# AAPCO 2005 Pesticide Drift Enforcement Survey Report

## **2005 AAPCO Pesticide Drift Enforcement Survey**

#### I. Survey Request:

AAPCO was asked by a number of AAPCO members as well as attendees at the October 2004 *International Conference on Pesticide Application for Drift Management*, to conduct a "Drift Survey" of the State Pesticide Regulatory Lead Agencies. The survey was to be similar to the AAPCO surveys in 1996 and 1999.

#### II. Methods:

Members of the AAPCO Committee on Off Target Movement of Pesticides cooperatively developed the questions for this 2005 survey. Important input from members of the SFIREG Pesticides Operations Management Committee contributed to the drafting of appropriate and desired questions. Comments received as a result of conducting the 1996 and 1999 surveys were relied upon in decisions to include same or similar questions, or alternatively, in asking a question in a significantly different way.

### **III.** Participation:

State Lead Agencies (SLAs) reported again that substantial expenditure of staff time and other resources were necessary in order to complete the survey. Following is a list of states that provided data for the 2005 survey.

Alaska	Illinois	Nebraska	South Carolina
Arizona	Indiana	Nevada	South Dakota
Arkansas	Iowa	New Mexico	Tennessee
California	Kansas	New York	Utah
Colorado	Kentucky	North Carolina	Vermont
Delaware	Louisiana	North Dakota	Virginia
Florida	Maryland	Ohio	Washington
Georgia	Michigan	Oklahoma	West Virginia
Hawaii	Minnesota	Oregon	Wisconsin
Idaho	Mississippi	Pennsylvania	Wyoming

#### **IV. Strengths & Limitations:**

Many of the following comments are the same as were offered in regard to the 1996 and 1999 surveys.

- States answered questions "as best they could".
- Individual states accept, investigate and enforce pesticide drift complaints in many different ways.
- States have varying data base systems for recording drift complaint and enforcement data.
- Definitions, data entry, design of databases, and data utilization vary significantly among the states.

- Some states offered complete answers/data to all survey questions; some only partial responses to some or all of the survey questions.

- Some data are estimates.
- Some states have no specific violation for off-target drift.
- Some states track and report only "serious" drift violations.
- One state does aerial drift investigations & forwards results to the state aerial board for enforcement.

#### V. Recognition of Team:

The 2005 AAPCO Survey resulted from the hard work and voluntary efforts of Leo Reed and Berly Nguyen, both on staff at Office of the Indiana State Chemist.

**NOTE:** SLA responses were entered into a Microsoft Excel spreadsheet. If you are interested in individual state survey data, you can request a copy of the spreadsheet from Dave Scott at scottde@purdue.edu or download it directly from the AAPCO website http://aapco.ceris.purdue.edu/htm/survey.htm.

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2002:	1674 (These are totals for all respondents)
2003:	1676
2004:	1705

2. How many of your agency's drift investigations were (1) not confirmed for pesticide drift, (2) confirmed for pesticide drift but no enforcement actions were taken, and (3) confirmed for pesticide drift and enforcement actions were taken?

	Drift Not Confirmed	Drift Confirmed But No Enforcement Action*	Drift Confirmed & Enforcement Action Taken
2002:	744	175	670
2003:	788	202	589
2004:	785	213	610

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\* This would include cases where the responsible applicator could not be identified, where the pesticide label may not have been clearly violated, where state/tribal laws & rules may not have allowed for enforcement action, etc.

3. How many of the confirmed drift occurrences involved pesticide applications to the following targets?

	Ag Crops	Non-Ag	Right-of-Ways	Other
2002:	607	121	79	42
2003	524	135	97	36
2004:	556	117	77	33

4. How many of the confirmed drift occurrences involved drift to the following non-target sites?

	Ag Crops	Lawn & Landscape	Humans	Animals	Endangered Species	Aquatic
2002:	328	345	115	25	3	15
2003	284	325	90	21	4	19
2004:	289	324	99	20	2	19

5. How many of the confirmed drift occurrences involved applications made by the following applicators?

	Commercial Applicators (For hire)*	Commercial Applicators (Not for hire; in- house business; government)*	Certified Private Applicators (Farmers, growers)*	Uncertified Applicators	Unknown
2002:	423	29	185	57	144
2003	402	51	153	51	108
2004:	446	41	176	47	81

\* This includes individuals (including registered technicians) working under the supervision of these certified applicators.

6. How many of the confirmed drift occurrences involved applications by the following method?

	Aerial	Ground						
		Boom Sprayer	Air Blast	Hand-Held Sprayer	Chemigation	Other		
2002:	244	342	45	58	5	23		
2003	237	302	34	83	3	35		
2004	260	342	44	66	3	31		

7. List the five (5) pesticide active ingredients most commonly involved in the confirmed occurrences.

	1st	2nd	3rd	4th	5th
2002:	2,4-D	<mark>glyphosate</mark>	malathion	atrazine	pendimethalin
2003	2,4-D	<mark>glyphosate</mark>	<mark>dicamba</mark>	atrazine	picloram
2004:	2,4-D	<mark>glyphosate</mark>	dicamba	atrazine	paraquat

8. How many of the following enforcement actions were taken for confirmed drift occurrences? Count each action that applies for the drift violation, even if more than one enforcement action is taken for each drift occurrence. (*NOTE: Enforcement actions are often concluded in subsequent years, and some actions may be open or pending. Simply report actions taken/concluded in each year.*)

	Written Warning	Administrative Hearing	Fine Assessed	Civil Complaint	Criminal Complaint	Referral to US EPA	License/Certificate Suspension/ Revocation	Other
2002:	375	63	237	158	1	1	27	33
2003	313	63	209	131	0	1	13	21
2004:	385	76	248	128	0	3	13	36

9. How many of the actions in #8 above involved repeat drift offenders within the last three years?

	Written Warning	Administrative Hearing	Fine Assessed	Civil Complaint	Criminal Complaint	Referral to US EPA	License/Certificate Suspension/ Revocation	Other
2002:	49	31	55	62	1	0	14	1
2003	47	12	40	52	0	0	5	2
2004:	73	26	55	74	0	0	6	1

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10. Since 2001 have there been changes to your state/tribal pesticide laws or regulations that have changed the way you respond to, investigate, or enforce drift complaints or violations? If yes, please provide details.

NV- policy change; "avoid drift" language on label no longer considered advisory language.

KS- routinely screen sensitive crops for a.i.'s that can cause synthetic auxin symptoms.

ND- added reg. language preventing off-target discharges & application when atmospheric conditions favor drift ; minimize exposure to animals& precautions to prevent application when humans are present in target and adjacent areas.

LA- emergency reg. adding restrictions on 2,4-D use in areas where sensitive crops grown.

WA- amended penalty matrix reg. to increase penalties for repeat offenders.

AZ- added reg."A person shall not allow drift that causes any unreasonable adverse effects." Defined buffer zones, contamination, direct release, drift, unreasonable adverse effect, child care facility & school.

CA- amended violation class designations & increased civil penalty ranges; amended law to allow county commissioners to pass county regs. for agricultural pesticide use within ¼ mile of a school.

TN- amended legislation regarding aerial applicators.

IN- added reg. "A person may not apply a pesticide in a manner that allows it to drift from the target site in sufficient quantity to cause harm to a nontarget site." Defined drift, nontarget site & sufficient quantity to cause harm.