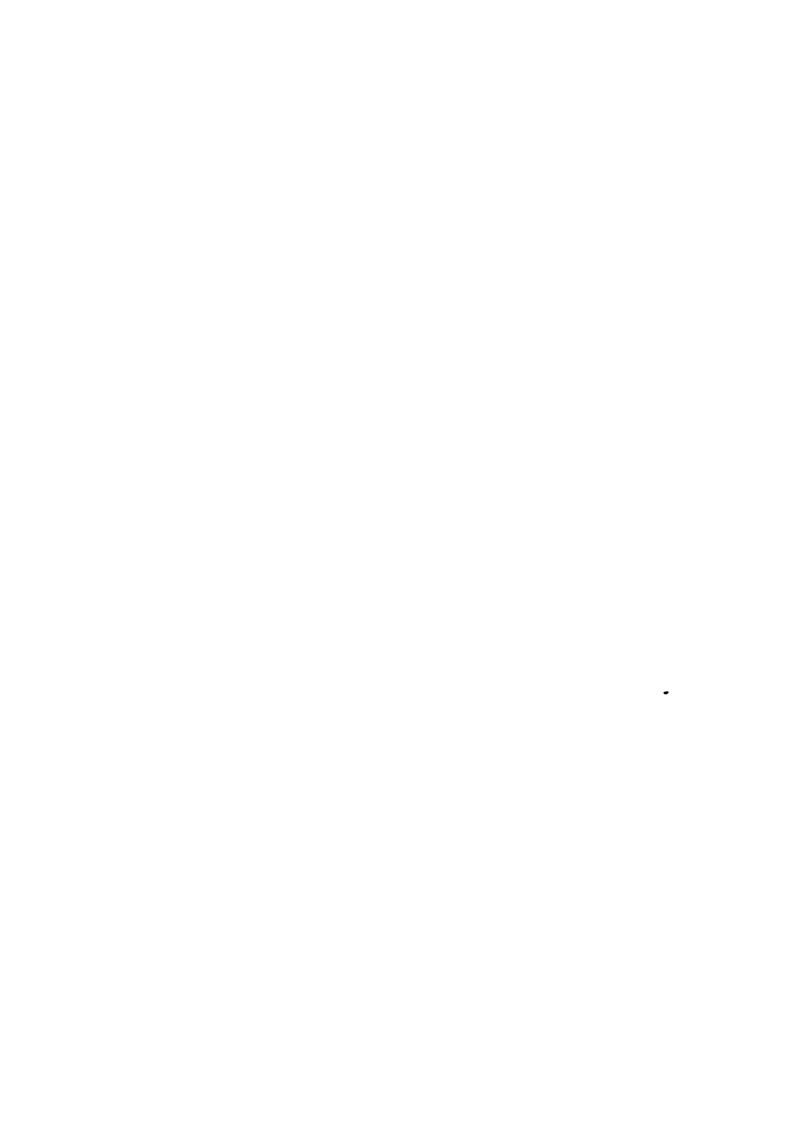
Whenever common names have been approved for use they appear upon the Federally registered label of the pesticide. Table 1 lists the common name of the active ingredient of some of the commonly used pesticides in tank mixes along with the trade name of the formulation.

Where common names are not approved, the active ingredient must be identified by its chemical name, also noted upon the Federally registered pesticide label. Upon request, the Office of the State Chemist will provide an abbreviation of a chemical name which may be used for labeling tank mixes of fertilizers with pesticides in this State. These abbreviations will be permitted until such time that a common name becomes available.

Percentages of the active pesticide ingredient in the final fertilizer mixture can be computed using nomograms.

The indicated common name of the active ingredient of pesticidal products noted below may be used in Indiana in lieu of the chemical name upon labels of <a href="mailto:custom">custom</a> - <a href="mailto:mixed">mixed</a> fertilizer - <a href="pesticide">pesticide</a> mixtures in order to comply with the requirements of Rule 7 under the Indiana Commercial Fertilizer Law. Trade names of pesticidal products may not be used to describe the active ingredient unless it coincides with the common name.

		TABLE 1	
	PRODUCT (TRADE NAME)		ACTIVE INGREDIENT (COMMON NAME)
(1)	AAtrex		atrazine
(2)	Aldrin		aldrin
(3)	Amiben		amiben
(4)	Blaydex		blaydex
(5)	Dowpon		dalapon - Na
(6)	Enide		diphenamid
(7)	Eptam		EPTC
(8)	Lasso		alachlor
(9)	Lorox		linuron
(10)	Maloran		chlorbromuron
(11)	Milogard		propazine
(12)	Paraquat		paraquat
(13)	Planavin		nitralin



(14)	Pramito1	prometone
(15)	Preforan	<b>fl</b> uorodifen
(16)	Princep	simazine
(17)	Ramrod	propachlor
(18)	Sutan	butylate
(19)	Treflan	trifluralin
(20)	Vernam	vernolate

# Situation Proposed and Requirements

A fertilizer/pesticide dealer receives an order for a given fertilizer/pesticide mixture to be applied by the dealer. The dealer transmits the fertilizer and pesticide to the tarm in separate containers and then mixes them in the field prior to application.

- a. Fertilizer to be used in mixture must be registered and labeled in compliance with the Indiana Commercial Fertilizer Law. This labeling requirement persists to the point of mixing with the pesticide.
- b. Pesticide to be used in mixture must be registered and labeled in compliance with the Indiana Pesticide Law and applicable Federal statutes.

- c. If delivery of the fertilizer and pesticide in separate containers is made to the purchaser in person, no further labeling beyond (a) and (b) is required. Delivery will be considered made when the purchaser is offered a copy of the delivery statement upon which information required in (a) and (b) is given. Tank mixing by or for the purchaser after delivery has been made requires no additional labeling.
- d. If tank mixing is performed prior to delivery (as defined in (c), then labeling of fertilizer/pesticide mixtures as required by Rule 7 of the Fertilizer Law must be complied with. Of course, such labeling prior to actual mixing (whether it occurs at the dealer's plant or in the field) would result in misbranding. Therefore, until the fertilizer and pesticide are mixed each must be labeled and registered in accordance with (a) and (b). Following the mixing operation, the mixture must be labeled in accordance with Rule 7 requiring the percentage by weight of active pesticidal ingredient and plant food nutrients in the tank mixture.



# Change in Analysis of Fertilizer

Regardless of the amount of pesticide added to the fertilizer, some change will occur in the plant food nutrient content. The more pesticide added, the greater the decrease in nutrient content.

This office will be obligated to assume the guaranteed analysis statement on the delivery statement of the tank mix describes the guarantee of that mixture. No other interpretation is possible.

A dealer should bear in mind that maintaining the nutrient guarantee of a fertilizer/pesticide tank mix at the same level as the guarantee of the fertilizer used in the mix increases the possibility of such a mixture being found deficient by analysis.

Mixtures of fertilizer and pesticides will be considered to be custom mixes when mixed to a given customer's specification and this particular mixture has not been advertised for sale before and in any manner. Such mixtures are permitted to be labeled with guarantees expressed as decimal quantities, such as 3.9% Nitrogen, 9.8% Available Phosphoric Acid ( $P_2O_5$ ), etc.



# STATE OF INDIANA INDIANA PESTICIDE REVIEW BOARD

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WHEREAS, Certain pesticide uses are present in Indiana and are not included or registration in the definitions contained in Section I-2, Public Law No. 199, ects of 1971; and,

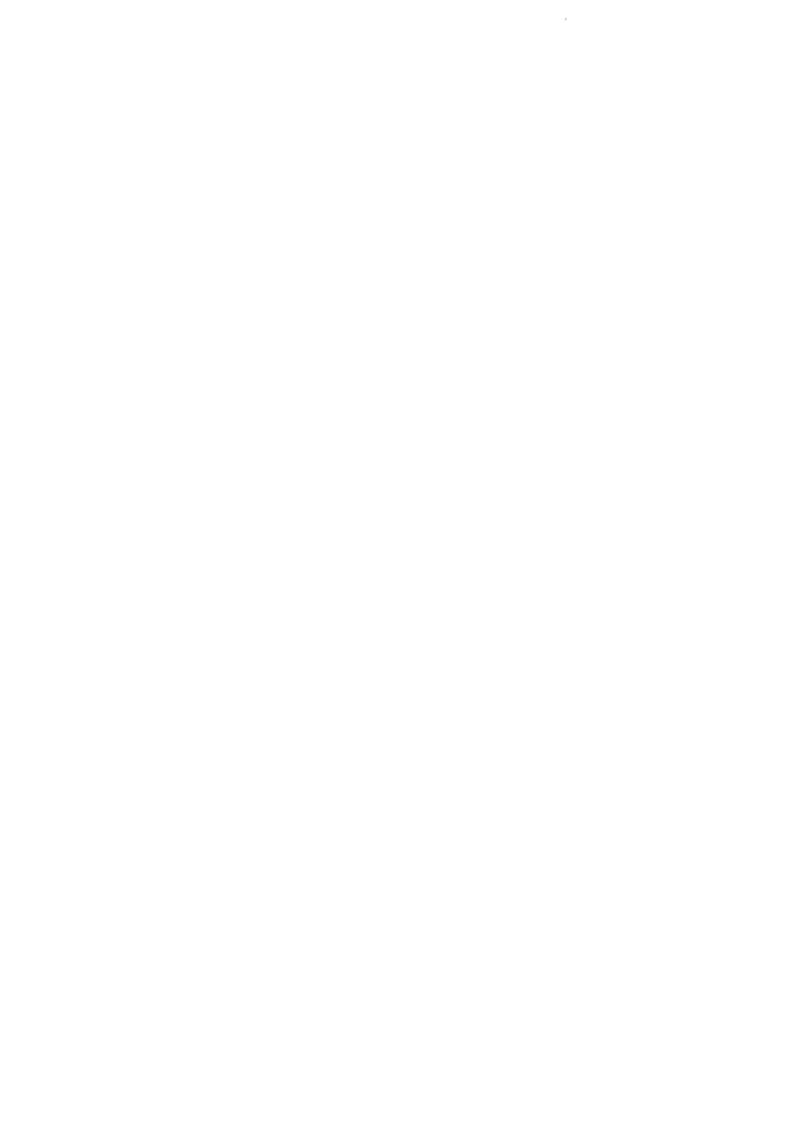
WHEREAS, it has been determined that these pesticide uses may be unduly nazardous to persons, animals, wildlife, crops, or vegetation other than the sests or vegetation which they are intended to prevent, destroy, control or nitigate or unduly hazardous to lands other than the lands to which they are applied.

NOW, THEREFORE, Pursuant to the authority of the Acts of 1961, Chapter 144 is found in the Indiana Code 15-3 as amended by the Acts of 1971, Public Law No. 99, Sections 1-2-23; and having given notice and held a public hearing as required by the Acts of 1945, Chapter 120, as found in the Indiana Code 1971, 1-22-2; the Indiana Pesticide Review Board hereby makes the following regulation to be known as Regulation No. 1.

#### REGULATION NO. I

#### DECLARATION OF ADDITIONAL PESIS

- Each of the following forms of plant and animal life and viruses is declared to be a pest under the Act when it is detrimental and/or injurious to man, domestic animals, useful plants, vertebrates, invertebrates, and other useful articles and substances:
  - (a) Mammals, including but not limited to dogs, cats, moles, bats, wild carnivores, and wild herbivores.
  - (b) Birds, including but not limited to starlings, house sparrows, wild pigeons and black birds.
  - (c) Fishes, including but not limited to alewives, sea lampreys, gizzard shad and carp.
  - (d) Amphibians and reptiles, including but not limited to poisonous snakes.
  - (e) Aquatic and terrestrial invertebrates, including but not limited to slugs, snails, and crayfish.
  - (f) Roots and other plant parts growing where not wanted.
  - (g) Viruses, other than those on or in living man and other animals.



# STATE OF INDIANA INDIANA PESTICIDE REVIEW BOARD

WHERSAS. Thallium Sulfate is primarily used for rodent control; and,

WHEREAS, The use of this pesticide has been suspended by Federal Regulation regular application due to the nature of its toxicity, and,

WHEREAS, The uses of this compound are not essential for rodent control he State of Indiana.

#### REGULATION NO. 2

## PRESCRIPTION USE ONLY - THALLIUM SULFATE

Thallium Sulfate is hereby designated as a pesticide for use by prescription only.

It shall be unlawful for any person to use Thallium Sulfate as a pesticide without first obtaining a written permit from the State Chemist.

Thallium Sulfate is prohibited for use for routine pest control. In accordance with the Acts of 1971, Public Law No. 199, Section 2-24, prescription-use permits may be granted by the State Chemist, such action to be taken only when emergency conditions exist and are substantiated to the effect that no other control measure will provide adequate control.

	• •	

# STATE OF INDIANA INDIANA PESTICIDE REVIEW BOARD

WHEREAS, It has been established that certain formulations containing tury compounds are used as pesticides; and,

1

WHEREAS, It has been determined that mercury compounds are extremely long and that certain plants and animals, particularly fish and other aquatic misms, store and accumulate mercury in sufficient quantities to be hazardous ersons, animals, and wildlife other than the pests which these compounds are inded to prevent; and,

WHEREAS, Certain uses of these pesticides have been suspended by Federal lation for regular application due to the nature of their toxicity; and,

WHEREAS, The uses of these pesticides are not essential for pest control in ana.

#### REGULATION NO. 3

# PRESCRIPTION USE PESTICIDES + DESIGNATED MERCURY COMPOUNDS

Pesticides containing alkyl mercury compounds and all other mercury products applied to laundry fabrics and mixed in marine anti-fouling paints are hereby designated as pesticides for use by prescription only.

It shall be unlawful for any person to use pesticides containing said mercury compounds without first obtaining a written permit from the State Chemist.

Said mercury compounds are prohibited for regular pesticide use. In accordance with the Acts of 1971, Public Law No. 199, Section 2-24, prescription-use permits may be granted by the State Chemist, such action to be taken only when emergency conditions exist and are substantiated to the effect that no other control measures will provide adequate control.

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#### Suggested Interim Guidelines on the Use of Aldrin and

#### Dieldrin in Indiana

The Indiana Pesticide Review Board has reviewed the current uses and potential hazards in the use of aldrin and dieldrin. As federal hearings are now in process concerning the future uses of these compounds, the Board believes that an advisory position in the form of a guideline for uses in the immediate future might be most helpful as a preliminary step in reviewing the need for a State Regulation.

The Board recognizes that there are several uses of aldrin and dieldrin that remain essential to practical effective and economical control of certain pests such as termites, wireworms, cutworms, grubs, corn rootworm and plum curculio. The Board also recognizes that these pesticides are long lasting and pose severe hazards to wildlife and the environment when applied in a manner that permits contamination of aquatic resources. Certain aquatic microorganisms, some types of fish and tertain birds that depend on aquatic sources of food may as a result be effected by relatively small amounts of these chemicals in our ponds, streams, lakes and rivers. The extreme long active life of aldrin and dielorin in water makes it imperative for all citizens to take positive steps when using these compounds to prevent contamination of our water resources.

A review of recent data concerning application techniques for aldrin and dieldrin have resulted in the following interim guidelines:

- 1. No aerial applications of aldrin or dieldrin should be advocated either in combination with other pesticides or with fertilizers.
- 2. All soil applications should be thoroughly mixed with the soil at time of or immediately following application.

  Granular formulation should be mineral base materials rather than particles of corn cobs, tobacco stems, nut hulls, or similar materials. Current seed treatment practices where the treated seed is inserted directly into the soil are acceptable.
- 3. In correlation with field soil application, good erosion prevention practices should be simultaneously practiced to avoid the contamination of aquatic environments.
- 4. Termite and other wood destroying pest control practices may continue as presently recommended with the exception that no topical or soil surface applications are recommended for exterior soil areas.

- 5. In those situations, where topical or above ground applications may be necessary to control pests, such as plum curculio, peach tree borer, Christmas tree weevils, selection of aldrin or dieldrin should be made only after it has been determined:
  - (a) That no other chemical of short residual nature will give adequate and less hazardous control.
  - (b) That all possibilities of water contamination have been eliminated or reduced to the minimum.
- The dipping of roots and tops of non-food plans may be continued.
- 7. Mothproofing processes will be permitted when dieldrin is used in a closed system.

## ENVIRONMENTAL DIRECTORY

FIELD TRAIL ASSOCIATION Paul Jamerson 3633 Columbus Avenue Anderson, IN 46014

IZAAK WALTON LEAGUE DEKALB COUNTY
Karen Griggs
R.R. 1, County Road 35
Ashley, IN 46705

LAKE MICHIGAN REGIONAL
PLANNING COUNCIL
Box 208
Beverly Shore, IN 46301

COMMITTEE TO PUBLICIZE
CRISIS BIOLOGY
205 Morrison
Indiana University
Bloomington, IN 47401

NATURE CONSERVANCY
Mobly
911 Meadow Lane
Bloomington, IN 47401

LEAGUE OF WOMEN VOTERS Mrs. Donald Meier 1205 Summit Bluffton, IN 46714

#### **STUFF**

St. Joseph's College Box 772 Collegeville, IN 47978

COLUMBUS WATER & AIR
ASSOCIATION (AWWA)
C. Spear
Box 170
Columbus, IN 47201

INDIANA AUDUBON SOCIETY
C. P. Wise
R.R. #6
Connersville, IN 47331

MAYOR'S COMMISSION ON ENVIRONMENT Dr. William Doemel Wabash College Crawfordsville, IN 47933

IZAAK WALTON LEAGUE Poling 8512 E. 101st Avenue Crown Point, IN 46307

LAKE COUNTY CONSERVATION CLUBS 801 N. Court Street Crown Point, IN 46307

LEAGUE OF WOMEN VOTERS
Mrs. L. Rocher
10412 Jennings Place
Crown Point, IN 46307

'INDIANA CONSERVATION
J. Jankowski
St. Joe College
4721 Indianapolis
East Chicago, IN 46312

GARDEN CLUB
Ms. C. Fisher
1800 Briar Ridge Road
Evansville, IN 47711

TRI-STATE AREA HEALTH PLAN-NING COUNCIL, INC. 210 Locust Street Evansville, IN 47708

IZAAK WALTON LEAGUE
ALPHA CHAPTER PRESIDENT
Purdue Campus
2101 Coliseum Boulevard
Ft. Wayne, IN 46805

LEAGUE OF WOMEN VOTERS Mrs. B. Knight 6505 Stonybrook Ft. Wayne, IN 46815

SPIRE

Concordia Senior College Ft. Wayne, IN 46805



COMMUNITY ACTION TO REVERSE POLLUTION (CARP) 8720 Oak Avenue Gary, IN 46403

INFO NEWSPAPER 1649 Broadway Gary, IN 46402

IZAAK WALTON LEAGUE INDE-PENDENCE HILL CHAPTER 3937 Jackson Gary, IN 46408

IZAAK WALTON LEAGUE INDIANA 5808 E. 10th Avenue Gary, IN 46403

LEAGUE OF WOMEN VOTERS OF GARY

E. Q. Committee 6045 Birch Gary, IN 46403

LITTLE CALUMET RIVER ASSOCIATION 6800 W. 25th Street Gary, IN 46406

PLANNED PARENTHOOD Mrs. S. Larmee 625 Washington Gary, IN 46402

IZAAK WALTON LEAGUE GRIFFITH CHAPTER R. Frost 542 Arbogast Street Griffith, IN 46319

INDIANA AUDUBON SOCIETY
D. Buck
R.R. #1, Box 332
Hamlet, IN 46532

CALUMET COMMUNITY COUNCIL S. M. Olszanski 3930 170th Street Hammond, IN 46323 HAMMOND ACTION COMMITTEE 608 Highland Street Hammond, IN 46320

INDIANA CITIZENS WATER
POLLUTION
Mrs. R. McMinpsen
7616 New Hampshire

Hammond, IN 46323

LAKE MICHIGAN INTER-LEAGUE GROUP

Mrs. N. Doyal Yaney 7412 Magoun Hammond, IN 46324

NORTHWEST INDIANA COMPREHENSIVE HEALTH PLANNING COUNCIL, INC. 8145 Kennedy Highland, IN 46323

GARDEN CLUB
Ms. E. Aldrin
108 N. Guyer Street
Hobart, IN 46342

IZAAK WALTON LEAGUE Swallow 1224 W. 44th Place Hobart, IN 45342

ACRES INC. 1802 Chapman Road Huntertown, IN 46748

IZAAK WALTON LEAGUE T. Dustin 1802 Chapman Road Huntertown, IN 46748

HUNTINGTON ZERO POPULATION GROWTH
O. Dan Killen
R.R. 7
Huntington, IN 46750

ENVIRONMENTAL COALITION OF METRO INDIANAPOLIS Room 401 30 E. Georgia Street Indianapolis, IN 46204

GARDEN CLUB OF INDIANA, INC. Mrs. Thorn 530 Carlyle Place Indianapolis, IN 46201

INDIANA CONSERVATION COUN-CIL INC. 2128 East 46th Street Indianapolis, IN 46205

LEAGUE OF WOMEN VOTERS
Mrs. Thomas Head
17 W. Market Street
Room 619
Indianapolis, IN 46204

NATIONAL COUNCIL OF WOMEN Becker 5621 Beechwood Avenue Indianapolis, IN 46219

IZAAK WALTON LEAGUE
H. Kohnke, President
Agronomy, Purdue University
Lafayette, IN 47907

LIVINGSTON HILLS ASSOCIATION P.O. Box 225
Lafayette, IN 47902

PLANNED PARENTHOOD P.O. Box 1114 Lafayette, IN 47902

AMERICAN CAMPING ASSOCIATION E. F. Schmidt Bradford Woods Martinsville, IN 46151

IZAAK WALTON LEAGUE
Wiseman
327 Johnson Road
Michigan City, IN 46403

PLANNED PARENTHOOD 261 Johnson Building Muncie, IN 47305 AMERICAN ASSOCIATION OF UNIVERSITY WOMEN (AAUW) "This Beleaguered Earth" Calumet Area Branch Mrs. R. Herlocker, Chairman 8528 Schreiber Drive Munster, IN 46321

SAVE THE DUNES COUNCIL Mrs. S. Troy 1512 Park Drive Munster, IN 46321

SOCIETY FOR PRESERVATION & USE OF RESOURCES (SPUR) 801 Elks Road Richmond, IN 47374

AREA PLANNING COMMISSION City-County Building Room 1219 227 W. Jefferson South Bend, IN 46601

INDIANA PUBLIC INTEREST RESEARCH GROUP (INPIRG) Rose-Hulman Institute Box 618 Terre Haute, IN 47803

WABASH VALLEY INT CON 24 South 7th Street Terre Haute, IN 47808

ZERO POPULATION GROWTH
L. Eaton
Department of Life
Science Institute
Terre Haute, IN 47809

ECHO
Taylor University
Upland, IN 46989

INDIANA CONSERVATION COUNCIL Arthur R. Bair R.R. 7 - Box 22 Valparaiso, IN 46383

INDIANA LEAGUE OF WOMEN VOTERS

E. Q. Committee Mrs. D. Trump Route 7, Box 34 Valparaiso, IN 46383

LIFE

Karin Griebel Valparaiso University Union Valparaiso, IN 46383 IZAAK WALTON LEAGUE INDIANA DIVISION Mr. Ted Falls Wheeler, IN 46393

MICHIANA FOR ENVIRONMENT
I. Walters
P.O. Box 82
Wyatt, IN 46595

# Poison Control Centers

City	Name and Address	Telephone	Director and Assistant Director
	INDIANA		
Anderson	Poison Control Center Hickey Memorial Hospital 2015 Jackson St. 46014	(317) 694-2511 Ext. 251	William L. Stephens
Angola	Poison Control Center Cameron Memorial Hospital, Inc. 416 E. Maumee Street 46703	(219) 665-2141	Irene F. Kenyon, R.N. Max White
East Chicago	Poison Control Center St. Catherine Hospital 4321 Fir Street 46312	(219) 397-3080	S. G. Zallen, M.D. E. L. Broomes, M.D.
Elkhart	Poison Control Center Elkhart General Hospital 600 East Blvd. 46518	(219) 523-5350 Ext. 215	C. R. Yoder, M.D. Forest M. Kendall, M.D
Evansville	Poison Control Center Deaconess Hospital 600 Mary Street 47710	(812) 426-3405	Robert Arendell, M.D.
	Poison Control Center St. Mary's Hospital 3700 Washington Avenue 47715	(812) 477-6261	Julian Present, M.D.
	Poison Control Center Welborn Memorial Baptist Hospital 412 S. E. 4th Street 47713	(812) 423-3103 Ext. 336 or 337 Night Ext. 253 or 254	Richard F. Emig
Fort Wayne	Poison Control Center St. Joseph Hospital 700 Broadway 46805	(219) 742-4121 Ext. 211	Jill Beatty, R.N.
	Poison Control Center Parkview Memorial Hospital 2200 Randalia Drive 46805	(219) 484-6636 Ext. 530	William O. Wissman, R. Ph. Grace Kammeyer, R.N.
Frankfort	Poison Control Center Clinton County Hospital 1300 Jackson Street 46041	(317) 654-4451 Ext. 22 Night Ext. 25	Frederick W. Flora, M.D.
Gary	Poison Control Center Methodist Hospital of Gary, Inc. 1600 W. 6th Avenue 46402	(219) 882-9461 Ext. 709	Virginia Jasperson, R.N. Gordon J. Rowan, R.N.
Goshen	Poison Control Center Goshen General Hospital 200 High Park Avenue 46526	(219) 533-2141 Ext. 356	Marvin Marquardt, D.O. Caro Yoder, M.D.
Hammond	Poison Control Center St. Margaret Hospital 25 Douglas St. 46320	(219) 932-2300 Ext. 700	Arthur Branco, M.D.
Indianapolis	Poison Control Center Marion County General Hospital 960 Locke Street 46202	(317) 630-7351	John Miller, M.D.
	Poison Control Center Methodist Hospital of Ind., Inc. 1604 N. Capitol Avenue 46202	(317) 924-8355	Maxine Bush, R.N.
Kokomo	Poison Control Center Howard Community Hospital 3500 S. Lafountain 46902	(317) 453-0702 Ext. 233 or 232	William M. Graff, R.Ph.



### oison Control Centers (continued)

ty	Name and Address	Telephone	Director and Assistant Director
	INDIANA		
fayette	Poison Control Center St. Elizabeth Hospital 1501 Hartford Street 47904	(317) 742-0221 Ext 421	Sister M. Laurine Paul Hess, Associate
	Poison Control Center Purdue University Student Health Center 47907	(317) 749-2441 Ext. 245 or 743-3494	L. W. Combs, M.D. W. H. Altier, M.D.
Grange	Poison Control Center La Grange County Hospital Route 1 46761	(219) 463-2144	D. L. Mattox, M.D.
nonsc	Poison Control Center Witham Memorial Hospital 1124 N. Lebanon Street 46052	(317) 482-2700 Ext. 44	T. L. Dillon, D.O. B. Martz, R.N.
ıdison	Poison Control Center Kings Daughter Hospital 112 Presbyterian Avenue 47250	(812) 265-5211	Jean Grimsley, R.N. Betty Jeffrey, R.N.
rion	Poison Control Center Mation General Hospital Wabash and Euclid Ave. 46952	(317) 664-5453	R. M. Hummel, M.D.
shawaka	Poison Control Center St. Joseph Hospital 215 W. 4th Street 46544	(219) 259-2431	H. A. Staunton, M.D.
ıncie	Poison Control Center Ball Memorial Hospital 2401 University Avenue 47303	(317) 284-3371 Ext. 241, 242	Dorothy Downing, R.N.
tland	Poison Control Center Jay County Hospital 505 W. Arch Street 47371	(317) 726-7260 or 726-4440 Ext. 67	F. E. Keeling, M.D. Raymond Minch
hmond	Poison Control Center Reid Memorial Hospital 1401 Chester Blvd. 47374	(317) 962-4545 Ext. 222	Olin K. Wiland, M.D.
Ibyville	Poison Control Center William S. Major Hospital 150 W. Washington Street 46176	(317) 392 <b>-3</b> 211	Carolyn Rosenfeld, R.N.
th Bend	Poison Control Center Memorial Hospital of South Bend 615 N. Michigan Street 46601	(219) 284-7458	Phillip Myers, M.D.
	Poison Control Center St. Joseph's Hospital 811 E. Madison Street 46622	(219) 23 <b>4-</b> 2151 Ext. 264	Bernard S. Vagner, M.D.
te Haute	Poison Control Center Union Hospital, Inc. 1606 N. 7th Street 47804	(812) 232-0361 Ext. 397 or 398	William W. Krieble, M.D.

