

A MODERN TALE OF THE FOX GUARDING THE HEN HOUSE: THE INHERENT CONFLICT OF INTEREST THAT EXISTS WHEN PESTICIDE DISTRIBUTORS EMPLOY PEST CONTROL ADVISERS

I. INTRODUCTION

In California, when agricultural growers want to apply pesticides to their crops, they are required to first obtain a recommendation from a licensed Pest Control Adviser (“PCA”).¹ Imagine you are a grower and in need of such a recommendation. A PCA visits your property to determine what type of chemical you need and how much of it is required to keep your precious crops protected from pests that could destroy your profit. The PCA tells you that he just so happens to sell the exact pesticide that he has recommended for your crop. This is a common scenario experienced by farmers considering that nearly ninety percent of all PCAs are employed by agricultural chemical distributors and sell the very products they recommend to farmers.² In fact, a substantial number of these company affiliated PCAs pocket a hefty commission for selling their employers’ products.³ This presents an extraordinary conflict of interest: PCAs employed by pesticide distributors provide pest control advice that is biased toward the profit of their employers and also aimed at earning a commission.⁴

The incentives for company affiliated PCAs to sell their employers’ product are substantial because their job security, income, and often bonuses are all dependent upon the promotion and sale of their company’s pesticides.⁵ For some farmers, this conflict of interest leads

¹ JILL LINDSEY HARRISON, *PESTICIDE DRIFT AND THE PURSUIT OF ENVIRONMENTAL JUSTICE* 63 (MIT Press, 2011); KEITH WARNER, *AGROECOLOGY IN ACTION: EXTENDING ALTERNATIVE AGRICULTURE THROUGH SOCIAL NETWORKS* 110 (MIT Press 2007).

² HARRISON, *supra* note 1, at 63.

³ *Id.*

⁴ *See id.* at 64.

⁵ *See* Darwin C. Hall, *The Profitability of Integrated Pest Management: Case Studies for Cotton and Citrus in the San Joaquin Valley*, 23(4) BULL. OF THE

to a very destructive outcome.⁶ For example, in 2010, a PCA employed by agricultural chemical giant Britz-Simplot recommended and sold a product to G & M Farms, representing that it had been tested and was safe for use on blueberries;⁷ however, this was a false representation.⁸ As a result of using the product in the manner and amount recommended by the PCA, most of G & M Farms' blueberry crop was rendered completely unmarketable or diminished in quality.⁹ Although both the company affiliated PCA and the pesticide distributor knew or should have known that this particular pesticide was not safe for use on blueberries, this information was never disclosed to G & M Farms.¹⁰

Despite the potential for harm, the conflict of interest created when pesticide distributors employ PCAs has survived virtually unregulated since as early as the 1950s, when Integrated Pest Management ("IPM") pioneer Robert van den Bosch was just beginning his career as an entomologist.¹¹ He waged a controversial war against company affiliated PCAs, declaring: "[p]erhaps the greatest absurdity in contemporary pest control is the dominant role of the pesticide salesman, who simultaneously acts as diagnostician, therapist, nostrum prescriber, and pill peddler."¹² Van den Bosch's book, *The Pesticide Conspiracy*, was published nearly forty years ago and many of his concerns regarding company affiliated PCAs remain relevant in the

ENTOMOLOGICAL SOC'Y OF AM. 267, 267–268 (1977) (explaining that company affiliated PCAs have a direct interest in the sale of pesticides because they are employed by the chemical companies).

⁶ See *infra* Part IV.A–C.

⁷ G & M Farms, Inc. v. Britz-Simplot Grower Solutions, LLC, No. 1:13CV0368(LJO MJS), 2013 WL 2360896 at *1 (E.D. Cal. May 29, 2013).

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*

¹¹ Robert Wuliger, *Robert van den Bosch: Stop the Pesticide Conspiracy*, MOTHER EARTH NEWS (July/August 1979), <http://www.motherearthnews.com/nature-and-environment/robert-van-den-bosch-the-pesticide-conspiracy-integrated-pest-management-zmaz79jazraw.aspx#axzz3HwkorYWT>; see 7 U.S.C.A. § 136r-1 (West 1996) (defining IPM as a method of pest control that uses both biological and chemical devices to better conserve the environment and reduce economic and health hazards).

¹² ROBERT VAN DEN BOSCH, *THE PESTICIDE CONSPIRACY: AN ALARMING LOOK AT PEST CONTROL AND THE PEOPLE WHO KEEP US "HOOKED" ON DEADLY CHEMICALS* 93 (Doubleday & Company 1978).

modern agricultural world.¹³ Decades later, most PCAs are employed by the pesticide industry and have a fundamental conflict of interest.¹⁴

This Comment will explore the inherent conflict of interest that exists when pesticide distributors employ PCAs, the destructive consequences which result from the conflict, and how eliminating company affiliated PCAs will undoubtedly reduce pesticide use, pesticide residues, and the health, safety, and environmental concerns caused by under-regulation and over-prescription of chemical pest control. Part II provides background information on the importance of pest control and the different options for implementing it, and discusses the licensing requirements for becoming a PCA. Part III will examine the existing conflict of interest prohibition for government employees who make recommendations, and the absence of a similar prohibition imposed on PCAs operating in the private sector. Part III will also draw parallels between the current pest control adviser conflict of interest and a similar conflict resolved long ago in the medical field. Part IV will describe the harmful effects of the conflict of interest, including the over-prescription and over-use of pesticides, as well as the pesticide distributors' ability to avoid liability for such harms. Part V will provide recommendations for eliminating the conflict of interest and promoting less hazardous, more sustainable methods of pest control. Finally, Part VI will conclude that removal of the conflict is imperative in reducing the over application and misapplication of toxic chemicals in agriculture and that a continued failure to address the problem will result in prolonged harm to farmers, the public, and the environment.

II. HISTORICAL BACKGROUND AND REGULATION OF THE CERTIFIED PEST CONTROL ADVISER

A. *The Use of Pesticides*

Traditionally, pest control was primarily exercised through the use of broad-spectrum insecticides, chemicals that, because of their indiscriminate toxicity, posed serious health and safety hazards to

¹³ See Lester E. Ehler & Dale G. Bottrell, *The Illusion of Integrated Pest Management*, 16 ISSUES IN SCI. & TECH. (2013), available at <http://www.issues.org/16.3/ehler.htm> (explaining the inherent conflict of interest that exists when PCAs are employed by pesticide distributors).

¹⁴ *Id.*

people and the environment.¹⁵ With this method of pest control, “one turns on the chemical switch, sits back, and lets the insecticides do the job.”¹⁶ Van den Bosch described this as “the lazy man’s approach, which characterizes so many aspects of modern life and for which society and the environment pay dearly.”¹⁷

Over time, pesticides have been linked to a multitude of health issues, ranging from minor irritations to cancer and, in some rare instances, even death.¹⁸ There are an estimated 300,000 pesticide poisonings in the United States each year, resulting in an abundance of ailments, including: memory loss; communication disorders; learning impairment; respiratory problems such as asthma, sinusitis and bronchitis; reproductive dysfunction; and cancer.¹⁹ These risks are especially high for farm workers and pesticide applicators who are most often exposed to the dangerous chemicals.²⁰

While human health perils are “the highest price paid for all pesticide use,”²¹ massive environmental costs are also incurred.²² It has been approximated that nearly one-half of all ground and well water in the United States is already contaminated or could become contaminated in the future; once that water is contaminated, pesticide residues remain present for extensive periods.²³ This not only jeopardizes human health, but also that of domestic animals, aquatic creatures, and wild birds and mammals.²⁴ Pesticide use has also had a drastic impact on honeybees, which are indispensable and have an

¹⁵ CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION, UNIVERSITY OF CALIFORNIA RIVERSIDE & UNIVERSITY OF CALIFORNIA DIVISION OF AGRICULTURE AND NATURAL RESOURCES, *The Value of IPM in Orchard Crops: Patrick Weddle* (June 7, 2013), http://ucanr.edu/sites/OrchardIPM/Video_Library_875/Industry_representatives/Patrick_Weddle [hereinafter Patrick Weddle].

¹⁶ VAN DEN BOSCH, *supra* note 12, at 154.

¹⁷ *Id.*

¹⁸ See EPA Takes Action against Companies that Sell and Import Illegal Pesticides, PEST CONTROL TECHNOLOGY ONLINE, <http://www.pctonline.com/epa-action-illegal-pesticides.aspx> (last visited July 8, 2014) (describing the potential harmful effects of pesticides).

¹⁹ David Pimentel, *Environmental and Economic Costs of the Application of Pesticides Primarily in the United States*, ENV’T, DEV. AND SUSTAINABILITY 229, 230–231 (Springer 2005).

²⁰ *Id.* at 231.

²¹ *Id.* at 230.

²² *Id.* at 229.

²³ *Id.* at 241.

²⁴ *Id.* at 242–245.

estimated benefit of \$40 billion per year to American agriculture.²⁵ Due to the toxicity of pesticides, up to twenty percent of all honeybee colonies are either killed or weakened.²⁶ Destruction of honeybee colonies causes losses in crops, wax, and honey production, and requires growers to rent honeybee colonies.²⁷ Together, these deficiencies add up to a total cost of \$283.6 million per year.²⁸

In addition to health, safety, and economic hazards, the repeated use of hazardous pesticides has led to a self-perpetuating, circular process known as “the pesticide treadmill.”²⁹ Van den Bosch describes this phenomenon as follows: growers use pesticides in order to salvage their crops, and each subsequent year farmers are compelled to use more and more chemicals due to the evolution of pesticide resistance in pests.³⁰ The pesticide treadmill is “an addictive process that is magnified and prolonged by genetic selection for insecticide resistance in the repeatedly treated pests.”³¹ Thus, the pest population is actually reinforced rather than destroyed, demanding the application of chemicals more often³² and in higher doses.³³ Moreover, pesticides can harm the beneficial, natural enemies of targeted pests, further contributing to dependence on chemicals and resulting in more than \$520 million per year in unnecessary costs for farmers.³⁴ This “unwinnable war”³⁵ against pests has spurred the development of safer and more selective chemical treatments.³⁶

Van den Bosch was one of the first to specialize in and stress the use of an integrated approach to pest control called Integrated Pest

²⁵ *Id.* at 238.

²⁶ *Id.*

²⁷ *Id.*

²⁸ *Id.*

²⁹ VAN DEN BOSCH, *supra* note 12, at 25.

³⁰ *Id.*

³¹ *Id.*

³² *See* Wuliger, *supra* note 11.

³³ Darwin C. Hall & L. Joe Moffitt, *Adoption and Diffusion of Sustainable Food Technology and Policy*, 4 ECON. OF PESTICIDES, SUSTAINABLE FOOD PRODUCTION AND ORGANIC FOOD MARKETS 3, 5 (Elsevier Science Ltd., 2002).

³⁴ Pimentel, *supra* note 19, at 235.

³⁵ Wuliger, *supra* note 11.

³⁶ Interview with Marshall W. Johnson, Ph.D., Cooperative Extension Specialist and Entomologist Emeritus, University of California, Riverside, in Clovis, Cal. (July 10, 2014).

Management (“IPM”).³⁷ IPM has gradually gained traction in the agricultural industry and involves fewer applications of pesticides and a greater emphasis on biological controls, like the natural enemies of the targeted pest.³⁸ Employing IPM techniques, while not eliminating pesticide use, includes frequent monitoring of a crop’s pest population, so pesticides are only applied when absolutely necessary.³⁹ IPM also allows the natural enemies of target pests to assist in controlling their population.⁴⁰

The distinction between company affiliated PCAs and independent PCAs is very important to the implementation of IPM. Independent PCAs are not employed by chemical companies and make no commission on the sale of pesticides.⁴¹ They are much more likely to use an integrated approach to managing pests, which in turn reduces the volume of pesticides used as well as the cost to growers.⁴² Economically, company affiliated PCAs have no incentive to recommend an integrated pest control method that requires selling less or no chemicals because their employers stay in business by selling those chemicals.⁴³ Rather, they have a vested interest in selling more

³⁷ CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION, UNIVERSITY OF CALIFORNIA RIVERSIDE & UNIVERSITY OF CALIFORNIA DIVISION OF AGRICULTURE AND NATURAL RESOURCES, *The Value of IPM in Orchard Crops: Cliff Ohmart* (June 10, 2013),

http://ucanr.edu/sites/OrchardIPM/Video_Library_875/Users_of_IPM/Cliff_Ohmart [hereinafter Cliff Ohmart].

³⁸ CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION, UNIVERSITY OF CALIFORNIA RIVERSIDE & UNIVERSITY OF CALIFORNIA DIVISION OF AGRICULTURE AND NATURAL RESOURCES, *The Value of IPM in Orchard Crops: Parry Klassen* (June 7, 2013),

http://ucanr.edu/sites/OrchardIPM/Video_Library_875/Those_benefiting_from_IPM/Parry_Klassen.

³⁹ See Sonja Brodt et al., *California Cotton Growers Utilize Integrated Pest Management*, 61(1) CAL. AGRIC. 24, 28 (January-March 2007) [hereinafter *Cotton Growers*]; Mark Metcalfe, *Pesticide Use, IPM and Pest Management Advice*, 5(2) AGRIC. AND RESOURCE ECON. UPDATE, 7 (November–December 2001).

⁴⁰ See U.S. CONG. OFFICE OF TECH. ASSESSMENT, OTA-ENV-636, BIOLOGICALLY BASED TECHNOLOGIES FOR PEST CONTROL, 135 (September 1995), available at <http://www.princeton.edu/~ota/disk1/1995/9506/950607.PDF> (explaining that growers using independent PCAs are much more likely to release beneficial insects and pheromones).

⁴¹ Sonja Brodt et al., *Almond Growers Rely on Pest Control Advisers for Integrated Management*, 59(4) CAL. AGRIC. 242, 242 (October–December 2005) [hereinafter *Almond Growers*].

⁴² See *id.* at 247–248; Pimentel, *supra* note 19, at 247.

⁴³ See HARRISON, *supra* note 1, at 64.

pesticides since they earn a commission on those sales.⁴⁴ One company affiliated PCA, who spoke with a condition of anonymity, described the payment structure: “Most PCAs are paid a base salary plus commission. The commission generally is paid out as a percentage of the gross profit that [the PCA] made for the company. Many companies pay these out as a bonus.”⁴⁵ The individual also acknowledged that “. . . [PCAs] do look at which products will have the highest gross profit for [them].”⁴⁶ The potential for substantial commission on sales of pesticides creates an unavoidable conflict of interest.⁴⁷

B. Development of the Certified Crop Adviser Professional Standards

The California Food & Agricultural Code was enacted with the objective “of promoting and protecting the agricultural industry of the state and for the protection of the public health, safety, and welfare.”⁴⁸ Under this code, it is unlawful to act as a PCA without first obtaining an agricultural PCA license.⁴⁹

In 1992, California introduced the Certified Crop Adviser Program.⁵⁰ The implementation of this program was in response to environmental and safety concerns regarding pesticides and aimed to “raise the awareness and professional standards of individuals making recommendations for the use of agricultural fertilizers, pesticides and related products.”⁵¹ The California Certified Crop Adviser Program has put into effect demanding educational and continuing education requirements for certified crop advisers,⁵² and the State of California

⁴⁴ *See id.*

⁴⁵ E-mail from Certified PCA (anonymous), Helena Chemical Company, to author (Aug. 22, 2014, 12:13 PST) (on file with author).

⁴⁶ *Id.*

⁴⁷ HARRISON, *supra* note 1, at 63–64.

⁴⁸ CAL. FOOD & AGRIC. CODE ANN. § 3 (West 2014).

⁴⁹ CAL. FOOD & AGRIC. CODE ANN. § 12051 (West 2014); *see also* CAL. FOOD & AGRIC. CODE ANN. § 12001 (West 2014) (prohibiting any person from acting as an agricultural pest control adviser without first obtaining a license, and exempting only officials of federal, state, and county department of agriculture and University of California personnel).

⁵⁰ CAL. DEPT. OF FOOD & AGRIC., CALIFORNIA CERTIFIED CROP ADVISER PROGRAM, available at [www.cdfa.ca.gov/is/docs/CCA00\[1\].pdf](http://www.cdfa.ca.gov/is/docs/CCA00[1].pdf).

⁵¹ *Id.*

⁵² *Id.*

has also established extensive educational requirements for obtaining and maintaining a PCA license.⁵³

After a PCA license applicant verifies that the necessary education and work experience prerequisites are met, the applicant must pass the Laws, Regulations, and Basic Principles examination and at least one specialized pest control category examination.⁵⁴ Following the attainment of a PCA license, PCAs must complete at least forty hours of approved continuing education every two years before renewing their licenses, four of which must relate to pesticide laws and regulations.⁵⁵ These requirements exist, undoubtedly, to assure that PCAs make informed, educated decisions when choosing which pest control method to recommend to growers for their particular crops.⁵⁶

Most PCAs are employed by pesticide distributors and make a commission on their sales of pesticides.⁵⁷ There is also a small but growing camp of independent PCAs who charge a per-acre fee for monitoring and consulting services, and do not sell the pest control methods they are recommending.⁵⁸ Regardless of company affiliation, all PCAs are held to high educational standards and must follow strict rules when recommending methods of pest control to a farmer.⁵⁹

C. Requirements Imposed Upon Pest Control Advisers When Making Pest Control Recommendations

There is no doubt regarding the need for occasional chemical use; even the famous pesticide critic van den Bosch did not dispute this

⁵³ See CAL. CODE REGS. tit. 3, § 6550 (2014) (requiring a bachelor's degree in a specified area of science and completion of specified curricula, or a specified doctoral degree, or specified curricula together with work experience in the pest control field).

⁵⁴ STATE OF CALIFORNIA, DEPARTMENT OF PESTICIDE REGULATION: PEST CONTROL ADVISER LICENSE PACKET (2010), available at http://www.cdpr.ca.gov/docs/license/app_packets/adviser.pdf.

⁵⁵ *Id.*

⁵⁶ See CALIFORNIA CERTIFIED CROP ADVISER PROGRAM, *supra* note 50 (describing the intent to increase professional standards of PCAs making pesticide recommendations).

⁵⁷ HARRISON, *supra* note 1, at 63.

⁵⁸ *Id.* at 64.

⁵⁹ CALIFORNIA CERTIFIED CROP ADVISER PROGRAM, *supra* note 50; See CAL. FOOD & AGRIC. CODE ANN. § 12003 (West 2014) (detailing the required elements of every recommendation for pest control).

fact.⁶⁰ In California, when a farmer needs pesticides, he is required to obtain a pest control recommendation, and the sole option for doing so is through PCAs, as they are the only individuals permitted to make recommendations for specific pesticide use.⁶¹ The California Food and Agricultural Code defines a recommendation as “the giving of any instruction or advice on any agricultural use as to any particular application on any particular piece of property . . . not in conflict with any registered pesticide label”⁶² Further, it is statutorily “unlawful for any pest control adviser to make recommendations in a category for which he is not certified.”⁶³

The California Food & Agricultural Code details at length the standards that must be met by each pest control recommendation:

Each written recommendation shall include...the following:

- (a) The name and dosage of each pesticide to be used or description of method recommended.
- (b) The identity of each pest to be controlled.
- (c) The owner or operator, location of and acreage to be treated.
- (d) The commodity, crop, or site to be treated.
- (e) The suggested schedule, time or conditions for the pesticide application or other control method.
- (f) A warning of the possibility of damages by the pesticide application that reasonably should have been known by the agricultural pest control adviser to exist.
- (g) The signature and address of the person making the recommendation, the date, and the name of the business such person represents.
- (h) Any other information the director may require.⁶⁴

Title 3 of the California Code of Regulations imposes additional requirements.⁶⁵ In pertinent part, it mandates that all recommendations contain a “certification that alternatives and mitigation measures that would substantially lessen any significant adverse impact on the environment have been considered and, if feasible, adopted.”⁶⁶ These recommendations are required by law to be obtained before pesticides may be applied:

⁶⁰ See Wuliger, *supra* note 11.

⁶¹ HARRISON, *supra* note 1, at 63; WARNER, *supra* note 1, at 110.

⁶² CAL. FOOD & AGRIC. CODE ANN. § 11411 (West 2014).

⁶³ CAL. FOOD & AGRIC. CODE ANN. § 12054 (West 2014).

⁶⁴ CAL. FOOD & AGRIC. CODE ANN. § 12003 (West 2014).

⁶⁵ CAL. CODE REGS. tit. 3, § 6556 (2014).

⁶⁶ *Id.* § 6556(e).

Agricultural pest control advisers shall put all recommendations concerning any agricultural use in writing. One copy of each such written recommendation shall be signed and dated and shall be furnished to the operator of the property prior to the application. Where a pesticide use is recommended a copy shall also be furnished to the dealer and the applicator prior to application.⁶⁷

It is clear that before a farmer performs chemical pest control on crops, he is first required to obtain a pest control recommendation.⁶⁸ The only persons permitted by law to give those recommendations are PCAs.⁶⁹ Because California regulations include substantial educational and experience requirements to obtain a PCA license, it is unlikely that the average farmer can practicably expend the time and money necessary to become a licensed PCA himself.⁷⁰ Thus, PCAs are farmers' only feasible option for obtaining the required recommendations. For this reason, PCAs serve a vital purpose in farming and have come to play a significant role in modern agriculture.

D. *The Vital Role of Pest Control Advisers*

The reliance on PCAs has continued to grow over time.⁷¹ In 1983, seventy five percent of a large survey of tomato growers ranked PCAs as their "most important source of pest control information."⁷² In 2000, a survey of 453 almond growers in the San Joaquin and Sacramento Valleys revealed that ninety seven percent of those growers relied on PCAs for advice regarding pest management.⁷³ And in 2007, a survey of 266 California cotton growers showed that ninety nine percent of those growers relied on PCAs for their pest management needs.⁷⁴

⁶⁷ FOOD & AGRIC. § 12003 (West 2014).

⁶⁸ *See id.*

⁶⁹ CAL. FOOD & AGRIC. CODE ANN. § 12001 (West 2014) (prohibiting any person from acting as an agricultural pest control adviser without first obtaining a license, and exempting only officials of federal, state, and county department of agriculture and University of California personnel).

⁷⁰ *See generally* CAL. CODE REGS. tit. 3, § 6550 (2014) (detailing the extensive educational and work experience prerequisites for obtaining a PCA license).

⁷¹ *See infra* notes 72–74 and accompanying text.

⁷² Mary Louise Flint & Karen Klonsky, *IPM Information Delivery to Pest Control Advisers*, 43(2) CAL. AGRIC. 18, 18 (March–April 1989).

⁷³ *Almond Growers*, *supra* note 41, at 243–244.

⁷⁴ *Cotton Growers*, *supra* note 39, at 27.

Regardless of company affiliation, or lack thereof, PCAs as a whole are growers' foremost source of guidance on pest control.⁷⁵ Thus, it is of utmost importance for growers to select PCAs whom they trust and who have the knowledge and experience necessary to make quality recommendations based on their individual needs.⁷⁶ However, the farmer-PCA relationship is not one-sided; to the contrary, growers and PCAs typically enjoy a symbiotic relationship.⁷⁷ PCAs risk their livelihoods with each recommendation they make, as a bad recommendation could undermine their credibility in a profession where trust is essential.⁷⁸ Growers, in turn, bet the farm when they follow a recommendation because "a wrong decision could push a marginal grower to the brink of economic disaster."⁷⁹ For this reason, PCAs have a significant incentive to make quality recommendations based on their expert knowledge of pest control methods.⁸⁰ However, a serious conflict of interest has remained unabated for decades, which significantly weakens the motivation of some PCAs to make beneficial recommendations to farmers based on sound science.⁸¹

III. AN INHERENT CONFLICT OF INTEREST EXISTS WHEN PEST CONTROL ADVISERS MAKE A COMMISSION ON THE VERY PESTICIDES THEY RECOMMEND

A company affiliated PCA's interest in maintaining a favorable reputation by providing sound recommendations is incompatible with his direct interest in the sales of chemicals he recommends.⁸² Most growers likely make use of company affiliated PCAs as a result of the convenience offered by the pesticide distributors, who provide "one-stop shopping" to growers.⁸³ To further incentivize the use of company affiliated PCAs, pesticide distributors commonly offer pest control

⁷⁵ *See id.*

⁷⁶ HARRISON, *supra* note 1, at 63.

⁷⁷ *See* WARNER, *supra* note 1, at 112.

⁷⁸ *Id.* at 112–113.

⁷⁹ *Id.* at 112.

⁸⁰ *See id.* at 112–113.

⁸¹ *See supra* Part I.

⁸² *See* HARRISON, *supra* note 1, at 64.

⁸³ *Id.* at 63.

recommendations free of charge.⁸⁴ This pervasive conflict has been widely recognized in the agricultural industry for decades.⁸⁵

A. *The Debate Over Whether the Conflict of Interest is Harmful*

There is immense debate as to whether this conflict of interest actually exists, or if it does exist, whether it is truly harmful.⁸⁶ Despite much condemnation over the years, “chemical companies have successfully fought all legislative efforts to separate the institutions of pesticide advice and pesticide sales.”⁸⁷ Those who support the free association of PCAs with pesticide distributors argue that the dual role of a company affiliated PCA presents no conflict of interest.⁸⁸ They reason that because PCAs are required by law to disclose the companies they represent within every written recommendation, growers are put on notice regarding whose interest a PCA is serving.⁸⁹

Another argument in support of company affiliated PCAs posits that if the conflict does exist, any risk of harm is eliminated because “it is unlawful for any [PCA] to . . . [m]ake any false or misleading statements in any written record or report relating to pesticides or involving the pest control dealer business where that person is, or was, employed.”⁹⁰ Because deviation from these requirements carries great risk for a PCA, including revocation or suspension of his license,⁹¹ it is argued that this risk ensures the reliability of his recommendations. Furthermore, the argument follows, regardless of company affiliation or independence, a PCA’s good standing in the agricultural community is dependent on his ability to make quality recommendations to help growers produce superior crops.⁹² PCAs know that a poor recommendation can have serious backlash for both the growers and

⁸⁴ See *Britz Fertilizers, Inc. v. Nationwide Agribusiness Ins. Co.*, No. 1:10CV02051(AWI), 2013 WL 5519605 at *1 (E.D. Cal. 2013).

⁸⁵ See E-mail from Rachael F. Long, Farm Advisor, University of California Cooperative Extension, to author (Jul. 2, 2014, 05:23 PST) (on file with author).

⁸⁶ See *infra* Part III.A.

⁸⁷ HARRISON, *supra* note 1, at 64.

⁸⁸ Telephone Interview with Rachael F. Long, Farm Advisor, University of California Cooperative Extension (Jul. 8, 2014).

⁸⁹ See CAL. FOOD & AGRIC. CODE ANN. § 12003(g) (West 2014) (requiring all pest control recommendations to include the name of the business which the PCA represents).

⁹⁰ CAL. FOOD & AGRIC. CODE ANN. § 12258(d) (West 2014).

⁹¹ CAL. FOOD & AGRIC. CODE ANN. § 12023 (West 2014).

⁹² *Almond Growers*, *supra* note 41, at 242.

themselves.⁹³ Thus, in order to remain employed as a PCA, one must maintain a good rapport with growers.⁹⁴ As one independent PCA stated: “if a PCA’s only motive is to make money off a grower, the grower will pick up on that very quickly and find someone else.”⁹⁵

The California Association of PCAs (“CAPCA”) has partially adopted this position.⁹⁶ While conceding that a conflict of interest exists, the CAPCA alleges that any risk is eliminated because PCAs compete in an aggressive market and overprescribing pesticides could lead to the loss of clients and money to another PCA.⁹⁷ It is this competitive nature of the business that CAPCA says will prevent any “significant problem” from materializing as a result of the conflict of interest.⁹⁸ However, affiliation does in fact have a significant impact on the environment, as well as on growers and the commodities they produce.⁹⁹ Such harms were likely what prompted California to prohibit conflicts of interest among state employees working in the Department of Pesticide Regulation.¹⁰⁰

B. Conflict of Interest Prohibition in Governmental Entities

The California Department of Pesticide Regulation (“DPR”) became an official government department in 1991, and is part of the California Environmental Protection Agency.¹⁰¹ It regulates all facets of pesticide sales and was founded with a mission “to protect human health and the environment by regulating pesticide sales and use, and by fostering reduced-risk pest management.”¹⁰²

⁹³ Telephone Interview with Rachael F. Long, *supra* note 88.

⁹⁴ WARNER, *supra* note 1, at 112–113.

⁹⁵ Telephone Interview with Rachael F. Long, Farm Advisor, *supra* note 88.

⁹⁶ See HARRISON, *supra* note 1, at 64.

⁹⁷ *Id.*

⁹⁸ *Id.*

⁹⁹ See *infra* Part IV.B.

¹⁰⁰ See generally CAL. FOOD & AGRIC. CODE ANN. § 11501 (West 2014) (defining a purpose to protect public health and safety as well as the environment by ensuring safe and proper use of pesticides).

¹⁰¹ *Department of Pesticide Regulation*, ALLGOV CALIFORNIA, http://www.allgov.com/usa/ca/departments/california-environmental-protection-agency/department_of_pesticide_regulation?agencyid=121 (last visited Nov. 2, 2014).

¹⁰² CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION, <http://www.cdpr.ca.gov> (last visited Nov. 2, 2014).

The DPR currently enforces laws that prohibit conflicts of interest among its employees.¹⁰³ Title 3, section 1.1 of the California Code of Regulations demands that “no [DPR] officer or employee shall hold any direct or indirect interest in the sale, manufacture, or distribution of any pesticide”¹⁰⁴ Further, all DPR officers and employees are prohibited from having a financial interest in any business using any of the following licenses: certificate of pesticide registration; pest control business license; pest control dealer license; pest control adviser license; pest control aircraft pilot’s certificate; or structural pest control registration.¹⁰⁵

Other states similarly prohibit state employees from serving dual roles of consultant and salesperson. For example, the New York State Ethics Commission (NYSEC) held that Pest Control Specialists employed by the New York Department of Environmental Conservation were prohibited from giving private pest control consultations because “their official State responsibilities required their interaction with persons in need of such services.”¹⁰⁶ The NYSEC stated that while both roles may be complementary, “it is precisely that close association that gives rise to serious concerns about their serving in both capacities at the same time.”¹⁰⁷ In prohibiting such conflicts of interest for government employees, the NYSEC reasoned that there was great potential to use a State position for personal gain, in violation of the public trust.¹⁰⁸ California and New York’s prohibition of dual roles for certain public employees should similarly be applied to the private sector PCAs in California in order to better achieve the DPR’s mission to protect human health and the environment.

C. The Conflict of Interest that Exists in the Private Sector is Unregulated

¹⁰³ CAL. CODE REGS. tit. 3, § 1.1 (1996).

¹⁰⁴ *Id.* § 1.1(a).

¹⁰⁵ *Id.* § 1.1(b)(1)–(6).

¹⁰⁶ Application of Pub. Officers Law § 74 to Foresters who seek to Perform Services as Private Consultants in the Forestry Field with which they are Associated, N.Y. Advisory Op. 93–5, N.Y. State Ethics Comm’n 1993 WL 778163 at *4 (1993).

¹⁰⁷ *Id.* at *5.

¹⁰⁸ *Id.* at *6.

While conflicts of interest among governmental employees are clearly proscribed,¹⁰⁹ similar conflicts among non-governmental individuals involved in the pesticide industry remain unregulated.¹¹⁰ The California Food and Agricultural Code defines a PCA as one who “offers a recommendation on any agricultural use, who holds himself or herself forth as an authority on any agricultural use, or who solicits services or sales for any agricultural use.”¹¹¹ Further, a pest control dealer is:

Any person, including any manufacturer, distributor, or retailer who engages in any of the following business activities: (a) Selling pesticides to users for an agricultural use. (b) Selling to users any method or device for the control of agricultural pests (c) Soliciting sales of pesticides by making agricultural use recommendations through field representatives, or other agents¹¹²

These code sections reveal significant overlap between the services performed by a PCA and those provided by pesticide distributors. Additionally, the work of each profession includes both recommending pesticides *and* selling them, with neither code section prohibiting the performance of both services simultaneously.¹¹³ As written, the government does not expressly prohibit a PCA from both making recommendations and earning a profit on the sales of the pesticides they recommend to their clients.¹¹⁴ As a result, as much as ninety percent of all PCAs work for pesticide distributors and earn a base salary plus commission on the sales of the very products they recommend.¹¹⁵

Although company affiliated PCAs are not employed by the government, they are still serving in multiple capacities, giving rise to the inescapable conflict of interest. The potential for abuse recognized in the public sector exists in the private pest control arena as well, and is likely magnified by the significant incentive company affiliated PCAs have to earn commission on the sales of the chemicals they recommend.¹¹⁶ The average grower gets his pest control advice from a

¹⁰⁹ Tit. 3, § 1.1 (1996).

¹¹⁰ See *infra* notes 111–113 and accompanying text.

¹¹¹ CAL. FOOD & AGRIC. CODE ANN. § 11410 (West 2014).

¹¹² CAL. FOOD & AGRIC. CODE ANN. § 11407 (West 2014).

¹¹³ See *id.* See also FOOD & AGRIC. § 11410.

¹¹⁴ See FOOD & AGRIC. § 11410; see also FOOD & AGRIC. § 11407.

¹¹⁵ WARNER, *supra* note 1, at 110.

¹¹⁶ See HARRISON, *supra* note 1, at 64.

PCA who will receive a percentage of whatever the grower pays for chemicals.¹¹⁷ In 2000, surveys of almond and cotton growers in California showed that nearly two-thirds of those growers primarily used PCAs affiliated with a pesticide distributor.¹¹⁸

It is generally acknowledged in the agricultural field that most PCAs work for pesticide distributors, while there is a small but growing number (less than ten percent) of independent PCAs who have no company affiliation.¹¹⁹ The problem created by company affiliated PCAs and their incentive to sell as many pesticides as possible has been described as “assum[ing] such overwhelming influence on our pest control system that it has made a mockery of scientific pest management. In other words, pest control has become as much or more a matter of moving merchandise as it has of bug killing.”¹²⁰

In 1970, attempting to eliminate the conflict of interest, State Senator Anthony Beilenson proposed a piece of legislation that, in addition to requiring licensing standards for PCAs, would prohibit pesticide salesmen from recommending the use of pesticides.¹²¹ However, the bill was never enacted.¹²² While the proposed licensing requirements for PCAs have since been adopted, a legal separation of pesticide salesmen from recommendations has not.¹²³ This is surprising when one considers the significant responsibility they carry. To avoid destructive results such as crop damage, it is vital that PCAs are able to make accurate diagnoses grounded in thoughtful analysis of symptoms and untainted by personal pecuniary interests.¹²⁴ “In the eyes of the law, PCAs are as responsible for giving sound pest management advice as doctors are responsible for giving sound medical treatment.”¹²⁵ The striking parallels between the roles of doctors and PCAs warrant a brief consideration of the actions taken by

¹¹⁷ Cliff Ohmart, *supra* note 37.

¹¹⁸ See *Almond Growers*, *supra* note 41, at 244 (survey of 453 total almond growers); *Cotton Growers*, *supra* note 39, at 28 (survey of 266 cotton growers).

¹¹⁹ U.S. CONG. OFFICE OF TECH. ASSESSMENT, *supra* note 40, at 135.

¹²⁰ VAN DEN BOSCH, *supra* note 12, at 59.

¹²¹ *Id.* at 94.

¹²² *Id.* at 95.

¹²³ See *id.*

¹²⁴ See MARY LOUISE FLINT, *IPM IN PRACTICE: PRINCIPLES AND METHODS OF INTEGRATED PEST MANAGEMENT* 244 (2d ed. 2012).

¹²⁵ *Id.*

lawmakers over thirty years ago to eliminate profit-driven treatment from the medical profession.¹²⁶

*D. A Similar Conflict of Interest has Already Been Prohibited
in the Medical Field*

In the 1980s, attention was increasingly focused on the medical field and the many physicians who were selling the drugs they prescribed.¹²⁷ By the late 1980s, many states barred such activity and others began strictly regulating the practice.¹²⁸ In California, prescribers may only dispense drugs to patients in their place of practice under a very specific set of circumstances; notably, prescribers are required to “[offer] to give a written prescription to the patient that the patient may elect to have filled by the prescriber or by any pharmacy.”¹²⁹ While physicians are not prohibited from giving patients a manufacturer’s sample of a drug, they must make a record of such and may not charge for the drug.¹³⁰ The Legislative intent behind outlawing this behavior is “clearly addressed to the potential conflict of interest problem and seek[s] to resolve the conflict by ensuring that patients know they have the option of having the prescription...filled at any pharmacy.”¹³¹ Pharmacists, in particular, supported these new regulations, fearing that “physicians who dispense drugs will have a financial incentive to overprescribe or limit prescriptions to those available in their relatively small inventories.”¹³²

There are eerie similarities between the conflict of interest that previously existed in the medical field and that which exists in the pesticide industry today: physicians and company-affiliated PCAs alike make recommendations and prescribe chemicals based on a particular problem a patient or client is having. Prohibiting PCAs from making a commission on the pesticides they recommend and sell could

¹²⁶ See *infra* Part III.D.

¹²⁷ See Ronald Sullivan, *Number of Doctors Selling Prescription Drugs Grows*, THE NEW YORK TIMES (March 19, 1987), <http://www.nytimes.com/1987/03/19/nyregion/number-of-doctors-selling-prescription-drugs-grows.html>.

¹²⁸ *Id.*

¹²⁹ CAL. BUS. & PROF. CODE ANN. § 4170(a)(6)–(7) (West 2014).

¹³⁰ *Park Med. Pharm. v. San Diego Orthopedic Assocs. Med. Group*, 120 Cal. Rptr. 2d 858, 861-862 (App. Ct. 2002).

¹³¹ *Id.* at 866.

¹³² Sullivan, *supra* note 127.

eliminate this same conflict of interest in the agricultural field. Independent PCAs, like physicians in the modern world, give unbiased recommendations or “prescriptions” for pesticides that can be filled through any pesticide distributor.¹³³ Independent PCAs are paid per acre for their knowledge and recommendations, not per quantity of pesticide sold.¹³⁴ Where PCAs remain independent of pesticide distributors, there is no incentive to overprescribe pesticides because they are not making money on the sales of those pesticides.¹³⁵

Medical doctors do not diagnose their patients while also acting as pharmacists.¹³⁶ It logically follows that PCAs should not diagnose, prescribe, and then sell their own “drugs” or pesticides. By removing the incentive for PCAs to overprescribe certain chemicals for personal financial gain, there could be a reduction in harmful spraying which is expensive to farmers and detrimental to both field workers and the environment.¹³⁷

IV. THE DESTRUCTIVE CONSEQUENCES OF THE CONFLICT OF INTEREST

A. *The Conflict of Interest Leads to the Over-Prescription of Pesticides*

Heavy debate surrounds the claim that the use of affiliated PCAs promotes increased use of chemicals.¹³⁸ There has been extensive criticism of company affiliated PCAs not only for over-prescribing pesticides, but also for the lack of monitoring pest populations in crops.¹³⁹ A study of cotton and citrus growers in the San Joaquin Valley showed a considerable decrease in pesticide use resulting from farmers’ employment of independent PCAs as opposed to company affiliated PCAs.¹⁴⁰ This demonstrates that “salesmen have a conflict of interest between profit maximization and the social goals of reduced pesticide use.”¹⁴¹

¹³³ See e-mail from Rachael F. Long to author, *supra* note 85.

¹³⁴ WARNER, *supra* note 1, at 113.

¹³⁵ See generally *id.* (stating that independent PCAs do not make commission from the sale of pesticides).

¹³⁶ Hall & Moffitt, *supra* note 33, at 10.

¹³⁷ See generally HARRISON, *supra* note 1, at 65 (explaining the great incentive for company affiliated PCAs to recommend highly toxic chemicals).

¹³⁸ *Almond Growers*, *supra* note 41, at 245; see *supra* Part III.A.

¹³⁹ HARRISON, *supra* note 1, at 65.

¹⁴⁰ Hall, *supra* note 5, at 268.

¹⁴¹ *Id.*

In 2000, 453 California almond growers participated in a survey regarding their pesticide use to control certain pests during three different seasons.¹⁴² In the dormant season (December–January), sixty two percent of the responding almond growers who used independent PCAs sprayed pesticides compared to seventy percent of growers using company affiliated PCAs.¹⁴³ When almond crops are susceptible to disease and pests (typically in May), nineteen percent of growers using independent PCAs sprayed versus twenty seven percent of those who used company affiliated PCAs.¹⁴⁴ And finally, during hull split (early July), fifty six percent versus sixty five percent, respectively, sprayed pesticides.¹⁴⁵ While the statistics as to almond growers in particular may not present a staggering difference numerically, the real world implications of even minor increases in pesticide application can be devastating.¹⁴⁶

Various studies have estimated that growers employing independent PCAs use up to fifty percent less pesticides on their crops, but are as profitable as growers who use company affiliated PCAs.¹⁴⁷ The explanation for this is simple: independent PCAs have a greater inclination than company-affiliated PCAs to recommend non-chemical methods such as biological control, which uses pests' natural enemies to assist in pest control.¹⁴⁸ PCAs employed by pesticide distributors lack incentive to make such recommendations because their employers' profits, as well as their own, are dependent upon selling pesticides.¹⁴⁹ In fact, company affiliated PCAs "have an incentive to learn and practice IPM techniques only to the point where they can remain competitive with independent [PCAs]."¹⁵⁰

B. The Danger of Misdiagnoses and Excessive Pesticide Applications

¹⁴² *Almond Growers*, *supra* note 41, at 243.

¹⁴³ *Id.* at 247.

¹⁴⁴ *Id.*

¹⁴⁵ *Id.*

¹⁴⁶ *See supra* Part II.A.

¹⁴⁷ Hall & Moffitt, *supra* note 33, at 5.

¹⁴⁸ U.S. CONG. OFFICE OF TECH. ASSESSMENT, *supra* note 40, at 135.

¹⁴⁹ HARRISON, *supra* note 1, at 64.

¹⁵⁰ Hall, *supra* note 5, at 268.

PCAs carry an immense responsibility to provide growers with quality pest management advice.¹⁵¹ They have a duty to stay current on pesticide labeling restrictions, information regarding which chemicals are appropriate for certain crops, and local statutes to ensure their recommendations are in compliance with applicable laws.¹⁵² With more recent technological advances, many PCAs have begun using software databases that contain pesticide label information that can assist them in writing quality, legal recommendations.¹⁵³ This is a significant development because it can prevent misdiagnosis, the potential harm to growers, and resultant destruction of crops.¹⁵⁴

In the late 1990s, California walnut growers obtained a pest control recommendation from a company affiliated PCA employed by Tri-Ag Service, Inc.¹⁵⁵ The walnut growers strictly followed the recommendation and applied the pesticides in the suggested amounts and concentrations.¹⁵⁶ Unfortunately, the recommended combination of pesticides was improper, and resulted in \$150,000 in damage to their walnut orchards.¹⁵⁷

In yet another instance of misdiagnosis, twenty-nine Texas peanut farmers applied a pesticide on their crops that was recommended by a PCA affiliated with Dow Chemical Company.¹⁵⁸ The pesticide was not for use on peanuts being grown in soil with pH levels exceeding 7.0, which was known or should have been known by the PCA and/or Dow.¹⁵⁹ To the contrary, it was represented to the growers that the chemical was safe for application on any area where peanuts were grown.¹⁶⁰ After application, petitioners' peanut crops were severely damaged.¹⁶¹

Gar Tootelian Inc. and Britz-Simplot Grower Solutions, LLC are two pesticide distributors that employ PCAs.¹⁶² In 2012, the two

¹⁵¹ See *infra* notes 155-165 and accompanying text.

¹⁵² FLINT, *supra* note 124, at 244-245.

¹⁵³ *Id.* at 245.

¹⁵⁴ See *infra* notes 212-215 and accompanying text.

¹⁵⁵ Etcheverry v. Tri-Ag Serv., Inc., 993 P.2d 366, 368 (Cal. 2000).

¹⁵⁶ *Id.*

¹⁵⁷ *Id.*

¹⁵⁸ Bates v. Dow Agrosiences LLC, 544 U.S. 431, 434 (2005).

¹⁵⁹ *Id.* at 435.

¹⁶⁰ *Id.*

¹⁶¹ *Id.*

¹⁶² *California Pesticide Dealers Hit with \$105,000 Fine*, WESTERN FARM PRESS (May 2, 2012), <http://westernfarmpress.com/management/california-pesticide-dealers-hit-105000-fine?eid=forward>.

companies were fined a total of \$105,000 for knowingly selling a pesticide illegal for use on the crop for which it was recommended.¹⁶³ The PCAs affiliated with Gar Tootelian and Britz-Simplot recommended and sold pesticides to growers who did not grow any crops on which that chemical could legally be applied.¹⁶⁴ As a result, more than 2.4 million pounds of peaches—over \$1 million in value—could not be sold or consumed.¹⁶⁵

In the above examples, many farmers suffered losses at the hands of company-affiliated PCAs. With the pesticide label database programs now available to assist PCAs in writing superior recommendations, it is difficult to understand why poor or excessive recommendations continue to be made. One potential explanation is the bias and profit motives of the PCAs who are making such recommendations.¹⁶⁶

While pesticides are designed to increase crop yields, they often lead to destruction.¹⁶⁷ When pesticide residues above the lawful limits set out by the Environmental Protection Agency (“EPA”) and the Food and Drug Administration (“FDA”) are found on crops, those crops must be destroyed.¹⁶⁸ It is estimated that pesticides lead to \$136 million in crop losses annually.¹⁶⁹ Improper recommendations resulting from misdiagnosis or influenced by personal pecuniary motives can have disastrous repercussions for growers, field workers, and the environment.¹⁷⁰ These are extreme examples of how the conflict of interest harms farmers. Less obvious are the significant costs imposed on unsuspecting growers who, while receiving their pest control recommendations for free, pay a substantial price for the chemicals prescribed to them by company affiliated PCAs.¹⁷¹

C. The Conflict of Interest Increases Costs to Farmers

¹⁶³ *Id.*

¹⁶⁴ *Id.*

¹⁶⁵ *Id.*

¹⁶⁶ Best Management Practices for Pest Control in Vegetables, VEGETABLE ENTOMOLOGIST WORKSHOP 9 (2d ed. May 2009), available at http://cals.arizona.edu/crops/pdfs/vegetable_bmps.pdf.

¹⁶⁷ See *supra* Part IV.B.

¹⁶⁸ Pimentel, *supra* note 19, at 241.

¹⁶⁹ *Id.*

¹⁷⁰ See *Etcheverry v. Tri-Ag Serv., Inc.*, 993 P.2d 366, 368 (Cal. 2000); see also *Bates v. Dow Agrosciences LLC*, 544 U.S. 431, 434 (2005).

¹⁷¹ See *infra* Part IV.C.

One reason growers may have for disregarding such a pervasive conflict of interest is that company affiliated PCAs offer their consulting services for “free” rather than charging a per-acre fee like independent PCAs.¹⁷² Company affiliated PCAs “provide a seamless package of expert advice plus pesticide sales, delivery, and application, depending on the needs of the grower, but the ‘value’ of the recommendation is folded into the sale of [pesticides].”¹⁷³ The following is a direct quote from a representative of pesticide distributor giant, Britz Fertilizers:

At all material times herein, Britz’[s] practice was not to charge growers a fee for crop consulting services and for recommendations by Britz’[s] salesmen, who were known as ‘PCAs’ (Pest Control Advisers) for use of agricultural chemicals. Those services were incidental to the sales by Britz of agricultural chemicals. The premise was that if the use of an agricultural chemical by a grower was recommended by a Britz PCA, the grower would purchase the chemical from Britz.¹⁷⁴

Even taking into account the fact that company affiliated PCAs give free recommendations, the use of an affiliated PCA can still be more costly to growers than the use of an independent PCA.¹⁷⁵ Because they are more likely to recommend an IPM approach, the use of independent PCAs reduces growers’ total pest management expenses, even after factoring in the per-acre fee charged by those independent PCAs.¹⁷⁶ In other words, the cost of per-acre evaluations by independent PCA is typically more than made up for by the decreased pesticide costs, allowing growers to maximize their profits.¹⁷⁷

D. Company Affiliated Pest Control Advisers are Generally Shielded from Liability for Poor Recommendations

All PCAs, regardless of independence or affiliation, may be held responsible in the form of fines and penalties for the illegal application

¹⁷² See *Almond Growers*, *supra* note 41, at 242.

¹⁷³ WARNER, *supra* note 1, at 110.

¹⁷⁴ Britz Fertilizers, Inc. v. Nationwide Agribusiness Ins. Co., No. 1:10CV0205(AWI), 2013 WL 5519605 at *1 (E.D. Cal. 2013).

¹⁷⁵ See Hall, *supra* note 5, at 271.

¹⁷⁶ See *id.*

¹⁷⁷ D.C. Hall et al., *The Performance of Independent Pest Management*, 29(10) CAL. AGRIC. 12, 14 (October 1975).

of pesticides or the use of ineffective or harmful pesticides.¹⁷⁸ However, company affiliated PCAs typically enjoy increased protection from personal liability for poor recommendations that cause crop damage or health and safety problems.¹⁷⁹

Most company affiliated PCAs are provided with errors and omissions liability insurance coverage through their employers, the pesticide distributors.¹⁸⁰ This is not a luxury that smaller-scale independent PCAs can afford.¹⁸¹ While both classes of PCAs are exposed to legal repercussions, such as revocation of their license for making bad recommendations, company affiliated PCAs are shielded from being held personally financially liable for doing so.¹⁸² For example, giant pesticide distributors, like Britz, provide up to \$1 million in errors and omissions coverage for each mistake made by their PCAs in the course of their employment.¹⁸³ Independent PCAs, on the other hand, do not enjoy such a shield, and their potential for personal liability acts as a deterrent to making financially biased and potentially harmful recommendations.¹⁸⁴ With such extraordinary insurance available to company affiliated PCAs, there may be less of an incentive for them to write accurate and legal recommendations.

V. RECOMMENDATIONS FOR ELIMINATING THE PEST CONTROL ADVISER CONFLICT OF INTEREST

There exists a grave potential for harm created by allowing pesticide distributors to continue to employ PCAs.¹⁸⁵ Nearly forty years ago, entomologist Robert van den Bosch perceived a direct correlation between the dual role played by affiliated PCAs and the increased harm to farmers, the environment, and human health.¹⁸⁶ He wrote, “After witnessing this...pest control chaos for more than a quarter century, it is abundantly clear to me that the elimination of the

¹⁷⁸ FLINT, *supra* note 124, at 244.

¹⁷⁹ *See infra* notes 180–182 and accompanying text.

¹⁸⁰ WARNER, *supra* note 1, at 113.

¹⁸¹ *Id.*

¹⁸² *See id.*

¹⁸³ Britz Fertilizers, Inc. v. Nationwide Agribusiness Ins. Co., No.

1:10CV02051(AWI), 2013 WL 5519605 at *1 (E.D. Cal. 2013).

¹⁸⁴ *See generally* WARNER, *supra* note 1, at 110 (explaining that independent PCAs are more at risk for personal liability because they cannot typically afford errors and omissions insurance).

¹⁸⁵ *See supra* notes 155–165 and accompanying text.

¹⁸⁶ *See* VAN DEN BOSCH, *supra* note 12, at 93.

pesticide salesman from pest control advisement is absolutely necessary if we are to develop a better pest-control system.”¹⁸⁷ Yet, decades later, many of his suggestions for developing a better system remain unrealized. The following recommendations provide a significant step toward a more environmentally sound and farmer-friendly approach to pest control management in California. A prohibition on employment of PCAs by pesticide distributors, along with a renewed emphasis on IPM practices and increased use of pesticide label databases is vital to the goal of sustainable, affordable, and safer pest management.

A. Separation of Pest Control Advisers from the Pesticide Distributors

There are various health, safety, environmental, and economical benefits to requiring PCAs to remain independent of pesticide companies.¹⁸⁸ However, it seems that these benefits are not widely known to growers, since less than one-third of farmers choose to hire independent PCAs when seeking required recommendations.¹⁸⁹ As written, the California Food and Agricultural Code intermingles “recommending” with “soliciting sales,”¹⁹⁰ providing a dangerous, albeit legal, basis for PCAs to operate in such conflicting capacities. By implementing a statutory separation of PCAs from pesticide distributors, the conflict of interest, and the harm it fosters, would be eliminated.

Past attempts to separate PCAs from the pesticide industry have been unsuccessful and have been met with resistance from the pest control industry.¹⁹¹ Attempting to reform pest management to reduce the problems created by the conflict of interest would “[threaten] the market that [pesticide] distributors have crafted, or at the least, [require] changes that pesticide distributors cannot easily and profitably provide.”¹⁹² However, there must be a focus on separating pesticide sales from pesticide recommendations, so that pesticide

¹⁸⁷ *Id.* at 180.

¹⁸⁸ See Hall & Moffitt, *supra* note 33, at 6–7; Hall, *supra* note 5, at 267–271 (detailing the harmful effects of pesticides, the use of which are reduced by the employment of independent PCAs).

¹⁸⁹ See *Almond Growers*, *supra* note 41, at 244.

¹⁹⁰ See CAL. FOOD & AGRIC. CODE ANN. § 11410 (West 2014); see also CAL. FOOD & AGRIC. CODE ANN. § 11407 (West 2014).

¹⁹¹ See, e.g., VAN DEN BOSCH, *supra* note 12, at 95.

¹⁹² HARRISON, *supra* note 1, at 65.

companies are not selling a particular product based on their own bias or profit motive.¹⁹³ While an immediate separation is not likely to occur, there are other steps that can be taken to reduce problems caused by the conflict of interest.

B. Emphasis on Education and Training in Integrated Pest Management and Promotion of Independent PCAs

The implementation of an IPM system is not against the use of all chemicals.¹⁹⁴ However, the use of chemicals should be one small part of the larger pest management framework rather than completely governing the practice.¹⁹⁵ It has been revealed that “[United States] pesticide use could be reduced by one-half without any reduction in crop yields.”¹⁹⁶ Further, “[t]he judicious use of pesticides could reduce the environmental and social costs, while it benefits farmers economically in the short term and supports sustainability of agriculture in the long term.”¹⁹⁷ These benefits have already been recognized by the federal government, which described IPM as “a sustainable approach to managing pests” that combines “biological . . . and chemical tools in a way that minimizes economic, health, and environmental risks.”¹⁹⁸

As the foremost source of information on pest control, PCAs are critical to the implementation of IPM in California. IPM requires intensive monitoring of crops, and thus requires a close relationship of trust between the PCA and the grower.¹⁹⁹ Due to the aforementioned safety and environmental hazards posed by pesticides, the goal of society is to reduce the use of such chemicals, which is accomplished by the use of IPM.²⁰⁰ Increased education for both PCAs and growers regarding the advantages of IPM must be provided. Those who recommend pesticides and those who use them must be made aware

¹⁹³ Best Management Practices for Pest Control in Vegetables, *supra* note 166, at 9.

¹⁹⁴ See Wuliger, *supra* note 11.

¹⁹⁵ *Id.*

¹⁹⁶ Pimentel, *supra* note 19, at 247.

¹⁹⁷ *Id.*

¹⁹⁸ 7 U.S.C.A. § 136r-1.

¹⁹⁹ *Cotton Growers*, *supra* note 39, at 27.

²⁰⁰ CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION, UNIVERSITY OF CALIFORNIA RIVERSIDE & UNIVERSITY OF CALIFORNIA DIVISION OF AGRICULTURE AND NATURAL RESOURCES, *The Value of IPM in Orchard Crops: Larry Burrow* (June 10, 2013),

http://ucanr.edu/sites/OrchardIPM/Video_Library_875/Educators/Larry_Burrow.

that IPM produces high quality crops without reducing growers' profits and is less harmful to the people and the environment because it allows for substantial protection from harmful pests without using unnecessary toxins.²⁰¹ Increasing grower education and improving IPM training for PCAs would help to reduce the use of pesticides by both PCAs and growers.²⁰² Such a reduction would improve public health and safety and reduce the costs imposed on growers' for purchasing what are often rather expensive chemical treatments.²⁰³

It is important that growers be better versed on the benefits of IPM as well as encouraged to use independent PCAs because of their ability to provide an integrated approach to pest management.²⁰⁴ The researchers, Farm Advisors, and Cooperative Extension Specialists employed by the University of California are at the forefront of IPM techniques and research.²⁰⁵ It has been found that independent PCAs in California are considerably more likely than company affiliated PCAs to reach out to extension personnel,²⁰⁶ who provide knowledge of integrated approaches to growers.²⁰⁷

Some growers may perceive IPM as a threat because it is a change in the chemical-dependent pest management strategy to which they have become accustomed.²⁰⁸ Along with resistance to change and learning new technologies, implementing IPM as a more common practice could be problematic because growers may fear that a lessened use of pesticides will be less effective.²⁰⁹ Further, IPM could be perceived as

²⁰¹ Patrick Weddle, *supra* note 15; CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION, UNIVERSITY OF CALIFORNIA RIVERSIDE & UNIVERSITY OF CALIFORNIA DIVISION OF AGRICULTURE AND NATURAL RESOURCES, *The Value of IPM in Orchard Crops: Tom Larsen* (June 7, 2013), http://ucanr.edu/sites/OrchardIPM/Video_Library_875/Industry_representatives/Tom_Larsen/.

²⁰² Metcalfe, *supra* note 39, at 9.

²⁰³ CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION, UNIVERSITY OF CALIFORNIA RIVERSIDE & UNIVERSITY OF CALIFORNIA DIVISION OF AGRICULTURE AND NATURAL RESOURCES, *The Value of IPM in Orchard Crops: Victoria Yokoyama* (June 14, 2013), http://ucanr.edu/sites/OrchardIPM/Video_Library_875/Viewpoints_from_researchers/Victoria_Yokoyama/.

²⁰⁴ See *Almond Growers*, *supra* note 41, at 242, 245.

²⁰⁵ Interview with Marshall W. Johnson, Ph.D., *supra* note 36; Flint & Klonsky, *supra* note 72, at 20.

²⁰⁶ U.S. CONG. OFFICE OF TECH. ASSESSMENT, *supra* note 40, at 135.

²⁰⁷ WARNER, *supra* note 1, at 110.

²⁰⁸ FLINT, *supra* note 124, at 246.

²⁰⁹ *Id.* at 259.

a risky practice because it requires allowing some beneficial pests to remain in the fields as opposed to spraying broad-spectrum insecticides and killing all the pests.²¹⁰ These issues “can be overcome with education or facilitated discussion.”²¹¹ While implementing IPM practices can present obstacles, and although some growers may perceive such a change as overly risky, the benefits of increased knowledge, reduced costs, and overall improvement in health and safety of pest management make IPM a risk worth taking.

C. Use of Pesticide Database Input Programs for Writing Recommendations

Finally, PCAs should increase their use of pesticide label databases when writing recommendations to ensure proper and safe pest control methods. Such databases allow PCAs to seamlessly make accurate and lawful pest control recommendations.²¹² The proper use of label databases would reduce the incidence of chemical over-prescription and prevent recommendations of unlawful pesticide applications, as these programs will not allow a PCA to write recommendations in excessive amounts or for pesticides that cannot lawfully be applied to the crop at issue.²¹³ For example, Agrian is a free program available to PCAs that checks recommendations against an enormous database of manufacturer label information, and provides accurate recommendations based on field size and crop type.²¹⁴ Mandating the use of Agrian or other services like it could ensure consistently superior pest control recommendations.²¹⁵

VI. CONCLUSION

The use of company affiliated PCAs has been practiced in the agricultural field for decades.²¹⁶ In 1979, van den Bosch was widely criticized for his recognition of this problem: “[t]he dominance of the chemical control strategy has already resulted in disasters economic,

²¹⁰ Interview with Marshall W. Johnson, Ph.D., *supra* note 36.

²¹¹ FLINT, *supra* note 124, at 259.

²¹² *Id.* at 245.

²¹³ See Agrian, Advisor and Documented Advisor (2014), available at http://fs1.agrian.com/home/Agrian_Grower.pdf.

²¹⁴ *Id.*

²¹⁵ See *id.*

²¹⁶ See E-mail from Rachael F. Long to author, *supra* note 85.

sociological, and ecological, and could lead to greater tragedies in the near future.”²¹⁷ His premonitions have become a reality.²¹⁸ Over time, pesticide distributors have continued to gain power through the employment of the vast majority of PCAs.²¹⁹ The affiliation of PCAs with giant agricultural chemical companies has proven to have detrimental effects on the environment and human health and safety.²²⁰ Farmers in particular bear the brunt of the PCA conflict of interest through increased costs and the potential destruction of their once-profitable crops.²²¹

The catastrophic consequences created by PCAs with conflicting interests can be remedied by a separation of PCAs from pesticide distributors, along with an emphasis on IPM and the use of pesticide label databases.²²² The California Food and Agricultural Code includes a legislative purpose section for its chapter on pest control operations.²²³ Most notably, part of the purpose is “to encourage the development and implementation of pest management systems, stressing application of biological and cultural pest control techniques with selective pesticides when necessary to achieve acceptable levels of control with the least possible harm to nontarget organisms and the environment.”²²⁴ The legislative intent was clearly aimed at reducing reliance on harmful pesticides, implementing IPM, and protecting the health and safety of people, the environment, and farmers in particular.²²⁵ This Comment has demonstrated that the most effective approach to achieving this goal is through the use of independent PCAs and the elimination of the conflict of interest that exists when pesticide distributors employ PCAs. The Department of Pesticide Regulation has already effectuated laws that prohibit a conflict of interest for governmental employees²²⁶ and similar regulations should be enacted that apply to all PCAs. Removing PCAs from the auspices of pest control giants is a necessary step toward the eradication of the pervasive conflict of interest that harms modern agriculture. Failure to

²¹⁷ Wuliger, *supra* note 11.

²¹⁸ *See supra* Part I. *See also* Part IV.B.

²¹⁹ *See* HARRISON, *supra* note 1, at 63.

²²⁰ *See supra* Part IV.A-B.

²²¹ *See supra* Part IV.C.

²²² *See supra* Part V.

²²³ CAL. FOOD & AGRIC. CODE ANN. § 11501 (West 2014).

²²⁴ *Id.* § 11501(f).

²²⁵ *See* FOOD & AGRIC. § 11501.

²²⁶ *See* CAL. CODE REGS. tit. 3, § 1.1 (1996).

erect a legal barrier between pesticide advisers and pesticide salesmen acts as an open invitation for the fox to continue guarding the hen house.

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