

AN ANALYSIS OF STATE PESTICIDE DRIFT LAWS REVISITED

Editor's Note: For the 20th Anniversary Volume of the San Joaquin Agricultural Law Review, Theodore A. Feitshans accepted our invitation to pen an update to an Article written by himself for Volume 9 of the San Joaquin Agricultural Law Review. The original Article is included as a counterpoint to this update in the Appendix.

I. INTRODUCTION

Whether the various state laws governing pesticide drift have at least in part achieved their objectives of reducing human exposure and threats to the environment since the author last addressed this topic¹ is a fascinating research question. Unfortunately there has been no research over the past decade that has tested this hypothesis.² Such research is costly and inherently difficult to conduct. There is no natural constituency that would support funding for research. Grants are generally made to address perceived problems, not to demonstrate that existing systems are achieving positive results (a form of publication bias).³ Indeed, given the polarization the subject has generated, any researcher that objectively addressed the question would likely be attacked from some quarters for suggesting any improvement, and from other quarters for suggesting that major problems remain – hardly a secure route to either tenure or future funding.

Nonetheless, one who walks through any major farm show can see the technological marvels on display that, for a price, can help the farmer who purchases them avoid exposing her neighbors to chemicals.⁴ This

¹ See generally Theodore A. Feitshans, *An Analysis of State Pesticide Drift Laws*, 9 SAN JOAQUIN AGRIC. L. REV. 37 (1999).

² The author's search of the literature, as well as his work in the field, has yielded no work on point. See generally Theodore A. Feitshans, *An Analysis of State Pesticide Drift Laws*, 9 SAN JOAQUIN AGRIC. L. REV. 37 (1999).

³ See generally Jonah Lehrer, *The Truth Wears Off*, NEW YORKER, Dec. 13, 2010, available at http://www.newyorker.com/reporting/2010/12/13/101213fa_fact_lehrer (last visited Mar. 9, 2011).

⁴ U.S. Enotl. Prot. Agency, *Generic Verification Protocol For The Verification Of Pesticide Spray Drift Reduction Technologies For Row And Field Crop* 3 (Draft, April 2007), available at <http://www.epa.gov/etv/pubs/600etv07021.pdf> (last visited Mar. 9, 2011).

technology has matured astoundingly since 1999. The serpent in the Garden of Eden is that many of these technologies manifest an alarming development of genes for resistance in pest species.⁵ As an example, important areas of U.S. cropland have become home to one or more major weed species that are resistant to the widely-used herbicide, glyphosate (originally marketed under the Monsanto trademark, Roundup).⁶ Nonetheless, since the 1999 Article, changes to the law have been generally very limited.⁷ A sample of these changes is discussed in the next section. In Part III of this brief update, the regulation of drift of genes that produce chemicals with pesticidal properties is discussed. As an area for state regulation, this area has been largely quiescent; however, as the result of developments at the federal level discussed in that section, and the proliferation of such genes, the states are unlikely to remain inactive.

II. NEW DEVELOPMENTS: STATE PROHIBITIONS OF DRIFT, PESTICIDE OVERSPRAY, AND OFF-SITE DAMAGE

No state, except California, has had major developments; its pesticide regulations have been substantially revised to focus on particular chemicals.⁸

In *Anderson v. State*, 693 N.W.2d 181 (Minn. 2005),⁹ the Supreme Court of Minnesota determined that a pesticide applicator with actual knowledge of foraging bees on neighboring property was liable to the owner of bee colonies, even where the pesticide was picked up on the target property.¹⁰ The Supreme Court of Minnesota cited the Supreme Court of Kansas decision in *Binder v. Perkins*, 516 P.2d 1012 (Kan. 1973)¹¹ that applied a negligence standard to the activities of pesticide applicators.¹² Similarly, Massachusetts has by regulation required that “[a]ll persons shall use pesticides in such a manner that there be no unreasonable adverse effect on the non-target environment.”¹³

⁵ NISHANTH THARAYIL-SANTHAKUMAR, MECHANISM OF RESISTANCE IN WEEDS 4-5, available at <http://www.weedscience.org/paper/Mechanism%20of%20Herbicide%20resistance.PDF> (last visited Mar. 10, 2011).

⁶ *The International Survey of Herbicide Resistant Weeds*, WEEDSCIENCE.COM, <http://www.weedscience.com> (last visited Mar. 10, 2011).

⁷ See *infra* Part II.

⁸ See generally CAL. CODE REGS. tit. 3, §§ 6400 – 6489 (2011).

⁹ *Anderson v. State*, 693 N.W.2d 181 (Minn. 2005).

¹⁰ *Id.* at 192 & n.4.

¹¹ *Binder v. Perkins*, 516 P. 2d 1012 (Kan. 1973).

¹² *Id.* at 1016.

¹³ 333 MASS. CODE REGS. § 13.02(5) (2011).

The New Jersey prohibition against drift has been re-codified but was not significantly modified in 2004.¹⁴ Ohio has modified its regulations to prohibit all off-site damage: “[n]o person shall: . . . [a]pply pesticide to an area or a crop in such a manner or at such a time that adjacent crops, pasture land, water or other areas will be damaged or contaminated.”¹⁵ Utah has also re-codified its provision regarding drift.¹⁶

Since the 1999 article, New York has transferred authority over pesticides from its Department of Agriculture and Markets to its Department of Environmental Conservation, but without major changes in the applicable provisions.¹⁷

The high courts of Washington, Oregon, Louisiana, and Oklahoma continue to be outliers in applying a rule of strict liability to aerial application of pesticides.¹⁸ These decisions cited in the 1999 article remain law in those states, but have not been followed by the high courts of any other states. However, all four of these states have no decided cases that indicate any wavering from the application of strict liability to the aerial application of pesticides.

III. CROPS WITH PESTICIDAL PROPERTIES

In 1999 the development of crops that, themselves, contain genes — genetically engineered into crops that produce chemicals with pesticidal properties — was only 4-5 years old.¹⁹ These genetically modified organisms (GMOs) raise concerns about the transfer of genetic material through movement of pollen as well as by other means.²⁰ Most of these developments have been at the federal level. The leading decision is *Monsanto Co. v. Geertson Seed Farms*, 130 S.Ct. 2743 (2010), decided by the Supreme Court on June 21, 2010, that reversed a Ninth Circuit opinion that had upheld a lower court injunction against deregulating Roundup Ready Alfalfa (RRA).²¹ RRA does not contain genes that produce chemicals with pesticidal properties; however, it does contain pat-

¹⁴ N.J. ADMIN. CODE § 7:30-10.2(f) (2008).

¹⁵ OHIO ADMIN. CODE 901:5-11-02(B)(8) (2009).

¹⁶ UTAH ADMIN. CODE r. 68-7-11(19) (2011).

¹⁷ See generally N.Y. COMP. CODES R. & REGS. tit. 6, §§ 320 - 359 (2010).

¹⁸ Feitshans, *supra* note 1, at 52.

¹⁹ Thomas Connor, Comment and Case Note, *Genetically Modified Torts: Enlisting the Tort System to Regulate Agricultural Contamination by Biotech Crops*, 75 U. CIN. L. REV. 1187, 1188 (Spring 2007).

²⁰ *Id.* at 1188 - 1189.

²¹ *Monsanto v. Geertson Seed Farms*, 130 S. Ct. 2743, 2761-62 (2010).

ented genetic material designed to make it tolerant to the herbicide, glyphosate (sold by Monsanto under the trademark Roundup).²²

In *Monsanto Co. v. Geertson Seed Farms*, the Supreme Court reversed a Ninth Circuit decision that had upheld the district court's grant of an injunction barring the Animal and Plant Health Inspection Service (APHIS) from partially deregulating RRA.²³ The district court had granted the injunction as a remedy for the failure of APHIS to prepare an Environmental Impact Statement (EIS) in support of its proposed deregulation of RRA as required by the National Environmental Policy Act (NEPA).²⁴

Quoting from *eBay Inc. v. MercExchange, L.L.C.*,²⁵ the Court stated the test for injunctive relief:

[A] plaintiff seeking a permanent injunction must satisfy a four-factor test before a court may grant such relief. A plaintiff must demonstrate: (1) that it has suffered irreparable injury; (2) that the remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and the defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.²⁶

The Court noted that all four factors must be satisfied before injunctive relief is appropriate.²⁷ Indeed in a NEPA case, a court that finds that all four factors exist need not grant injunctive relief.²⁸ "A preliminary injunction is an extraordinary remedy never awarded as of right."²⁹ In his opinion in *Winter v. Natural Resources Defense Council, Inc.*, 555 U.S. 7 (2008), the Chief Justice noted that a court in a NEPA case has alternatives to enjoining the underlying activity in which the agency is engaged.³⁰ "A court concluding that the Navy is required to prepare an EIS has many remedial tools at its disposal, including declaratory relief or an injunction tailored to the preparation of an EIS rather than the Navy's training [the activity for which the EIS was required]."³¹ At least one district court has noted that after *Monsanto Co. v. Geertson Seed Farms*,

²² *Id.* at 2750.

²³ *Id.* at 2761-62.

²⁴ *Id.* at 2751-52; *see generally* 42 U.S.C. §§ 4321 - 4375 (2010).

²⁵ *eBay, Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006).

²⁶ *Monsanto*, 130 S. Ct. at 2756-57 (citing *eBay, Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006)).

²⁷ *Id.* at 2757.

²⁸ *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 30-31 (2008).

²⁹ *Id.* at 31.

³⁰ *Id.* at 46.

³¹ *Id.*

the continued viability of injunctive relief as a remedy for NEPA violations has been diminished.³²

Justice Stevens, in his dissent in *Monsanto Co. v. Geertson Seed Farms*, noted that the district court found “that gene flow is likely and that APHIS has little ability to monitor any conditions imposed on a partial deregulation.”³³ Justice Alito, writing for the majority in *Monsanto Co. v. Geertson Seed Farms*, recognized the inherent conflict between producers of crops that are GMOs, and those that are certified organic or conventional.³⁴ Harms noted by the Court include costs associated with the need for testing to ensure that seed sold to customers, who do not want GMO-contaminated seed, is not contaminated, and the need to contract to grow such seed in isolated areas outside of the United States.³⁵ While the majority and Justice Stevens both recognized the potential for harm from RRA, they differed in their assessment of both the likelihood and magnitude of the potential harms. Writing for the majority, Justice Alito held that none of the four factors in the four-factor test for injunctive relief had been met.³⁶ Justice Alito noted that, “If a less drastic remedy (such as partial or complete vacatur of the APHIS’s deregulation decision) was sufficient to redress respondents’ injury, no recourse to the additional and extraordinary relief of an injunction was warranted.”³⁷

The decision of the Supreme Court in *Monsanto Co. v. Geertson Seed Farms*, together with its earlier decision in *Bates v. Dow Agrosciences L.L.C.*, 544 U.S. 431 (2005),³⁸ is likely to accelerate the likelihood of state regulation of the use of GMOs. In *Bates v. Dow Agrosciences L.L.C.*, the Supreme Court limited the extent to which section 136(v) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)³⁹ preempts state regulation of pesticides in ways important to the ability of states to regulate GMOs. The Supreme Court held that:

Rules that require manufacturers to design reasonably safe products, to use due care in conducting appropriate testing of their products, to market products free of manufacturing defects, and to honor their express warranties or other contractual commitments plainly do not qualify as requirements for “labeling or packaging.” None of these common-law rules requires that manufacturers label or package their products in any particular way. Thus, peti-

³² *Lands Council v. Cottrell*, 731 F. Supp. 2d 1074, 1091 (D. Idaho, August 6, 2010).

³³ *Monsanto v. Geertson Seed Farms*, 130 S. Ct. 2743, 2770-71 (2010) (Stevens, J., dissenting).

³⁴ *Id.* at 2754-57.

³⁵ *Id.*

³⁶ *Id.* at 2759.

³⁷ *Id.* at 2761.

³⁸ *Bates v. Dow Agrosciences L.L.C.*, 544 U.S. 431 (2005).

³⁹ 7 U.S.C. § 136 (2010).

tioners' claims for defective design, defective manufacture, negligent testing, and breach of express warranty are not pre-empted.⁴⁰

The Court further held that a state rule that merely might induce a manufacturer to make a change in a label is not preempted by FIFRA.⁴¹ The Court noted that section 136(v)(a) of FIFRA allows a state agency to entirely ban a federally registered pesticide.⁴² In this context it is clear that states may even ban GMOs with genes that produce chemicals with pesticidal properties.

Absent the ability to successfully challenge an agency decision for violations of NEPA, it is very difficult to challenge an agency decision to deregulate or permit a GMO because agency decisions are entitled to deference under *Chevron, U.S.A. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 844-45 (1984).⁴³ In *Monsanto Co. v. Geertson Seed Farms* the district court's vacatur of APHIS's complete deregulation of RRA was not appealed and, therefore, not addressed by the Supreme Court.⁴⁴ Despite his suggestion that the district court should have considered vacatur of the decision to deregulate rather than injunctive relief, it is difficult to imagine that such an action would have withstood review under standards of *Chevron* deference.

Taken as a whole, these agency and Supreme Court decisions open the door to state regulation of drift of genes from GMOs. In an excellent article on the subject, Thomas Connor noted that Colorado, Iowa, and North Carolina actively promote the use of GMOs while Vermont and Maine discourage their use.⁴⁵ Although most states do not have the regulatory apparatus necessary to adequately regulate the use of GMOs any more than the federal government does, the tort system could regulate such behavior.⁴⁶ State legislatures may find it useful to clarify the standard of duty owed by users, marketers and manufacturers of GMOs in order to obviate the need to establish the standard through litigation.⁴⁷ Those states that wish to encourage the use of GMOs may legislatively limit the duty, while those that wish to provide more protection for organic and conventional producers may wish to establish a heightened duty.

⁴⁰ *Bates*, 544 U.S. at 444.

⁴¹ *Id.* at 445.

⁴² *Id.* at 446.

⁴³ *Chevron U.S.A. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 844-45 (1984).

⁴⁴ *Monsanto v. Geertson Seed Farms*, 130 S. Ct. 2743, 2756 (2010).

⁴⁵ Connor, *supra* note 19, at 1199.

⁴⁶ *Id.* at 1199-1200.

⁴⁷ *Id.* at 1200-01.

IV. CONCLUSION

Although this brief Article has not attempted to chronicle every change to state laws that regulate pesticide drift, all of these changes since 1999, with the exception of California, have been minor.⁴⁸ As suggested above this is likely due to dramatic improvements in pesticide application technologies that substantially reduce both the likelihood and extent of drift. However, this state of affairs is not likely to remain as genetically engineered crops, especially those designed to produce chemicals with pesticidal properties, come into more widespread use. The stage is set for this area of state drift regulation to accelerate over the next decade.

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⁴⁸ See *supra* Part II.

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