



Maryland Department of Agriculture

Office of Plant Industries and Pest Management

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor
Joseph Bartenfelder, Secretary
James P. Eichhorst, Deputy Secretary

Pesticide Regulation

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PESTICIDE REGULATION SECTION

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Mr. Karl Aro

Maryland General Assembly
Office of the Executive Director
Legislative Services Building
90 State Circle
Annapolis, MD 21401

Dear Mr. Aro:

The Maryland Pesticide Registration and Labeling Law requires the Maryland Department of Agriculture to develop a comprehensive pesticide data program and, in accordance with Section 2 – 1312 of the State Government Article, to provide the General Assembly with an annual report of pesticide data for Maryland.

As required by the State Government Article, I am sending the Department of Legislative Reference five (5) copies of the Pesticide Data Report for 2015. Unfortunately, inadvertently I had sent copies of the 2016 Maryland Pesticide Data Report rather than the 2015 Report. I apologize for any confusion I may have caused.

Sincerely,

Dennis W. Howard
Program Manager

DH:JK
Enclosures



MARYLAND
PESTICIDE DATA REPORT
2015

MARYLAND
DEPARTMENT OF AGRICULTURE

Lawrence J. Hogan, Jr.

Governor

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MARYLAND PESTICIDE DATA REPORT FOR 2015

1. INTRODUCTION

The Maryland Pesticide Registration and Labeling Law (Title 5, Subtitle 1, Agriculture Article Ann. Code Md), Section 5-102(D), requires the Secretary of Agriculture to develop a comprehensive pesticide data program and to provide the General Assembly, in accordance with Section 2-1246 of the State Government Article, a report on pesticide data. The annual data program is to include the number and types of enforcement actions taken and figures for the number, types and uses of pesticides in Maryland.

A pesticide is defined generally by the state and federal law as any substance, or mixture of substances, intended to prevent, destroy, repel, or mitigate a pest. There are at least 21 different classes (types) of pesticide based on their target pests, including algacide = target pest is algae; avicide = birds; bactericide = bacteria; fungicide = fungi; growth regulator = insect or plant growth; herbicide = weeds; insecticide = insects; rodenticides = rodents; and slimicide = slime molds.

II. BACKGROUND

The Maryland Department of Agriculture (MDA) is the State Agency responsible for regulating the distribution, sale, storage use and disposal of pesticides in Maryland. The Department cooperates with other State agencies and institutions and federal agencies to conduct the pesticide education, regulatory and enforcement programs. Departmental activities and responsibilities are described briefly, as follows:

A. Pesticide Regulation Section

1. Enforcement Program

The Pesticide Regulation Section of the Maryland Department of Agriculture enforces federal (Federal Insecticide, Fungicide, and Rodenticide Act or FIFRA) and state (Pesticide Applicators Law) pesticide use laws and regulations. Under the enforcement program, MDA conducts routine inspections of licensed pesticide businesses, public agencies and restricted use pesticide dealers. Inspections include a review of pesticide application records, restricted use pesticide sales records, safety equipment, pesticide storage areas, application equipment, pest control vehicles, and anti-siphon devices.

Use observations are conducted to observe actual pesticide applications to field crops, structures, lawns and ornamental to ensure compliance with the pesticide label directions and state and federal regulations.

Pesticide misuse, incidents, and consumer complaints are investigated. In the event of a violation, the Department has the authority to suspend, revoke or deny a license or certificate and to assess a civil penalty. As part of a Cooperative Agreement with the U.S. Environmental Protection Agency (EPA), the Pesticide Regulation Section conducts inspections at Pesticide Producer Establishments, Marketplaces, Worker Protection, Container-Containment and pesticide Import inspections. EPA also refers complaint investigation and special initiative inspection to our Department for investigation.

2. Applicator Certification and Training Program

The Pesticide Regulation Section certifies private and commercial pesticide applicators to verify the competence of the applicator. Private applicators (farmers) are given closed-book written exams to become certified for a three year period. Certification authorizes them to purchase and apply restricted use pesticides on their own property for the purpose of producing agricultural commodities. Certificates are renewed by MDA after submission of proof of updated training on the use of pesticides. MDA certifies commercial applicators (employee of pest control businesses and public agencies) who meet minimum standards of experience or education requirements and who have passed written exams in specific pest control categories. Commercial applicator certificates are renewed annually, after required training has been obtained in order to maintain their level of competency. MDA approves and monitors applicator recertification training courses and sets minimum standards for approval of courses for recertification purposes. Private and Commercial applicator training session are coordinated with county extension agent who are provided training materials such as slide sets, videos and educational brochures by MDA. In addition, MDA registers employees who work under the supervision of certified commercial applicators. Prior to registration with the Department, and within 30 days of employment, the employee must be trained according to standards developed by MDA.

MDA issues licenses and permits to pesticide businesses or public Agencies that apply general or restricted use pesticides. Dealers who sell Restricted Use Pesticides must obtain a permit issued by MDA to do so. MDA

Issues licenses to pest control consultants who either identify pests or Recommend pesticides or other techniques for the purpose of controlling pests.

3. Technical Information and Collection and Dissemination Program

The Pesticide Regulation Section provides information to Pesticide Applicators, Restricted Use Pesticide Dealers, federal, state, and local agencies and the general public on issues concerning pesticide use and pesticide regulation. Training materials, informational brochures and fact sheets are developed for pesticide applicators in order to provide compliance assistance when new guidelines or regulation are implemented. A series of "Pesticide Information Sheets" was developed to provide information on pesticide issues and regulations to consumers and pesticide applicators. The Pesticide Regulation Section developed a consumer Information Bulletin for use by licensed lawn and landscape firms for distribution to their customers. In addition, the Section has compiled pesticide product pesticide pesticide product label information that must be given to all pest control customers to inform them of any safety precautions or environmental hazards associated with each pesticide uses. A listing of pesticide sensitive individuals is available so that these listed individuals can receive advance notification prior to lawn care and ornamental pesticide applications being made to adjacent properties by license pest control businesses or public agencies. Maryland is one of only twelve (12) state that have a mandated pesticide sensitive individual notification program.

The Department provides information to applicants on where and how to obtain study materials for certification and conducts certification examination sessions every other month in three regional locations. Private Applicators (farmers applying Restricted Use Pesticides) receive exam study materials provided by the MDA and are offered certification examinations in county extension offices on an as-needed basis.

Homeowners are give information on licensing requirements for pest control Firms, as well as, information on termite inspections and control, proper pesticide Handling and alternatives to chemical pest control. Table top displays, brochures, and "Pesticide Information Sheets" have been developed for use at various trade shows, grower meeting, and the State Fair.

During 2015, MDA continued to expand the Pesticide Regulation Section's Home Page on our website so that information on pesticide business licensing Requirements, certification exam dates, recertification training sessions, pesticide

container recycling dates, Pesticide Information Sheets and, Integrated Pest Management in School is available on the Internet. Consumers can now electronically file complaints, report pesticide incidents, download application forms to apply for certification, request employee I.D. card and request additional information about pesticide regulations and management programs. An added feature to the Section's website is a searchable database of registered pesticide products, licensed pest control firms and pesticide applicators.

4. Water Quality Protection, Endangered Species Protection and Worker Protection Program

MDA is involved in four Federal (EPA) regulatory programs that are being implemented through the states. The Department has developed as State water quality management plan for managing the use of pesticides to protect water resources as part of its Water Quality Protection Program. MDA monitors EPA's "Pesticide of Interest" list annually to maintain a list of "Pesticide of Concern" within Maryland. Under the Endangered Species Protection Program, MDA is responsible for programs to protect federally listed endangered species that may be harmed by the use of certain pesticides. MDA also implements and conducts the federal Worker Protection Standard Program to protect certain pesticide users, handlers and farm workers from exposure to pesticides. MDA also inspects agricultural facilities to ensure bulk pesticide storage tanks, containment structures and mixing/loading pads meet state and federal requirements.

5. Special Programs

The Pesticide Regulation Section conducts special programs relating to pesticide management, when funding is available. These special programs address specific pesticide issues, environmental concerns or regional situations that require additional focus and attention beyond routine programs. Special programs may include development of informational materials and pesticide educational programs, participation in pesticide monitoring programs and, coordination of pesticide container and unusable pesticide disposal programs should funding be available.

6. Chesapeake Bay Programs

MDA has been an active participant in efforts to restore the Chesapeake Bay.

Pesticide management commitments were incorporated into the Toxic 2000 Strategy as part of the Chesapeake 2000 Agreement and include commitments for adoption of Integrated Pest Management Practices.

7. Integrated Pest Management In Schools

The Pesticide Regulation Section has been conducting an Integrated Pest Management in Public Schools Program since 1995, in cooperation with the Maryland State Department of Education, Maryland Association of Boards of Education, county school systems, University of Maryland, Maryland State Pest Control Association and, EPA. The Purpose of the program is to review each school system's pest management practices and to provide technical assistance to Maryland public school systems to facilitate the implementation of IPM programs in order to reduce the risk of exposing students and staff members to pesticides. Mandatory IPM programs have been required in Maryland public schools and, on school grounds since 2000.

B. State Chemist Section

1. Registration

The State Chemist Section (SCS) is responsible for registration of all Pesticide products distributed, sold, or transported in Maryland. The purpose for product registration is to ensure the sale and distribution of commodities that are effective and safe for humans and the environment. In 2105 the SCS registered 12,511 products.

2. Inspection

Product quality and safety are determined by chemical analysis of products sampled by the Section's staff which inspects, on a regular schedule, warehouses and retail outlets. During 2015, 233 products were sampled for formulation analysis. SCS inspectors also collected 325 samples of fruit juices, produce, fruit and processed food to be analyzed by USDA/FDA to aid in establishing pesticide tolerances in foods consumed by children and infants.

3. Chemical Analyses

In 2015 the Section analyzed thirty-six MDA/EPA samples for pesticide investigations.

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III. PESTICIDE REGISTRATION DATA AND ENFORCEMENT

The Pesticide Registration and Labeling Law requires a distributor of pesticide products to annually register the products with MDA's State Chemist Section (SCS) before distribution in the State. The State Chemist Section utilizes a computerized registration process, which has expedited and improved the accuracy of the registration process and has enabled the Section to compile more information about registered pesticide products.

During 2015, pesticide product registration data include

1. Number of registrants = 1,049
2. Number of pesticide products registered = 12,643

As a result of the State Chemist Section's enforcement and registration program (pesticide dealer inspections, product sample collection, chemical analysis and label review), the following regulatory actions were taken against pesticide products violating the State Pesticide Registration and Labeling Law:

- Market place samples collect and analyzed = 231
- Total chemical analyses = 246
- Non-registered product (product offered for sale but not registered with the Department) Stop Sale Order = 7

In support of the Pesticide Regulation Section's enforcement activities and, for other State agencies, the SCS laboratory analyzed samples (soil, water, tissue, swabs, product, etc.) for pesticide residues. The following is a summary of the analyses:

Investigation Samples (pesticide misuse, accidents)

Samples analyzed = 42

Total number of analyses = 356

IV. PESTICIDE USE ENFORCEMENT INSPECTION AND ACTIONS

During 2015, inspections of licensed pest control businesses and public agencies were conducted as follows:

- | | |
|---|-------|
| 1. Routine business inspections | = 470 |
| 2. Routine public agency inspections | = 132 |
| 3. Pesticide Dealer Inspections | = 84 |
| 4. Pesticide Use Observations | = 77 |
| 5. Pesticide Samples collect for analysis | = 246 |
| 6. Application records reviewed | = 562 |

Violations detected during pest control business inspections are summarized in Table 1 and include;

- | | |
|---|-------|
| 1. Number of businesses and public agencies with violations | = 338 |
| 2. Unregistered employee violations | = 12 |
| 3. Records incomplete and inaccurate | = 72 |
| 4. Vehicles not properly identified | = 21 |
| 5. No anti-siphon device | = 4 |
| 6. No First Aid/Safety Equipment violations | = 7 |
| 7. No customer information | = 18 |

During 2015, MDA assessed penalties against individuals or firms for violating the Maryland Pesticide Applicators Law and or Regulations. The actions taken are summarized, as follow:

1. Consumer Complaint Investigations = 21 (Investigations initiated as a result of a written complaint from consumers regarding pest inspections or pesticide misuses).
2. Investigational Conferences = 3 (Informal meeting held with licensee and/or complainant to gather additional information about an ongoing investigation or to alert licensee to a situation requiring immediate action.
3. Administrative Hearing = 0 (Formal Hearing before an Administrative Law Judge, because magnitude of violation warrant it or, because of a repeat violation by the firm or individual).

4. Penalties Assessed:

Notices of Warning = 131 (Certified Letter notifying licensee, permittee, or individual that they have committed a violation or, that a situation needs to be corrected).

Field Notice = 17 (Violations noted by field Inspector during a routine inspection. Licensee, permittee or individual is informed of an infraction and is given a compliance period to correct the infraction).

Criminal Action = 0 (Action taken against and individual or company that is operating without a pesticide business license or who has repeatedly violated pesticide laws. Individual in prosecuted through county court system).

Civil Penalties = 4 (A civil penalty may be assessed in lieu of or, in addition to a suspension or revocation of a license, permit, certificate, or employee registration card. The Secretary may impose up to a \$2,500 civil penalty per violation).

Licensees were assessed a total of \$1,950.

V. PESTICIDE APPLICATOR CERTIFICATION AND TRAINING PROGRAM

During 2015, the following licensing and certification activities were conducted and are summarized below.

1. Pesticide businesses licensed	= 2,341
2. Public agencies permitted	= 325
3. Pesticide dealer permits	= 150
4. Pest control applicators certified	= 4,528
5. Private applicators certified	= 1,026
6. Commercial applicators examined	= 699
7. Total examinations administered	= 2,043

In order to maintain applicator certification, private applicators must participate in Departmental approved training once every three years. Commercial applicators of pesticides must attend an annual recertification training session. The following data indicates the training held in 2016.

1. Commercial applicator training sessions held	= 567
2. Private applicators training session held	= 108

VI. PESTICIDE USE DATA

The Pesticide Regulation Section regulates the use of pesticides in Maryland (See Section II). An essential factor in conducting effective regulatory or educational programs on pesticides is data relating to the quantity and distribution of pesticide product usage in the State. It is a costly and complicated process to collect pesticide usage data. Therefore, the Department conducted pesticide use surveys on a 3 – year cycle, beginning in 1982 and followed with Annual surveys for 1985, 1988, 1991, 1994, 1997, and for 2000. Due to limited resources (funding and personnel), the Department was limited to conducting additional pesticide usage Surveys in 2004, 2011 and 2014. The data was compiled by the National Agricultural Statistics Services (NASS), an agency of the U.S. Department of Agriculture, in cooperation with MDA. The Department contract with NASS to conduct the surveys and to provide final data.

Maryland is unique in having such extensive pesticide use data, as no neighboring state has similar data. These data meet the commitment made by Maryland as part of the Chesapeake Bay Agreement. In addition, the data has been used in a variety of ways, including as a basis for conducting surface water surveys or ground water surveys and, as a basis for developing state pesticide management plans to deal with pesticides with a potential to be a problem in water sources. MDA is planning on contracting with NASS to conduct future pesticide usage surveys.

VII. WATER QUALITY PROTECTION, ENDANGERED SPECIES PROTECTION AND, WORKER PROTECTION PROGRAM

MDA, as state lead agency for pesticide management, is responsible for developing a pesticide Management Plan (PMP) to protect water quality resources. The Pesticide Regulation Section has participated in EPA sponsored ground water protection training courses on pesticide monitoring and wellhead protection in order to obtain information and guidance on developing Maryland's PMP. The PMP is one facet of an overall comprehensive State Ground Water Protection Program (CSGWPP) which includes all state programs affecting ground water resources of the State.

MDA continues to support the endangered species protection program, initiated in 1992, to protect the Maryland Darter from adverse effects due to pesticide use. Informational brochures were distributed to growers, commercial and private applicators, as well as, pesticide dealers that outlined the program and listed measures recommended for protection of federally listed endangered species.

MDA continues to disseminate information regarding the new Federal Worker Protection Standards. Pesticide Regulation Section Inspectors continue to assist farmers in understanding the requirements of the federal program.

VIII. SPECIAL PROGRAMS

MDA continues to conduct an empty pesticide contain recycling program in Maryland. During 2016, the MDA Pesticide Container Recycling Program collected and recycled 25 tons of plastic for recycling.

IX. INTEGRATED PEST MANAGEMENT IN SCHOOLS

MDA continues to promote and implement the Integrated Pest Management (IPM) Program in Maryland's Public Schools. Legislation was passed in 1999 that expanded the 1998 law to include pesticide use on school grounds. Schools are required to provide notification to parents, students and, staff of pesticide applications to school buildings and on school grounds. MDA's Pesticide Regulation Section staff reviewed and approved revised IPM plans that incorporated programs for managing pest problems on school grounds, and provided technical assistance in the development of the plans. All of Maryland's Public Schools have fully implemented their IPM programs. MDA Inspection staff ensure continued compliance with the IPM regulations by conducting inspection as the schools. A total of 47 schools were inspected in 2015.

APPENDIX A
PESTICIDE REGULATION SECTION ACTIVITIES 2013 - 2015

	2013	2014	2015
Pesticide Businesses Licensed	1,728	1,809	1,842
Not-For-Hire Business License	173	156	173
Commercial Pest Control Applicators certified in one or more Category	3,634	3,377	3,406
Registered Personnel Employed by Licensed Business and Public Agencies	7,533	7,360	7,392
Public Agency Permits Issued	323	315	315
Public Agency Applicators Certified In One Or More Pest Control Categories	1,042	1,010	1,010
Private Applicators Certified To Date	3,275	3,246	3,345
Dealer Permits Issued	152	148	148
Applicator Certification Examination Session Held	18	18	18
Individuals Taking Certification Examinations	850	764	758
Number of Businesses Inspected	911	894	1,099
Number of Businesses with Violations	344	274	277
Unregistered Employee Violations	13	21	13
Record Incomplete or Inaccurate Violations	98	162	96
Vehicles Not Properly Identified Violations	30	43	24
No Antisiphon Device Violations	14	20	8
No First Aid/Safety Equipement Violations	11	6	4
Incomplete Or No Customer Information Violations	13	11	13
Pesticide Dealer Inspections	78	77	79
Pesticide Application Records Reviewed	911	911	983
Hearings And Investigational Conferences Held	2	2	3
Consumer Complaints Investigations	42	40	36
Pesticide Use Observations	71	27	75
Pesticide Samples Collected for Analysis	50	48	52
Market Place Inspection Conducted	31	32	30
Pesticide Producer Establishment Insepctions Conducted	30	32	26
Container/Containment Inspections Conducted	9	9	9