

DRIVERLESS TRACTORS: A MATTER OF LIFE OR DEATH

INTRODUCTION

In the town of Coalinga, on June 28, 1997, farmworker Rafael Martinez was killed while working in a melon field. He was run over by a trailer hauled by a tractor without a stationary driver.¹ Mr. Martinez departed the tractor as it was moving.² He lost his balance, fell back, "and his chest was crushed by the front tire of a trailer carrying summer cantaloupes."³

Rafael Martinez's death could have been prevented. His daughter stated she heard him cry for help to stop the tractor as he was about to be crushed.⁴ If someone had been operating the tractor, or had been stationed within ten feet of the controls, Mr. Martinez's life could have been saved.

I. AGRICULTURE IS ONE OF THE MOST DANGEROUS INDUSTRIES

Agricultural injuries are not a new phenomenon in California. "Agriculture is considered one of the nation's most hazardous occupations with an estimated death rate of 21 per 100,000 work[ers] in 1996."⁵ According to the National Safety Council, agriculture is among the three most hazardous industries in the United States;⁶ "the other two are mining and construction."⁷ In 1996, mining was the most dangerous occupation; however, in that year, 130,000 more severe injuries occurred in agriculture than in mining.⁸ "Nationally, in 1996, 710

¹ Marcos Breton, *Coalition Pursues Shift in Tractor Worker Rules*, SACRAMENTO BEE, June 8, 1998, at A1.

² *Id.*

³ *Id.*

⁴ *Id.*

⁵ Paul D. Ayers, *Rops Design and Testing for Agricultural Tractors* (visited Fall 1998) <http://lamar.colostate.edu/~jhliu/topics_3.html>.

⁶ Info at AgSource, *Farm Fatalities* (last modified Dec. 22, 1997) <<http://www.agsource.com/farmfata.html>> [hereinafter Farm Fatalities].

⁷ *Id.*

⁸ South Dakota St. Univ. CES, Agricultural and Biosystems Engineering Dep't, Ag-

farm residents died directly from work related tasks, and a total of 150,000 farm residents suffered from disabling injuries."⁹ According to the United States Department of Labor, "farming has one of the highest fatality rates of all occupations."¹⁰ "Farmers and farmworkers receive little formal safety training and they most often work alone and are far from assistance should an injury occur."¹¹ "Fatalities are most likely to occur in spring, summer, and fall"—especially "May, July, August, and October"—the months when production rates are at their highest.¹²

Despite the astounding statistical data on the number of agricultural injuries, there is a dangerous trend by growers to use driverless tractors to harvest fruits and vegetables. California requires tractors to have operators unless the employer meets several stringent requirements.¹³ There have been a number of fatalities and serious injuries from driverless tractors. Between September 1996 and October 1997, there were five accidents—three fatalities, and two severe limb injuries—which involved driverless tractors that did not meet the require-

riculture Heath and Safety Statistics (visited July 17, 1999) <<http://www.abs.sdsstate.edu/ae/agsafe/agsafestatistics.html>>.

⁹ *Id.*

¹⁰ Jack L. Runyan, *Injuries and Fatalities on U.S. Farms* (last modified Jan. 26, 1998) <<http://151.121.66.126/epubs/htmlsum/aib739.html>> [hereinafter Injuries and Fatalities].

¹¹ *Id.*

¹² *Farm Fatalities*, *supra* note 6.

¹³ CAL. CODE REGS. tit. 8, § 3441(b) (2000) provides in relevant part:

All self-propelled equipment shall, when under its own power and in motion, have an operator stationed at the vehicular controls. This shall not prohibit the operator occupying or being stationed at a location on the vehicle other than the normal driving position or cab if controls for starting, accelerating, decelerating and stopping are provided adjacent and convenient to the alternative position.

Subsection (1) provides:

[f]urrow guided self-propelled mobile equipment may be operated by an operator not on the equipment provided that all of the following are complied with:

- (A) The operator has a good view of the course of travel of the equipment and any employees in the immediate vicinity.
- (B) The steering controls, when provided, and the brake and throttle controls are extended within easy reach of the operator's station.
- (C) The operator is not over 10 feet away from such controls and does not have to climb over or onto the equipment or other obstacles to operate the controls.
- (D) The equipment is not traveling at over two miles per hour ground speed.

ments for legal operation of a tractor without a driver.¹⁴ The accidents all occurred while the workers were getting on or off the tractor as it was traveling through the field.¹⁵

Furrow-guided, self-propelled mobile equipment is used by the agricultural community throughout California.¹⁶ Two growers testified at a Cal-OSHA hearing that the use of driverless tractors for harvesting was the normal and usual procedure in the industry.¹⁷ They further noted that they had never been cited for this violation in the past.¹⁸ The need to ban this practice is urgent to prevent further farmworker fatalities and injuries.

II. CALIFORNIA IS NOTORIOUS FOR THE USE OF DRIVERLESS TRACTORS

All self-propelled agricultural equipment (including tractors)¹⁹ must have a driver stationed on the tractor, except under specific circumstances.²⁰ If the operator is stationed at a different location "other than the normal driving position" there must be controls to "start[], accelerate[], decelerate[], or stop[]" placed at a convenient location.²¹ First, the operator must have a "good view" of both the forward course and any employees in the area of the moving tractor.²² Second, the steering, brake, and throttle controls must be within "easy reach of the operator's station."²³ Third, the operator must be able to reach the controls to maneuver the tractor without having to "climb over or onto any equipment or other obstacles."²⁴ Fourth, the tractor must not be

¹⁴ Memorandum from John Howard, Chief Cal-OSHA, to John. D. MacLeod regarding Division Evaluation of Variance File No. 96-V-059, (Jan. 16, 1998), at 6. [hereinafter Division Evaluation].

¹⁵ *Id.*

¹⁶ Application for Permanent Variance by California Safety Service Group, File No. 96-V-059, (May 10, 1996), attachment 7 at 1 [hereinafter Application for Permanent Variance].

¹⁷ Giannini Bros., 97-R2D2-2251, at 10 (Dep't of Indus. Relations 1998) [hereinafter Giannini Bros]. The court, relying on prior precedent, stated that just because everyone in an industry engages in a particular practice, this is not a defense to a violation, and each is still subject to any safety order which applies to them. *Id.*

¹⁸ *Id.* Again relying on prior precedent, the court stated that the lack of prior citations for the same violation does not prevent a current citation for the practice.

¹⁹ Veg. Packer, Inc. 95-R3D2-758 & 759, at 6 (Dep't of Indus. Relations 1995) [hereinafter Veg. Packer].

²⁰ CAL. CODE REGS. tit. 8, § 3441(b) (2000).

²¹ CAL. CODE REGS. tit. 8, § 3441(b) (2000).

²² CAL. CODE REGS. tit. 8, § 3441(b)(1)(A) (2000).

²³ CAL. CODE REGS. tit. 8, § 3441(b)(1)(B) (2000).

²⁴ CAL. CODE REGS. tit. 8, § 3441(b)(1)(C) (2000).

traveling in excess of two miles per hour.²⁵ Cal-OSHA is authorized to enforce the provisions of Title 8 of California Code Section 3441(b) as a result of its own investigation or from a complaint.²⁶ Section 3441(b) was one of the eight most frequently cited code sections listed in the Cal-OSHA Reporter applicable to agricultural growers in 1996.²⁷

“Between 1990 and 1997, Cal-OSHA” issued ninety-two citations for growers operating driverless tractors and fined employers a total of \$117,125.²⁸ After the appeal process, this amount was reduced to a mere \$12,785.²⁹ This is an alarming sum considering the ramifications driverless tractors have on farmworker safety. Employers are not likely to be concerned about minor fines, but are likely to listen when the fine puts a dent in their pockets. In 1998, Cal-OSHA issued three citations for violation of the California regulation prohibiting the use of driverless tractors absent required conditions.³⁰ Cal-OSHA issued twenty citations for violations in 1999.³¹ This is a major concern because many lives have been lost due to similar violations. In 1998, fines for violations of section 3441(b) ranged from \$250 to \$405.³² In 1999, fines ranged from \$435 to \$2,000.³³ Thus, fines are increasing along with Cal-OSHA’s awareness of the serious effects this practice has on farmworker safety.

III. EMPLOYERS HAVE THE DUTY TO PROVIDE EMPLOYEES A SAFE AND HEALTHY WORK ENVIRONMENT

Employers have a statutory duty to provide a safe work place.³⁴ The Federal Occupational Safety and Health Act of 1970 (hereinafter “FOSHA”) was enacted because Congress believed that worksite injuries are of major concern to the economy, both in terms of production, and the amount of compensation costs paid to injured employees.³⁵

²⁵ CAL. CODE REGS. tit. 8, § 3441(b)(1)(D) (2000).

²⁶ CAL. LAB. CODE §§ 6308, 6317 (Deering 2000).

²⁷ 1996 Most Frequently Cited Cal-OSHA Standards by Industry Group, CAL-OSHA REP., (March 16, 1998).

²⁸ Keith J. Moyer, *Driverless Tractors*, FRESNO BEE, Feb. 8, 1999, at B6.

²⁹ *Id.*

³⁰ *Establishment Search Inspection Detail—OSHA View*, (visited Feb. 28, 1999) <<http://www.osha.gov/cgi-bin/est/est1xp?i=125653485>> [hereinafter Search Inspection].

³¹ *Id.*

³² *Id.*

³³ *Id.*

³⁴ Federal Occupational Safety and Health Act of 1970, 29 U.S.C. § 651(b)(2)(3) (2000).

³⁵ 29 U.S.C. § 651(a) (2000).

Congress enacted FOSHA to ensure that (1) working individuals would be provided with a safe, healthy working environment; and (2) that the state and employer would make every effort to prevent unnecessary injuries to employees.³⁶

FOSHA authorizes states to adopt and oversee their own safety laws, subject to federal requirements.³⁷ The California Department of Industrial Relations is responsible for the development and enforcement of occupational safety and health standards.³⁸ The California Occupational Safety and Health Standard Board is the California agency responsible for implementing and enforcing safety and health regulation issues involving California workplaces.³⁹ It is the sole agency in California that can make and amend regulations.⁴⁰ The approved state plan requires the Board to draft a state regulation within six months of the issuance of a federal regulation.⁴¹ The state's regulation must be "at least as effective" as the federal standard.⁴² The purpose of the Board is to ensure that employers comply with regulations and protect employees from hazardous and dangerous working situations.⁴³ Cal-OSHA is authorized to issue fines when investigation discloses that individuals are not in compliance with regulations. An employer who violates a regulation or order *may* receive a civil fine of up to \$7,000 if the violation is deemed minor.⁴⁴ Serious violations *can* result in a civil fine of up to \$25,000 for each violation.⁴⁵ Further, if the employer does not have a preventive program developed, there is no basis for a good faith adjustment which reduces the fine for the violation.⁴⁶ An employer who is a repeat or willful offender may be assessed a fine up to \$70,000 per violation, but not less than \$5,000 per willful viola-

³⁶ 29 U.S.C. § 651 (2000).

³⁷ 29 U.S.C. § 667(b) (2000) provides that submission of the approved state plan will preempt applicable Federal standards. 29 U.S.C. § 667(c) (2000) provides that the state plan shall be submitted to the Secretary of the United States Department of Labor who shall approve or modify it.

³⁸ CAL. LAB. CODE §§ 50, 50.5, 50.7 (Deering 2000).

³⁹ *Occupational Safety and Health Standards Board Role and Responsibilities* (last modified June 2000) <<http://www.dir.ca.gov/OSHSB/oshsb.html>> [hereinafter Board Role and Responsibilities].

⁴⁰ *Id.*

⁴¹ CAL. LAB. CODE § 142.3(a)(2) (Deering 2000).

⁴² CAL. LAB. CODE § 142.3(a)(2) (Deering 2000).

⁴³ Board Role and Responsibilities, *supra* note 39.

⁴⁴ CAL. LAB. CODE § 6427 (Deering 2000).

⁴⁵ CAL. LAB. CODE § 6428 (Deering 2000).

⁴⁶ CAL. LAB. CODE § 6428 (Deering 2000).

tion.⁴⁷ Also, employers who fail to abate this practice can be fined \$15,000 for each day of continued violation.⁴⁸

Every California employer must keep its place of employment safe for its employees.⁴⁹ An employer shall utilize procedures and mechanisms that will result in a safe place of employment.⁵⁰ More specifically, employers must engage in preventive measures and use tools necessary to result in a safe place of employment.⁵¹ In addition, the employer shall maintain a written injury prevention program and convey it to all employees.⁵² It shall include issues ranging from the scheduling of routine inspections for hazards to training and ensuring that employees are aware of and in compliance with the laws.⁵³ All employers owe a duty to their employees to abide by all rules and regulations intended to ensure employee safety.⁵⁴ In a civil action against an employer the issue of whether that employer has provided a safe and healthy place of employment is a question of fact to be determined by a jury.⁵⁵

⁴⁷ CAL. LAB. CODE § 6429 (Deering 2000).

⁴⁸ CAL. LAB. CODE § 6430 (Deering 2000).

⁴⁹ CAL. LAB. CODE § 6400 (Deering 2000).

⁵⁰ CAL. LAB. CODE § 6403(b) (Deering 2000).

⁵¹ CAL. LAB. CODE § 6401 (Deering 2000).

⁵² CAL. LAB. CODE § 6401.7 (Deering 2000).

⁵³ CAL. LAB. CODE § 6401.7(a) (Deering 2000) provides in relevant part:

Every employer shall establish, implement, and maintain an effective injury prevention program. The program shall be written . . . and shall include, but not be limited to, the following elements: (1) Identification of the person or persons responsible for implementing the program. (2) The employer's system for identifying and evaluating workplace hazards, including scheduled periodic inspections to identify unsafe conditions and work practices. (3) The employer's methods and procedures for correcting unsafe or unhealthy conditions and work practices in a timely manner. (4) An occupational health and safety training program designed to instruct employees in general safe and healthy work practices and to provide specific instructions with respect to hazards specific to each employee's job assignment. (5) The employer's system for communicating with employees on occupational health and safety matters, including provisions designed to encourage employees to inform the employer of hazards at the worksite without fear of reprisal. (6) The employer's system for ensuring that employees comply with safe and healthy work practices, which may include disciplinary action.

⁵⁴ CAL. LAB. CODE § 6407 (Deering 2000).

⁵⁵ Mortensen v. Southern Pac. Co., 53 Cal. Rptr. 851, 853 (Ct. App. 1966). "The test of negligence in supplying the employee a safe place to work is whether reasonable men, examining the circumstances and the likelihood of injury, would have taken those steps necessary to remove the danger." (citing Atlantic Coast Line R.R. Co. v.

IV. PROBLEMS ASSOCIATED WITH DRIVERLESS TRACTORS

Driverless tractors create many dangers and problems. In the fields, the ground is usually very uneven, increasing the chance that a worker will trip and fall toward the moving tractor.⁵⁶ It does not matter if the tractor is only operating at two miles per hour; if the tractor rolls over on workers, the massive weight of the equipment can literally crush them. The workers almost always walk along the rear or side of the tractor pulling the harvester,⁵⁷ thereby making it very easy for them to get in the tractor's path. Even if a worker falls into soft dirt, and sinks enough to avoid being crushed by the driverless tractor, he/she still runs a high risk of severe injury. Wet fields are very slippery, increasing the chance that farmworkers will slip and fall. When workers are dismounting the tractor after turning it around, they can very easily fall in its path or get stuck on the tractor unable to dismount, making them vulnerable to injury. Some workers often ride on the towed harvesters, to place the produce into the boxes as it is picked. This gives rise to potential danger because they can easily fall off.

The California Code of Regulation requirements for operation of a driverless tractor are more burdensome to the employer than having a traditional stationary driver at the controls. Employers must meet four requirements.⁵⁸ First, they must make sure that an operator is watching the tractor and employees at all times.⁵⁹ Secondly, the operator must be able to control the tractor without being stationed on it by having the brake and throttle controls extended "within easy reach."⁶⁰ Thirdly, the operator must be within ten feet of the controls.⁶¹ Lastly, the equipment must not be traveling over two miles per hour.⁶² Because of the strict restrictions for utilizing driverless tractors it seems to be far more time consuming for the employer to ensure and comply with all four requirements than it is for the employer to use a driver. Therefore, it makes more sense to have a driver on the tractor, virtually eliminating the risk of death or great bodily harm posed by driverless tractors. Potential consequences of not using a driver seem to

⁵⁶ Craven 185 F.2d 176, 179 (4th Cir. 1950).

⁵⁷ Interview with Robert F. Perez, Law Firm of Perez Makasian Williams & Medina, Fresno, Cal., July 27, 1999.

⁵⁸ Division Evaluation, *supra* note 14, at 6.

⁵⁹ CAL. CODE REGS. tit. 8, § 3441(b)(1) (2000).

⁶⁰ CAL. CODE REGS. tit. 8, § 3441(b)(1)(A) (2000).

⁶¹ CAL. CODE REGS. tit. 8, § 3441(b)(1)(B) (2000).

⁶² CAL. CODE REGS. tit. 8, § 3441(b)(1)(C) (2000).

⁶³ CAL. CODE REGS. tit. 8, § 3441(b)(1)(D) (2000).

outweigh the added expense of employing a stationary driver. Although it may be tiresome and boring for the employee to drive the tractor, employees can regularly trade off driving duties. Such a trade off could provide a welcome break from the rigorous work of picking the produce.

Cal-OSHA issued a policy statement stating that the worker in charge of the remote controls should have the sole duties of continually watching the tractor and workers, and warning employees when a possible danger arises.⁶³ If the operator/employee were to perform other work while watching the tractor and the employees, it is likely the operator would not see someone in the path of the tractor because his/her attention would be divided. It is also likely that he/she would not be able to stop the tractor in time to prevent an injury. Continuance of this practice would defeat the intent and purpose of the exceptions to the law which allow the tractor to be utilized without a driver, provided the requirements of the exception are satisfied.

Employers bear the burden of showing that they are either exempt from the law or are in compliance with it.⁶⁴ An employer can use three mechanisms to try to win an exemption from the law. First, the employer can file for a temporary variance which will be granted upon proof of inability to comply with the law due to some defect in his/her business practice or machinery.⁶⁵ They must make every effort to reduce the danger to employees and must take all necessary steps to comply with the law as soon as possible.⁶⁶ Secondly, they can apply for a permanent variance which will be granted if a preponderance of evidence shows that the proposed alternative practices will be just as safe, if not safer, than the law currently requires.⁶⁷ However, this exemption can be revoked or amended by the Cal-OSHA Board if the employers do not meet the requirements under which the variance was granted.⁶⁸ Thirdly, an employer can petition Cal-OSHA to engage in its quasi-legislative rulemaking function by amending, modifying, or

⁶³ Letter from Michael A. Mason, Chief Counsel, Cal-OSHA, to Rob Roy, General Counsel for Ventura County Agricultural Association (Feb. 15, 1999) [hereinafter Rob Roy letter].

⁶⁴ Giannini Bros., *supra* note 17, at 8.

⁶⁵ CAL. LAB. CODE §§ 6450-6457 (Deering 2000).

⁶⁶ CAL. LAB. CODE § 6450(b) (Deering 2000) provides in part, "Any temporary order issued under this section shall prescribe the practices, means, methods, operations, and processes which the employer must adopt and use while the order is in effect and state in detail his program for coming into compliance with the standard."

⁶⁷ CAL. LAB. CODE § 143(b) (Deering 2000).

⁶⁸ CAL. LAB. CODE § 143(d) (Deering 2000).

repealing a Cal-OSHA regulation to meet the employer's specific needs.⁶⁹ An employer who does not seek an exemption must meet and comply with the four specified conditions to operate a driverless tractor.

Cal-OSHA has found that violation of section 3441(b) is a serious violation.⁷⁰ A serious violation constitutes a substantial likelihood of death or great bodily harm which could result from the way in which the job is completed, unless there is no way for the employer to know of the violation.⁷¹ This violation will only be found if there is "a substantial probability of death or serious physical harm."⁷² It is common sense that employers have a duty to supervise their employee's work. Therefore, if an employer fails to comply with section 3441(b) he/she will be cited for a serious violation. Cal-OSHA's classification is substantiated by the numerous deaths in past years and the even greater number of severe injuries to farmworkers from this practice.⁷³

V. CALIFORNIA GROWERS ATTEMPT TO CHANGE THE LAW BY FILING A JOINT VARIANCE IN 1996

Eighty-one California growers filed for a permanent variance in 1996. The majority of these growers were from Salinas and Santa Maria. They sought the variance because they wanted authorization to allow operators to mount/dismount the tractors by changing the control requirement.⁷⁴ Current law requires the tractor to be controlled at the wheel unless the four conditions under section 3441(b) are met.⁷⁵ The growers proposed that the use of an emergency "kill switch device" would amount to sufficient compliance with the law and would be just as safe as having the "brake and throttle" control the law currently requires.⁷⁶

This variance was said to be the most controversial in the history of

⁶⁹ CAL. GOV'T CODE § 11346 (Deering 2000).

⁷⁰ Veg. Packer, *supra* note 19, at 6, affirmed on reconsideration in Veg. Packer, Inc. Docket No. 95-R3DA-759 at 2.

⁷¹ CAL. LAB. CODE § 6432 (Deering 2000).

⁷² *Id.*

⁷³ Veg. Packer, *supra* note 19, at 5-6. In this case, the employees were packing vegetables onto the crates on the trailer which was pulled by the driverless tractor. The operator would mount the tractor to turn it around to proceed down another furrow. No remote controls were provided to slow down or stop the tractor. *Id.* at 1.

⁷⁴ Application for Permanent Variance, *supra* note 16, attachment 6 at 1.

⁷⁵ *Id.*

⁷⁶ *Id.* at 2.

Cal-OSHA.⁷⁷ Several agencies, such as farmworker unions and California Rural Legal Assistance opposed this variance from the beginning.⁷⁸ They opposed it on procedural grounds, as well as substantive grounds. They felt, as did the Division of Occupational Safety and Health Enforcement Division of Cal-OSHA, that the kill switch did not provide "superior or equivalent safety by a preponderance of the evidence."⁷⁹

Cal-OSHA opposed the variance for several reasons. First, it opposed it on substantive grounds because it strongly believed that the kill switch would not provide safety that is superior to safety provided by the current requirements.⁸⁰ Cal-OSHA found an inherent danger when the operator of a driverless tractor attempts to mount and dismount the tractor because he/she can slip and fall.⁸¹

Cal-OSHA believed that the applicant's attempt to rewrite section 3441(b)(1)(B) was not justified by the substitution of a "kill switch" because the law already requires a kill switch on towed farm equipment.⁸² Under section 3441(e), there must be a device installed on the tractor when towing equipment which will immediately stop the tractor if needed.⁸³ The section implies that a "kill switch" is required in order to be in compliance with subsection (e). Furthermore, the kill switch does not provide the added protection prescribed under subsection (b)(1)(B) because Cal-OSHA found that this subsection requires a remote control to stop, accelerate, and decelerate.⁸⁴

Cal-OSHA found evidence that compliance with all four requirements is possible and feasible.⁸⁵ The California Department of Transportation and the University of California, at Davis, have been in-

⁷⁷ Telephone Interview with Richard Quandt, Growers & Shippers Vegetable Association, Aug. 19, 1999 [hereinafter Quandt Interview].

⁷⁸ Moyer, *supra* note 28.

⁷⁹ Variance Decision by Occupational Safety and Health Standards Board, File No. 96-V-059, (July 13, 1999) at 12. [hereinafter Variance Decision].

⁸⁰ Division Evaluation, *supra* note 14, at 4.

⁸¹ *Id.* at 5.

⁸² *Id.* at 7.

⁸³ CAL. CODE REGS. tit. 8, § 3441(e) (2000) states:

Where mobile farm equipment is towed by a tractor or truck and the tractor or truck driver cannot see the employees on the towed equipment, a positive signaling device shall be installed on the towed equipment, or there shall be a device on the towed equipment that can be actuated to stop the towing equipment in case of an emergency.

⁸⁴ Division Evaluation, *supra* note 14, at 7.

⁸⁵ *Id.*

venting a riderless front-end loader.⁸⁶ Through this development, Cal-OSHA found that steering, braking, and throttling can be controlled on a furrow-guided tractor by use of a remote control.⁸⁷ This development makes the growers' proposed use of a "kill switch" less compelling because compliance with the law is achievable if they are willing to buy the available technology.

In this case, eighty-one growers applied for a variance, raising a serious issue of compliance.⁸⁸ Although a single employer usually applies for a variance, California permits a "class of employers" to bring an application for a variance.⁸⁹ "A class of employers would be a discrete number of employers similarly situated and one that would be able to uniformly comply with all of the requirements respective to perfecting the variance because of this similarity."⁹⁰ Cal-OSHA did not believe the growers constituted such a class;⁹¹ the only thing the employers had in common was that they all wanted to be exempt from 3441(b) in exchange for using a kill switch on their tractors.⁹² The growers did not provide evidence that they used the same type of equipment or that they engaged in the same type of harvesting process.⁹³ All the farmers had their own employees who worked at different job sites with varying crews composed of different members.⁹⁴ In addition, the growers failed to show a common practice of training their employees in the same manner.⁹⁵ Cal-OSHA further stated that the variance procedure is not intended to allow employers to seek an exemption by changing the law.⁹⁶ The better approach would have been to have the Board engage in its quasi-legislative rulemaking function to modify the current standard.⁹⁷ This approach would also have accomplished a longer lasting effect on current driverless tractor practice than an exemption.⁹⁸

⁸⁶ *Id.*

⁸⁷ *Id.*

⁸⁸ *Id.* at 2.

⁸⁹ CAL. CODE REGS. tit. 8, § 411(a) (2000).

⁹⁰ Division Evaluation, *supra* note 14, at 2.

⁹¹ *Id.*

⁹² *Id.*

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ *Id.*

⁹⁶ *Id.* at 2-3.

⁹⁷ *Id.* at 3.

⁹⁸ *Id.*

Cal-OSHA also found that the variance would be virtually impossible to supervise and enforce because the employers are spread across a large geographical area.⁹⁹ Cal-OSHA is required to do a quarterly report regarding the parties' compliance with the variance. Cal-OSHA does not have the manpower or time to supervise across such a broad geographical area.¹⁰⁰

All employers must give notice of the proposed variance to all their employees in order to give them the chance to appear and be heard.¹⁰¹ Cal-OSHA found that not all of the growers' employees were given adequate notice.¹⁰²

The grower's proposal, however, is not utterly without merit. The growers filed the variance in response to the Targeted Industry Partnership Program (hereinafter "TIPP") sweeps by Cal-OSHA.¹⁰³ TIPP was an effort to target dangerous industries, including agriculture. TIPP conducted numerous inspections and discovered that driverless tractors were being used in violation of the law. They cited several growers for violations.¹⁰⁴ This variance was the growers' attempt to seek relief from the citations.¹⁰⁵ The growers proposed the alternative use of a kill switch in the back of the tractor because during picking all the workers are in the back of the tractor by the harvester. If an emergency arose, they argued, there could be a very fast response and any nearby crew member could hit the kill switch.¹⁰⁶

The growers do not see the operator of the tractor as a driver, but rather as a rider.¹⁰⁷ They claimed the tractor does not require any steering because it is furrow-guided and the driver merely sits on the tractor.¹⁰⁸ The growers argued that having a driver ride on the tractor will likely result in more injuries because the driver tends to get very bored and tired. The driver is isolated from the rest of the crew and cannot see what the workers are doing behind him.¹⁰⁹ If an emergency

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ CAL. CODE REGS. tit. 8, § 407.2 (2000) provides in part, "[T]he employer shall post a copy of the application or appeal, or a statement giving a summary of the application or appeal and specifying where a copy may be examined, at the place or places where notices to employees are usually posted."

¹⁰² Division Evaluation, *supra* note 14, at 3.

¹⁰³ Quandt Interview, *supra* note 77.

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

¹⁰⁹ *Id.*

arose, they said, response time would be longer because workers would have to communicate with the driver, who may not be paying attention.¹¹⁰ Further, the loud noise and vibration from the tractor would contribute to this problem because the driver might not be able to hear communication of an immediate danger.¹¹¹ The growers attempted to alleviate the danger of workers getting off and on the tractor by adding a platform extension with steps and hand-holds extending over the tractor wheel.¹¹² One grower believed this platform alone would be enough to prevent injuries.¹¹³ However, while the extension may prevent the driver from falling, it does not prevent employees from being run over.

The growers also claimed there was no technology available to meet the current demands of having a ground level control to accelerate, decelerate, stop, and start the tractor.¹¹⁴ In addition, many different makers of tractors, both old and new, are being used by the growers. This makes it difficult to obtain the necessary parts for complying with the law. The cost of the parts will vary depending on the make of tractor.¹¹⁵ However, technology is definitely available to place a "kill switch" on a tractor which could cut off all power to the tractor if necessary to prevent injury.¹¹⁶

The growers claimed the current trend in technology seems to be the invention of machines that can be operated without a driver to command them.¹¹⁷ They argued that since the law currently allows seed planters to be operated without a driver—provided they have a "kill switch"¹¹⁸—the law should allow tractors to operate similarly.¹¹⁹ They argued that because tractors and seed planters are operated in the same manner, tractors should also be allowed to be operated without a

¹¹⁰ *Id.*

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ See Questionnaire by George J. Adam, A & A Farms, Santa Maria, Cal. (on file with *San Joaquin Agricultural Law Review*). The author mailed a questionnaire to selected applicants and Mr. Adam was one of the applicants who responded.

¹¹⁴ Quandt Interview, *supra* note 77.

¹¹⁵ *Id.*

¹¹⁶ *Id.*

¹¹⁷ *Id.*

¹¹⁸ CAL. CODE REGS. tit. 8, § 3441(b) (2000) provides in part, "Seedling planters and other similar equipment traveling at a speed of two miles an hour or less where a control that will immediately stop the machine is located at the operator's work station will satisfy this requirement."

¹¹⁹ Quandt Interview, *supra* note 77.

driver.¹²⁰

The growers' arguments and proposals failed to recognize hazards to employees who may be in front of the tractor. This position is the most dangerous because the workers are in the imminent zone of harm posed by the tractor and may have no escape to prevent being run over. For example, if all the workers are in the back picking, then no one will be able to see if someone gets in front of the tractor. A driver positioned atop the tractor has wider range of vision and would be able to see dangers existing in front of the tractor. This driver would be able to act in time to prevent an injury.

In spite of the safety issues, The Cal-OSHA Standard Board made no ruling on the substantive issues in the case.¹²¹ The Board ultimately denied the variance for procedural defects.¹²² It found that all the employees had not been given adequate notice as provided by the California Labor Code.¹²³ The Review Board stated it may refuse to consider a similar request by this or other groups if the same notification problems seem inevitable.¹²⁴ The growers have filed a petition for rehearing which has yet to be ruled on.¹²⁵ The petition was denied.¹²⁶

VI. FARMWORKERS INJURED BY DRIVERLESS TRACTORS IN CALIFORNIA CANNOT SUE THEIR EMPLOYERS

Farmworkers injured on the job have limited remedies. Under California Workers' Compensation law, the only remedy for an injured employee is the right to compensation.¹²⁷ However, there are exceptions to this general rule. An employee can bring an action at law if the employer physically assaults the employee.¹²⁸ If the injury to the employee is "aggravated by the employer's fraudulent concealment" of the injury he/she can bring suit.¹²⁹ The employee can also bring an action if the injury is as a result of the employer's manufacturing a

¹²⁰ *Id.*

¹²¹ Variance Decision, *supra* note 79, at 15.

¹²² *Id.*

¹²³ *Id.* The Board found the growers had not complied with California Labor Code section 143.1 and section 407.2 of the California Code of Regulations Title 8, which set forth the responsibilities of employers to notify their employees of proceedings and allow them to be present at any hearings.

¹²⁴ *Id.*

¹²⁵ Quandt Interview, *supra* note 77.

¹²⁶ *Id.*

¹²⁷ CAL. LAB. CODE §§ 3601-3602 (Deering 2000).

¹²⁸ CAL. LAB. CODE § 3602(b)(1) (Deering 2000).

¹²⁹ CAL. LAB. CODE § 3602(b)(2) (Deering 2000).

defective product which was transferred to the employee through a third person.¹³⁰ Further, an injured employee can bring a cause of action when the employer fails to pay for Workers' Compensation benefits.¹³¹

Workers' Compensation law is provided "to furnish a complete system of [workers'] compensation, including full provision for such medical, surgical, hospital, and other remedial treatment as is requisite to cure and relieve from the effects of such injury."¹³² The goal of the California Workers' Compensation Act is to place injured employees in the same position as they were in before the injury and to give them guidance and support so they can return to work as soon as possible.¹³³ However, if a farmworker is injured by a driverless tractor, Workers' Compensation does not compensate for the full damage caused by the injury.¹³⁴ There is no compensation for pain and suffering, or for having to work under conditions which could have been made less hazardous.

VII. INJUNCTIONS PREVENT THE USE OF "DRIVERLESS TRACTORS"

In an action by the state, the primary goal of injunctive relief is to stop continued violations of the law.¹³⁵ However, under the Unfair Business Practice Act, injunctive remedies are available to private parties whether acting in their own interest or on behalf of the general public.¹³⁶ Unfair business practices include acts that are done in the course of business that are unlawful.¹³⁷ The Unfair Competition Law permits a cause of action to be brought under Business and Professions Code section 17200 if an act or practice violates some other "law be it civil or criminal, federal, state, or municipal, statutory, regulatory, or court-made."¹³⁸ Therefore, farmworker advocate agencies

¹³⁰ CAL. LAB. CODE § 3602(b)(3) (Deering 2000).

¹³¹ CAL. LAB. CODE § 3702(a)(3) (Deering 2000).

¹³² Fitzpatrick v. Fidelity and Cas. Co., 60 P.2d 276, 277 (Cal. 1936) (citations omitted).

¹³³ Edgar v. Workers' Compensation Appeals Bd., 76 Cal. Rptr. 2d 83, 88 (Ct. App. 1998).

¹³⁴ *Id.*

¹³⁵ Hernandez v. Atlantic Fin. Co., 164 Cal. Rptr. 279, 284 (1980).

¹³⁶ CAL. BUS. & PROF. CODE §§ 17070, 17078-17081 (Deering 2000); Barquis v. Merchants, 496 P.2d 817, 829 (Cal. 1972); Continental Baking Co. v. Katz, 439 P.2d 889, 898-900 (Cal. 1968).

¹³⁷ CAL. BUS. & PROF. CODE § 17200 (Deering 2000).

¹³⁸ Saunders v. Superior Court, 33 Cal. Rptr. 2d 438, 441 (1994), internal citations omitted.

such as CRLA can seek injunctions to prohibit unlawful use of driverless tractors. In fact, CRLA has been previously granted three injunctions against this practice.¹³⁹ These injunctions not only prohibit this dangerous practice, but also allow the court to hold the growers in contempt of court for violating the orders.¹⁴⁰ This will likely have a deterrent effect on other growers who may be engaging in this practice.

Here, the growers requiring employees to work in the fields while using driverless tractors without remote controls or providing other alternatives that comply with the law violates both the California Labor Code and Cal-OSHA Regulations. Using driverless tractors violates the California Labor Code because it creates a potential danger to employee safety.¹⁴¹ Thus, private individuals can bring an action for an unlawful business activity.¹⁴² CRLA or other interested agencies¹⁴³ may bring an action on their own behalf, or on behalf of concerned members of the public.¹⁴⁴ Furthermore, the plaintiff does not have to be personally affected by the violation to bring the action.¹⁴⁵ The Unfair Business Practice Act¹⁴⁶ provides standing for a private individual or agency to sue.¹⁴⁷

A plaintiff must meet one of the six requirements to win a preliminary injunction to prevent this unlawful practice.¹⁴⁸ First, the plaintiff must prove entitlement to relief and that the relief sought consists, at least in part, of preventing the commission of a certain act.¹⁴⁹ Here, the act would be the failure of growers to comply with the California regulation that requires all self propelled equipment to have an operator stationed at the vehicle controls, unless specific requirements are met.¹⁵⁰ Second, the plaintiff must establish that “great or irreparable

¹³⁹ Telephone Interview with Michael Meuter, California Rural Legal Assistance, Aug. 12, 1999.

¹⁴⁰ *Id.*

¹⁴¹ CAL. LAB. CODE §§ 6400, 6401, 6403, 6407 (Deering 2000).

¹⁴² CAL. BUS. & PROF. CODE §§ 17070, 17200 (Deering 2000).

¹⁴³ CAL. BUS. & PROF. CODE §§ 17070, 17200, 17204 (Deering 2000).

¹⁴⁴ Midpeninsula Citizens for Fair Housing v. Westwood Investors, 271 Cal. Rptr. 99, 106 (Ct. App. 1990).

¹⁴⁵ Consumers Union v. Fisher Dev., 257 Cal. Rptr. 151, 155 (Ct. App. 1989).

¹⁴⁶ CAL. BUS. & PROF. CODE § 17200 (Deering 1999); Stoiber v. Honeychuck, 162 Cal. Rptr. 194, 206-207 (1980).

¹⁴⁷ Committee on Children's Television, Inc. v. General Foods Corp., 673 P.2d 660, 668 (Cal. 1983).

¹⁴⁸ CAL. CIV. PROC. CODE § 526(a) (Deering 2000).

¹⁴⁹ CAL. CIV. PROC. CODE § 526(a)(1) (Deering 2000).

¹⁵⁰ CAL. CODE REGS. tit. 8, § 3441(b) (2000).

injury" will occur if the conduct continues.¹⁵¹ Here, the potential injury to the farmworkers is irreparable; many have died or suffered severe injury. Third, the plaintiff must establish that the employer is acting in violation of the rights of another.¹⁵² Here, the employer is violating farmworkers' rights to a healthy and safe work environment. Fourth, the plaintiff must show that pecuniary relief would not be adequate.¹⁵³ Fifth, the plaintiff must show it would be extremely difficult to determine the amount of compensation.¹⁵⁴ A court cannot place a value on human life or use of limbs; money can never adequately compensate for this type of injury. Finally, the plaintiff must show that it is necessary to prevent a large number of judicial proceedings.¹⁵⁵ The large number of growers who have been cited for engaging in use of "driverless tractors" is evidence that this is a common practice among growers. Also, there is a potential for many lawsuits due to the large number of accidents that may occur from this practice, which further favors the granting of an injunction. The only way to prevent serious harm is to prevent the violations from occurring. Therefore, when an injunction proceeding is brought against a grower for use of unlawful driverless tractors, public policy favors issuing an injunction to prevent violations.

The legislature seems to agree that the use of driverless tractors endangers farmworkers and is against public policy. The legislature has acted to protect employees by making violations of any standard or order that is deemed to be a serious violation a misdemeanor.¹⁵⁶ Even a negligent violation of any standard or order is deemed a serious violation.¹⁵⁷ Since most farmworkers are seasonal migrant workers who are

¹⁵¹ CAL. CIV. PROC. CODE § 526(a)(2) (Deering 2000).

¹⁵² CAL. CIV. PROC. CODE § 526(a)(3) (Deering 2000).

¹⁵³ CAL. CIV. PROC. CODE § 526(a)(4) (Deering 2000).

¹⁵⁴ CAL. CIV. PROC. CODE § 526(a)(5) (Deering 2000).

¹⁵⁵ CAL. CIV. PROC. CODE § 526(a)(6) (Deering 2000).

¹⁵⁶ CAL. LAB. CODE § 6423 (Deering 2000).

¹⁵⁷ CAL. LAB. CODE § 6423 (Deering 2000), provides in part:

[E]very employer, and every officer, management official, or supervisor having direction, management, control, or custody of any employment, place of employment, or other employee, who does any of the following shall be guilty of a misdemeanor: (a) [k]nowingly or negligently violate any standard, order, or special order, or any provision of this division, or of any part thereof, in or authorized by this part the violation of which is deemed to be a serious violation pursuant to Section 6432; (b) [r]epeatedly violates any standard, order, or special order, or provision of this division, or any part thereof in, or authorized by, this part, which repeated violation creates a real and apparent hazard to employees.

usually unable to obtain any other employment, often cannot speak English, have very little education, and are afraid to speak out for fear of being disciplined or losing their livelihood, an injunction would be proper. Public policy dictates that society protect such individuals. Cal-OSHA has acted in agreement by making a violation of 3441(b) a serious violation that is a misdemeanor.¹⁵⁸

VIII. RECOMMENDATIONS FOR EMPLOYERS

In addition to enforcing violations of the law, more work is needed to prevent further injuries to farmworkers resulting from the use of driverless tractors. "It may be possible to reduce the risk of occupational injuries through regulation, engineering, education, or a combination of these methods."¹⁵⁹ The farming industry is far behind in technology compared to other industries.¹⁶⁰

Engineering is a very effective way to cure defects in agricultural machinery. One way engineering could prevent a tractor from being operated without a driver is to place a "kill switch" on the seat of the tractor so that it will not start without someone sitting in the driver's seat.¹⁶¹ Because of the great threat these tractors pose, it would be wise to place such a device on all of them. Farm equipment has a long usage rate; therefore, the safety devices usually quit working long before the equipment does causing employers to replace them periodically.¹⁶² It takes years for new safety devices to become widely used.¹⁶³

Employers need to "make accident prevention a management as well as a personal goal."¹⁶⁴ "Developing effective farm safety programs" requires that all the parties involved in farming join together to work on safety and injury prevention.¹⁶⁵ Employers need to get their employees and families involved with the safety concerns and preventive measures.¹⁶⁶ Communication is the key to educating workers.¹⁶⁷ Employers should conduct regular meetings with employees and their

¹⁵⁸ Veg. Packer, *supra* note 19, at 6.

¹⁵⁹ Injuries and Fatalities, *supra* note 10.

¹⁶⁰ Interview with Robert F. Perez, *supra* note 56.

¹⁶¹ *Id.*

¹⁶² Injuries and Fatalities, *supra* note 10.

¹⁶³ *Id.*

¹⁶⁴ U.S. Dep't of Labor, OSHA Fact Sheet (visited July 17, 1999) <<http://www.pp.okstate.edu/ehs/training/oshafarm.htm>> [hereinafter OSHA Fact Sheet].

¹⁶⁵ Injuries and Fatalities, *supra* note 10.

¹⁶⁶ OSHA Fact Sheet, *supra* note 164.

¹⁶⁷ *Id.*

families to “assess safety hazards, [and] discuss potential accident situations.”¹⁶⁸ Open communication with employees about the potential dangers associated with driverless tractors increases the probability that workers will alert employers and other employees when a dangerous situation arises.

Employers must make sure to read and follow all instructions contained in equipment operator’s manuals and “on product labels for safe use and handling.”¹⁶⁹ It is against manufacturers’ instructions to get off a tractor while it is moving; and most manuals warn against trying to get on or off a moving tractor.¹⁷⁰ Therefore, employers need to ensure that all employees comply with manual instructions.

“The benefits of accident prevention include reduced work injury and illness costs such as worker compensation insurance premiums, lost production and medical costs.”¹⁷¹ A workplace that is free of danger and harm promotes worker production and satisfaction.¹⁷² Most importantly, it prevents injuries and human suffering.¹⁷³

CONCLUSION

Agriculture is already one of the most dangerous industries. Use of “driverless tractors” makes it even more hazardous to farmworker safety, increasing the number of injuries to workers. Driverless tractors have taken lives of farmworkers that could have been saved if employers had prevented their use. Cal-OSHA recognized the danger posed by the unlawful use of driverless tractors. This is evidenced by the fact the agency has classified it as a serious violation and issued more citations in 1999 than in previous years. However, more needs to be done. Employers are the key to preventing future injuries. Only forty percent of workplace fatalities can be prevented by Cal-OSHA enforcement measures;¹⁷⁴ therefore, the majority of enforcement and supervision is in the hands of the employer. Although, driverless tractors may have been accepted in the past, they must not threaten farmworkers in the future. The current trend is in the right direction.

¹⁶⁸ *Id.*

¹⁶⁹ *Id.*

¹⁷⁰ See, e.g., JOHN DEERE TRACTOR OWNER’S MANUAL 05-2 (1999).

¹⁷¹ OSHA Fact Sheet, *supra* note 164.

¹⁷² *Id.*

¹⁷³ *Id.*

¹⁷⁴ National Census of Fatal Occupational Injuries, *OSHA-Workplace Fatalities* (visited July 18, 1999) <<http://epf.org.osha3.htm>>.

Cal-OSHA's denial of one of the largest variance filings in history points to a vital change in future practice.

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