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Dust in the Wind: Will New Environmental Regulations Mean More Liability Claims?

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DUST IN THE WIND: WILL NEW ENVIRONMENTAL REGULATIONS MEAN MORE LIABILITY CLAIMS?

I. INTRODUCTION

The nation's leading agricultural producers are facing increasingly stringent enforcement of environmental regulations. This follows in light of agriculture's increasingly visible role as a major contributor to air-borne particulate matter. At the same time, the media has focused the spotlight on the nation's worst air quality basin, where many of those same farmers are located. Environmental matters are highly emotional and politically charged topics whenever they arise. Will this combination of factors combine to expose farmers and their insurers to heightened tort liability? This Comment will review the evolution of environmental regulations and how they evolved following some highly publicized environmental debacles. Then follows a discussion about some of the possibilities that may lie ahead for agricultural producers and the companies who insure them for liability.

II. SAN JOAQUIN VALLEY AGRICULTURE

Nestled within the heart of California lies a green and fertile valley called San Joaquin. But this is no ordinary valley. Memorialized by Hollywood with Barbara Stanwyck and Lee Majors in "The Big Valley,"¹ it stands alone in the world of superlatives. This enormous valley is blessed with abundant nearby water for irrigation,² fertile soil,³ and a moderate, Mediterranean climate.⁴ These conditions allow the farmers who toil these lands to be the most productive in the country.⁵ Fresno

¹ TIM BROOKS & EARLE MARSH, *THE COMPLETE DIRECTORY TO PRIME TIME NETWORK TV SHOWS* 85, (4th ed., Ballentine Books, 1988) (the show ran from 1965 to 1969 on ABC and was set on the sprawling "Barkely" ranch in the San Joaquin Valley).

² American Farmland Trust: California Region: Southern San Joaquin Valley, *available at* http://www.farmland.org/california/south_san_joaquin.htm (last visited Sept. 27, 2004) (on file with the San Joaquin Agricultural Law Review).

³ *Id.*

⁴ *Id.*

⁵ 2002 Census of Agriculture, County Profile, United States Department of Agriculture (2002).

County, the heart of the San Joaquin Valley, leads the way, accounting for more than four billion dollars a year in agricultural commodities.⁶

Although naturally dry,⁷ irrigation has turned this arid alluvial basin⁸ into the world's largest "hothouse,"⁹ transforming the once barren landscape into an agricultural powerhouse. In fact, the area is so productive that five of the nation's top ten agricultural producing counties are in this valley,¹⁰ including Fresno, Tulare, and Kern counties, consistently ranking first, second, and third, year after year.¹¹

The weather conditions, although often maligned by locals and visitors alike, combine with the fertile soil to make this region abundantly productive. The dry, blistering hot summers, with July and August averaging near 100 degrees,¹² help to control some otherwise devastating crop diseases such as powdery mildew and brown rot.¹³ The dense, oppressive tule fog that shrouds much of the valley during the winter months¹⁴ serves to protect many cold sensitive crops from frost, including vast groves of citrus that blanket the valley's eastern slopes.¹⁵

Many of the same conditions that make for such a fertile environment have a dark, sinister side to them. Contained within a natural bowl formed by mountains, the air quality in the San Joaquin Valley is poor. The valley is prone to stagnant air, caused by a lack of cleansing circulating wind from the frequent inversion layers.¹⁶ It actually rivals that of the greater Los Angeles air basin and Houston, Texas, for the dubious distinction of some of the worst air in the nation to breathe.¹⁷ While

⁶ Summary of County Agricultural Commissioner's Reports, 2002-2003, California Department of Agriculture (Sept. 2002).

⁷ United States Department of Agriculture, California Dry Steppe Province, available at <http://www.fs.fed.us/colorimagemap/images/262.html> (last visited Dec. 11, 2004).

⁸ James J. Parsons, *A Geographer Looks at the San Joaquin Valley*, Carl Sauer Memorial Lecture (1987).

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.*

¹² Fresno County Convention and Visitors Bureau, Welcome to Fresno: Weather, available at http://www.fresnocvb.org/Visiting_Fresno/weather.htm (2001) (on file with the San Joaquin Agricultural Law Review).

¹³ Parsons, *supra* note 8.

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ Mark Grossi, *The Last Gasp*, THE FRESNO BEE, Dec. 15, 2002, Supplement (a large, multi-story supplement about the ongoing problem of the quality of air in the San Joaquin Valley).

¹⁷ EPA, AirData - Air Quality Index Summary Report, available at <http://www.epa.gov/air/data/reports.html> 12 (2004).

much of the pollutants consist of ozone,¹⁸ nitrous oxide,¹⁹ and other ominous sounding components of smog, dust is a significant contributor to the overall poor quality of the air in the San Joaquin Valley.²⁰

III. DUST PRODUCING ACTIVITY

Airborne dust is introduced from a variety of different activities, including industrial and manufacturing sources.²¹ However, dust is a natural consequence of agricultural activity.²² This is particularly true in regions where accumulated alluvial sediments have been disturbed,²³ and by its very nature, agricultural activity requires disturbing the ground. Whether it be from tilling the soil,²⁴ harvesting nuts,²⁵ vehicle traffic on unpaved roads and in equipment storage areas,²⁶ or simply dust blown by the wind, known as fugitive agricultural windblown dust,²⁷ much of the particulate matter in the air we breathe is directly attributable to the agricultural industry.²⁸

Other day to day farming operations contribute to the problem. Activities such as disking,²⁹ crop spraying,³⁰ and even bare patches of earth, such as fields,³¹ are sources and each contributes significantly to airborne dust.

Recent implementation and enforcement of environmental regulations³² promise to drastically change the practices of affected farming

¹⁸ California Air Resources Board, *The 2004 Air Resources Board Almanac of Emissions and Air Quality* 12 (2004).

¹⁹ *Id.*

²⁰ *Id.* at 70.

²¹ Walter G. Wright & Mary Ellen Henry, *The Arkansas Pollution Control Program: Past, Present and Future*, 51 Ark L. Rev. 227, 251 (1998).

²² AGRICULTURE IMPROVING RESOURCES, ET. AL., CONSERVATION MANAGEMENT PRACTICES HANDBOOK 1 (2004) (the booklet contains dozens of recommended techniques and procedures to inhibit PM-10 emissions).

²³ Charles S. Zender, et. al, *The Mineral Dust Entrainment and Deposition (DEAD) Model*, JOURNAL OF GEOPHYSICAL RESEARCH, Vol. 108, No. D14, 4416 (2003).

²⁴ KARINA O'CONNOR, ET. AL., EPA'S TECHNICAL SUPPORT DOCUMENT FOR THE SAN JOAQUIN VALLEY 13 (Jan. 27, 2004).

²⁵ Dennis Pollock, *Growers Combat Dust*, THE FRESNO BEE, Sept. 12, 2004, at D1.

²⁶ KARINA O'CONNOR, *supra* note 24, at 14.

²⁷ *Id.* at 13.

²⁸ California Air Resources Board, *supra* note 18, at 70.

²⁹ Western Regional Air Partnership, *Fugitive Dust Handbook* 1-1 (Nov. 15, 2004).

³⁰ Mark Grossi, *Agriculture a Leading Polluter*, THE FRESNO BEE, Dec. 15, 2002, (Last Gasp), at 15.

³¹ Western Regional Air Partnership, *Fugitive Dust Handbook* 1-1 (Nov. 15, 2004).

³² Mark Grossi, *EPA Calls for Axing Loophole for Ag*, THE FRESNO BEE, March 1, 2003, at A1.

operations. Established methods of farming that cause a large amount of surface disturbance³³ have been supplanted by new ways to farm that are intended to minimize surface disturbances and the resulting large quantity of dust that is introduced into the atmosphere.³⁴ Many of these newly suggested techniques are the result of the knowledge that soil surfaces that are disturbed “produce significantly more fugitive dust than undisturbed surfaces.”³⁵

Farmers are now being encouraged to make use of combined operations while working in their fields to make as few passes as possible, thus reducing disturbances to the soil.³⁶ Depending upon the number of vehicle trips,³⁷ they may also be urged to use dust suppression techniques such as applying roadmix,³⁸ gravel,³⁹ or other types of materials⁴⁰ on unpaved farm-to-market roads⁴¹ and equipment yards.⁴² They might even be required to pave some of their farm-to-market roads if vehicle traffic exceeds the allowable threshold.⁴³ Unpaved equipment areas have their own set of regulations that may require various methods of dust suppression, like applying washed gravel,⁴⁴ “chemical or organic dust suppressants,”⁴⁵ and paving.⁴⁶

³³ Western Regional Air Partnership, *supra*, at 1-4.

³⁴ Agriculture Improving Resources, *supra* note 22, at 6.

³⁵ WILLIAM BARNARD, ET. AL., METHODOLOGY FOR ESTIMATING FUGITIVE WINDBLOWN AND MECHANICALLY RESUSPENDED ROAD DUST EMISSIONS APPLICABLE FOR REGIONAL SCALE AIR QUALITY MONITORING 73 (Final Report For Western Regional Governor’s Assoc., Contract No. 302039, Apr. 2001).

³⁶ Agriculture Improving Resources, *supra* note 22, at 6.

³⁷ San Joaquin Valley Unified Air Pollution Control District, RULE 8061 § 4.1 (Nov. 15, 2001).

³⁸ San Joaquin Valley Unified Air Pollution Control District, RULE 8061 § 5.2.2.3 (Nov. 15, 2001).

³⁹ San Joaquin Valley Unified Air Pollution Control District, RULE 8061 § 5.2.1.2 (Nov. 15, 2001).

⁴⁰ San Joaquin Valley Unified Air Pollution Control District, RULE 8061 § 5.2.1.6 (Nov. 15, 2001).

⁴¹ San Joaquin Valley Unified Air Pollution Control District, RULE 8011 § 7.0 (Nov. 15, 2001).

⁴² San Joaquin Valley Unified Air Pollution Control District, RULE 8011 § 7.0 (Nov. 15, 2001).

⁴³ San Joaquin Valley Unified Air Pollution Control District, RULE 8081 § 5.2.2.1 (Nov. 15, 2001).

⁴⁴ San Joaquin Valley Unified Air Pollution Control District, RULE 8071 § 5.1.1.2 (Nov. 15, 2001).

⁴⁵ San Joaquin Valley Unified Air Pollution Control District, RULE 8071 § 5.1.1.3 (Nov. 15, 2001).

⁴⁶ San Joaquin Valley Unified Air Pollution Control District, RULE 8071 § 5.1.1.5 (Nov. 15, 2001).

These revised regulations require that certain types of pollution sources be targeted for identification,⁴⁷ followed by the implementation of both remedial and prophylactic steps to bring their farming operations into compliance.⁴⁸ This has come as quite a shock to the agricultural industry. Although well known as a large source of dust particle emissions,⁴⁹ thanks in large part to powerful lobbying efforts,⁵⁰ the agricultural community has been largely exempt from enforcement since implementation of the regulations in 1976.⁵¹ The winds of change swept across the valley, however, when the EPA, prompted by a series of lawsuits,⁵² began the process of closing the loopholes that had shielded valley farmers from the effects of enforcement of the regulations for many years.⁵³

Spearheaded by California State Senator Dean Florez and signed into law by then California Governor Gray Davis in September, 2003,⁵⁴ SB700 signified the start of sweeping changes for California's agricultural producers. This bill, acknowledging the significant role that valley agriculture played in the overall poor air quality,⁵⁵ effectively closed the door on long-standing agricultural equipment exemptions.⁵⁶ The bill added several sections to the state Health and Safety Code⁵⁷ and added provisions to identify agricultural sources of air pollution.⁵⁸ It is through the state Health and Safety Code that the Clean Air Act⁵⁹ derives its local power.⁶⁰ By removing the permit exemptions, it gave the regional air districts in California the authority to implement the rules as directed by

⁴⁷ EPA, *The Plain English Guide to the Clean Air Act*, available at http://www.epa.gov/oar/apqps/peg_caa/gegcaa03.html (last revised Jan. 15, 1996) (on file with San Joaquin Agricultural Law Review).

⁴⁸ *Id.*

⁴⁹ Agriculture Improving Resources, *supra* note 22, at 4.

⁵⁰ Mark Grossi, *Agriculture a Leading Polluter*, THE FRESNO BEE, Dec. 15, 2002, (Supplement) at 15.

⁵¹ Mark Grossi, *Air Board Cuts Farm Loophole, But Issue's Not Over*, THE FRESNO BEE, Dec. 23, 2002, at A1.

⁵² Mark Grossi, *Holes in Air Rules Prompt Lawsuit*, THE FRESNO BEE Jan. 30, 2003, at A1.

⁵³ Lesli Maxwell and Mark Grossi, *Farmers Pressured to Tighten Air Rules*, THE FRESNO BEE, Feb. 28, 2003, at A1.

⁵⁴ S.B. 700, 2003 Leg., Ch. 479 (Cal. 2003).

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ California Air Pollution Control Officers Assoc., *Senate Bill 700: Agriculture & Implementation*, at 1 (Apr. 2003).

⁵⁹ 42 U.S.C. § 7401 (2005).

⁶⁰ Cal. Health & Safety Code § 40001 (Deering's 2004).

the needs specific to their region.⁶¹ The bill also set forth specific timetables for implementation depending upon the region's overall air quality with regions that were serious non-attainment areas targeted first.⁶²

The impact of these regulations will vary depending on the kind of crops being farmed. Some farmers will be urged to replace outdated equipment with newer, emission compliant equipment,⁶³ including the diesel pumps that many farmers use to irrigate their fields.⁶⁴ This is particularly true in the case of one of the most notoriously dusty agricultural activities, almond harvesting.⁶⁵

This flurry of regulatory activity has not gone unnoticed by the media. This is hardly a surprise considering the designation of the country's leading agricultural producing region⁶⁶ as the worst air quality basin, even eclipsing the notoriously smoggy Los Angeles air basin in several different categories.⁶⁷

The paradoxical conundrum pairing the seemingly bucolic lifestyle of farming with the smog that is more commonly associated with industrialized urban areas, has made for plenty of headlines. Initially undaunted by the ominous notoriety, the locals quickly took refuge in blaming the poor state of their air quality on the congested San Francisco Bay Area, insisting that smog from the metropolitan Bay Area must be regularly blowing in, fouling the air in the valley.⁶⁸ While some particulate material may migrate from other regions, the bulk of the problem lies within the valley and blame shifting is futile.⁶⁹

⁶¹ California Air Pollution Control Officers Assoc., Senate Bill 700: Agriculture & Implementation, at 4 (Apr. 2003).

⁶² *Id.* at 14.

⁶³ Eric McMullin, *Ag Alert*, (Sept. 1, 2004) (manufacturers and growers describe new equipment to reduce dust emissions), available at http://www.cfbf.com/agalert/2004/09_01_04_03_aa.cfm (on file with the San Joaquin Agricultural Law Review).

⁶⁴ Lesli Maxwell, *Pollution Measure to Focus on Farms*, THE FRESNO BEE, Feb. 10, 2003, at A1.

⁶⁵ Dennis Pollock, *Growers Combat Dust*, THE FRESNO BEE, Sept. 12, 2004, at D1.

⁶⁶ 2002 Census of Agriculture, County Profile, United States Department of Agriculture.

⁶⁷ Mark Grossi, *Valley Leads Air Violations*, THE FRESNO BEE, Nov. 3, 2004, at B3.

⁶⁸ Mark Grossi, *Don't Blame San Francisco*, THE FRESNO BEE, Dec. 15, 2003, Supplement.

⁶⁹ *Id.*

IV. THE PROBLEM WITH DUST

All blame aside, everyone has the right to breathe clean air in the place where they live, whether it be in the city or in the country,⁷⁰ and dusty air is not clean air. Dust is a well-established nuisance, a cause of action that has been available to individuals since at least the thirteenth century⁷¹ with a long history of case law.⁷² The nature of a public nuisance recognizes that dust manifests as a menace to public health when it interferes with public comfort or causes obstruction to a public highway.⁷³ The California Penal Code and the California Civil Code both describe a public nuisance as “anything which is injurious to health...”⁷⁴

In addition to causing inconvenience and aggravation by fouling a newly washed car or invading a neighbor’s adjacent land, dust is a major contributor to atmospheric haze⁷⁵ and to air pollution in the San Joaquin Valley.⁷⁶ Airborne dust that rises to the level of substantial interference with the “comfortable enjoyment” of nearby premises could give rise to an actionable nuisance, allowing a person who suffers injury or property damage to seek relief.⁷⁷ The right to relief also extends to organizations or associations whose members have standing to sue for relief.⁷⁸ Persons could also use traditional theories of negligence, but both theories require a standard of conduct with which to compare the actions of the tortfeasor.

The well-settled duties of a land occupier are especially stringent as they pertain to persons outside the premises who may be injured by artificial conditions within.⁷⁹ The basis for applying such a strict standard of liability generally results from the understanding that one who is in pos-

⁷⁰ *Pitner v. Shugart Bros.*, 103 S.E. 791, 792 (GA. 1920); 61C AM. JUR. 2d *Pollution Control* § 1966 (2004).

⁷¹ W. PAGE KEETON, PROSSER AND KEETON ON THE LAW OF TORTS § 86, at 617 (5th ed. 1984).

⁷² *Id.* § 57, at 390.

⁷³ *Id.* § 90, at 644.

⁷⁴ CAL. CIV. CODE § 3479 (Deerings 2004); PENAL CODE § 370 (Deering’s 2004).

⁷⁵ EPA, *What is Visibility Impairment?*, Visibility Improvement Program, available at <http://www.epa.gov/air/visibility/what.html> (last updated Apr. 16, 2004).

⁷⁶ KARINA O’CONNOR, ET. AL., EPA TECHNICAL SUPPORT DOCUMENT FOR THE SAN JOAQUIN VALLEY, CALIFORNIA, 2003 PM-10 PLAN AND 2003 PM-10 PLAN AMENDMENTS 13 (Jan. 27, 2004).

⁷⁷ *Pitner v. Shugart Bros.*, 103 S.E. at 792; *Wade v. Campbell*, 200 Cal. App. 2d 54, 58; 61C AM. JUR. 2d *Pollution Control* §§ 1967-1972 (2004).

⁷⁸ *American Canoe Assoc. v. City of Louisa Water & Sewer Commission*, 389 F.3d 536, 540 (6th Cir. 2004); *Friends of the Earth, Inc. v. Laidlaw Environmental Services, Inc.*, 528 U.S.167, 181 (2000); 61B AM. JUR. 2d *Pollution Control* § 77 (2004).

⁷⁹ W. PAGE KEETON, *supra* note 71, § 57, at 386.

session of, and therefore in physical control of, such land is in the best possible position to recognize, comprehend, and correct those dangers that may be present.⁸⁰ This logic follows the reasoning that such knowledge triggers an inherent duty that is owed to those who may be injured or affected by an artificial condition on the land in question.⁸¹

Traditionally, such a duty would sound in negligence⁸² flowing from the risk created by the artificial condition.⁸³ Cultivated land is an artificial condition.⁸⁴ Plumes of dust drifting from cultivated land could create dangers to persons adjacent to the land.⁸⁵ Land occupiers have been found negligent for everything from clouds of steam or smoke blowing or drifting across a highway, causing visual obstruction that resulted in damage or injury from accidents,⁸⁶ to dust particle contamination causing damage to a grand piano.⁸⁷

The telling point is not the mere possibility of such occurrences, but the inevitability of such occurrences was obvious.⁸⁸ Thus, the obvious nature of the condition becomes a factor in weighing the duty of care.⁸⁹ It is no secret that wind can entrain, or pick up, dust.⁹⁰ There are even instances where highway officials post warning signs due to visibility problems caused by windblown dust.⁹¹ Furthermore, at certain times of the year, such as following a harvest, agricultural fields may be devoid of soil fixing vegetation or other crops.⁹²

When these conditions are present, it is highly foreseeable that a dust cloud could become entrained during periods of high winds and become a hazard. On November 29, 1991, just such an event occurred in western Fresno County a few miles south of Coalinga, California, on Interstate 5, when a pile-up involving more than one hundred cars killed fourteen

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.* at 387.

⁸³ *Id.* at 386.

⁸⁴ *Id.* at 390.

⁸⁵ *Hudson v. Grace*, 34 A.2d 498, 501 (1943) (steam from a boiler blew across, and obstructed visibility on an adjacent roadway during certain wind conditions).

⁸⁶ *Id.*

⁸⁷ Local Highway Technical Assistance Council, *Manual for Managing Dust on Unpaved Roads 2* (Mar. 2001) (covers the costs, techniques, and methods to be used for dust control on unpaved roads within the state of Idaho).

⁸⁸ *Hudson*, 34 A.2d at 501.

⁸⁹ See RESTATEMENT (SECOND) OF TORTS § 371 (1965).

⁹⁰ O'Connor, *supra* note 76, at 15.

⁹¹ Approval and Promulgation of Implementation Plans for California – San Joaquin Valley PM-10 Nonattainment Area; Serious Area Plan for Attainment of the 24-Hour and Annual PM-10 Standards, 40 C.F.R. pt. 52.L (Mar. 8, 2000).

⁹² O'Connor, *supra* note 76, at 15.

people.⁹³ In a prelude to this disaster on April 25, 1985, along State Route 152 near Los Banos, California, a large dust cloud, spawned by thirty-five mile-per-hour winds, created havoc for motorists resulting in a thirty-five car chain reaction accident that claimed the lives of four people.⁹⁴ Massive plumes of dense, floating dust are blatant hazards, but what about less obvious manifestations of airborne dust?

V. DANGEROUS AIR

The hazards of poor air quality go well beyond navigational hazards or property damage. In fact, the danger of air pollution was hammered home in a horrendous tragedy that killed twenty people, momentarily putting air quality in the spotlight as our nation was embarking on its post-war economic boom. On October 26, 1948, atmospheric conditions, combined with industrial emissions of carbon monoxide, sulfur dioxide, and metal dust from the local steel mills and zinc works to form a deadly cocktail of toxic spume. It settled on the unwary residents of the community of Denora, Pennsylvania, and sickened thousands of residents.⁹⁵ Twenty of them died.⁹⁶

Following the Denora smog disaster and serious problems with air quality in Los Angeles, the coming decades ushered in a flurry of legislation beginning in the 1950s.⁹⁷ The Air Pollution Control Act of 1955 was the first piece of legislation to directly address the problem of the worsening air quality. While the Act did little to directly affect air quality, it granted five million dollars per year for research and it helped to create an awareness of this growing problem.⁹⁸

Subsequent bills in 1960 and 1962 extended funding for research and began to look at automobile exhaust.⁹⁹ Publicity surrounding those troubled areas combined with the new legislation and began to increase pub-

⁹³ Jim Steinberg and Louis Galvan, *14 Killed In Pileup On I-5*, THE FRESNO BEE, Nov. 30, 1991, at A1.

⁹⁴ Charles McCarthy, *1985 Dust Storm Killed 4 In Crash*, THE FRESNO BEE, Nov. 30, 1991, at A16.

⁹⁵ W. Michael McCabe, *Denora Disaster Was Crucible For Clean Air*, Pennsylvania Department of Environmental Protection, http://www.dep.state.pa.us/dep/Rachel_Carson/crucible.htm (Oct. 28, 1998) (on file with the San Joaquin Agricultural Law Review).

⁹⁶ *Id.*

⁹⁷ James R. Fleming & Bethany R. Knorr, *History of the Clean Air Act*, Colby College, <http://www.ametsoc.org/sloan/cleanair/> (1999) (on file with the San Joaquin Agricultural Law Review).

⁹⁸ *Id.*

⁹⁹ *Id.*

lic awareness of the problems of air pollution. Walt Disney even joined the fray with a well-intentioned pitch about technology's marvelous triumph over the menace of smog in the imaginary future of 1986 during a narrated portion of the now defunct, "Rocket to the Moon" attraction at the newly opened Disneyland.¹⁰⁰

The 1960s marked the decade of change beginning in 1963 when Congress passed the Clean Air Act¹⁰¹ with the intent to deal with problems our nation was facing from deteriorating air quality.¹⁰² A more cynical nation was again shocked into action when on June 22, 1969, the Cuyahoga River, a major waterway that snakes through Cleveland, Ohio's industrial center known as "The Flats,"¹⁰³ caught fire.¹⁰⁴ Although the river had done so on previous occasions,¹⁰⁵ with major fires in 1949, 1951,¹⁰⁶ and one in 1952 that caused significantly more damage,¹⁰⁷ they went largely unnoticed. This time, however, the horrific images of a river so polluted that it had burst into flames garnered national attention when *Time Magazine* picked up the story and ran a featured article on August 1, 1969.¹⁰⁸

A continued effort to keep pollution in the minds of Americans reached a peak when, on the first anniversary of Earth Day in 1971, a televised public service announcement was broadcast over the nation's airwaves.¹⁰⁹ To this day, it remains one of the most memorable commercials in television history. A Native American, portrayed by the venerable character actor Iron Eyes Cody, slowly paddled his canoe down a once majestic river, its beaches now littered with trash. Floating rubbish bumped against the side of the canoe as he surveyed the menacing en-

¹⁰⁰ Disneyland, TWA's Rocket To The Moon, part 2, (1957) (transcript on file with the San Joaquin Agricultural Law Review).

¹⁰¹ James R. Fleming, *supra* note 97.

¹⁰² *Id.*

¹⁰³ Cleveland State University, The Center for Environmental Science, Technology and Policy, *Brief Pictorial View of Lake Erie*, <http://www.csuohio.edu/cestp/sol/history/pictures/html> (last updated March 12, 2003) (on file with the San Joaquin Agricultural Law Review).

¹⁰⁴ The Cuyahoga River Fire: June 22, 1969, <http://www.cwru.edu/artsci/engl/marling/60s/pages/richoux.TheFire.html> (n.d.) (on file with the San Joaquin Agricultural Law Review).

¹⁰⁵ *Id.*

¹⁰⁶ Cleveland State University, *supra* note 103.

¹⁰⁷ The Cuyahoga River Fire, *supra* note 104.

¹⁰⁸ *Id.*

¹⁰⁹ Public Service Announcement, *The Crying Indian*, (Young & Rubicam's Marsteller, Inc., March 1971) (in addition to information about the advertisement, a link is available to download and view the sixty second commercial in QuickTime format), available at <http://www.kab.org> (on file with the San Joaquin Agricultural Law Review).

croachment of man's careless treatment of the land. Arrayed behind him was a starkly ominous skyline of factories belching thick, sickening smoke into the dingy gray skies. The ad continued with a barrage of horrific scenes depicting examples of pollution, culminating with him standing alongside a freeway, choked with smog and an endless stream of cars as a bag of trash is thrown onto his feet. When the camera zoomed in, a tear could be seen running down his cheek.¹¹⁰

This award winning commercial¹¹¹ delivered a powerful message for the times. It brought home the message about the evils of environmental pollution to millions of Americans. These disturbing images, played in living rooms across the country, helped to convince a growing number of people that something had to change.¹¹² Earth Day, an annual observance falling on the vernal equinox each year,¹¹³ was an event that had only formed the year before Iron Eyes Cody's famous commercial¹¹⁴ and was becoming a nationwide event that would garner substantial press coverage. Bad news continued to rock the nation's sense of superiority with widespread publication of the poor state of the Great Lakes' once thriving and abundant ecosystem in a 1973 National Geographic article.¹¹⁵ Nearly fourteen years later, another story in the same magazine illustrated that, while the water was clearer after years of tough enforcement of environmental regulation, it was no safer.¹¹⁶

In 1997, changes to the Clean Air Act were made to set standards for ozone and particulate matter (PM).¹¹⁷ The increased attention given to agriculture is reasonable in light of the significance of agricultural sources of methane (CH₄) produced by feedlot emissions,¹¹⁸ nitrous oxide (N₂O) linked to the agricultural and livestock industries,¹¹⁹ and dust from

¹¹⁰ *Id.*

¹¹¹ Advertising Mascots, Iron Eyes Cody, available at http://www.tvacres.com/admascots_chiefironeyes.htm (n.d.) (on file with the San Joaquin Agricultural Law Review).

¹¹² *Id.*

¹¹³ Earth Day, What and When is Earth Day?, available at <http://earthsite.org/day.htm> (n.d.) (on file with the San Joaquin Agricultural Law Review).

¹¹⁴ *Id.*

¹¹⁵ Gordon Young, et. al., *The Great Lakes: Will Our Inland Seas Survive?*, NATIONAL GEOGRAPHIC, Aug. 1979, at 147, 151.

¹¹⁶ Charles E. Cobb, Jr., *The Great Lakes' Troubled Waters*, NATIONAL GEOGRAPHIC, Jul. 1987, at 2, 25.

¹¹⁷ EPA The Plain English Guide to the Clean Air Act, available at http://www.epa.gov/oar/oapqs/peg_caa/pegcaa03.html (Nov. 26, 2003) (on file with the San Joaquin Agricultural Law Review).

¹¹⁸ Bryan C. Weare, *Global Climate Change Will Affect Air, Water In California*, CALIFORNIA AGRICULTURE, No 56-3, 89, 90, (May-June 2002).

¹¹⁹ *Id.*

soil, which is the largest contributor to particulate matter ten microns or less in diameter (PM-10).¹²⁰ This recent ratcheting up of the environmental laws has led to a variety of state and county legislation, preceded by State Implementation Plans (SIP),¹²¹ the specifics of which are well beyond the scope of this writing.

Perhaps more importantly, however, dust is now known to be extremely dangerous to humans.¹²² Particularly hazardous are those particles smaller than ten microns (PM-10).¹²³ These particles are so small that they penetrate deeply into lung tissue¹²⁴ and have been associated with asthma, emphysema, heart attacks, and arrhythmias.¹²⁵ Studies have also shown the dangers can include ischemic heart disease and even strokes.¹²⁶ This alarming link between serious health problems and particulate matter is so strong that a study encompassing fourteen U.S. cities found a one to two percent increase in admissions to hospitals for cardiovascular and pulmonary diseases that are attributable to fine dust particles.¹²⁷ Even more troubling is a trend of an increasing number of pediatric hospital visits for acute asthma attacks in children that has been attributed to the problem of airborne fine dust particles.¹²⁸

What is pertinent, however, is the attention that some of the new regulations have received in the media. This may stem from the recent designation of certain portions of the central San Joaquin Valley as the nation's worst air quality basin.¹²⁹ When this news reached the local residents, a public outcry ensued, spawning a series of articles and special

¹²⁰ Research Update: Scientists Score Dustbusting Efforts in Antelope Valley, California Agriculture, *available at* <http://californiaagriculture.ucop.edu/> (Jul./Aug. 1998) (on file with the San Joaquin Agricultural Law Review).

¹²¹ EPA, The Plain English Guide to the Clean Air Act, Features of the 1990 Clean Air Act, , *available at* http://epa.gov/oar/oaqps/peg_caa/pegcaa02.html (May 13, 2002) (on file with the San Joaquin Agricultural Law Review).

¹²² Particulate Matter, American Lung Association, *available at* <http://www.lungusa.org> (Apr. 2000) (on file with the San Joaquin Agricultural Law Review).

¹²³ EPA, The Plain English Guide to the Clean Air Act: Glossary, *available at* http://www.epa.gov/oar/oaqps/peg_caa/pegcaal10.html (Particulates particulate matter (PM-10)) (May 13, 2002) (on file with the San Joaquin Agricultural Law Review).

¹²⁴ EPA PUBLICATION Particle Pollution and Your Health, AIRNow, *available at* <http://www.epa.gov/airnow/particle/airborne.html> (n.d.) (on file with San Joaquin Agricultural Law Review).

¹²⁵ *Id.*

¹²⁶ Selected Key Studies on Particulate Matter and Health: 1997-2001, American Lung Association, p. 10.

¹²⁷ *Id.* at 4.

¹²⁸ *Id.* at 18.

¹²⁹ Mark Grossi, *supra* at note 16.

features in Fresno's newspaper, *The Fresno Bee*.¹³⁰ While not of the same magnitude as the "Crying Indian" commercials,¹³¹ or Time's article on the Cuyahoga River fire,¹³² these well written and timely stories were collectively organized under the ominous sounding moniker, "*Last Gasp*."¹³³

The public knowledge and awareness that comes from public exposure is part of the information that will show how "injurious to health" dust can be in the framework of a nuisance analysis.¹³⁴ The large amount of publicity, now spanning several decades, has made the dangers of air pollution very clear to the general public. More recently, the dangers of dust, given short shrift when compared to the volatile and toxic compounds that received so much attention in the past, has come to the forefront with increased attention and exposure. When viewed in conjunction with a private person's standing to sue for violations of many of a state's regulatory statutes under a wide variety of circumstances,¹³⁵ this combination has the potential for increased litigation with some lively debate to follow.

Quite simply put, more media exposure means more public reaction. The public reaction, however, is not always in line with what one might expect. Slight risks, when highly publicized, tend to cause a disproportionate share of public reaction to even extremely remote risks such as earthquakes or a terrorist attack.¹³⁶ For a contemporary illustration, one need only think back to the almost predictable frenzy that accompanies the announcement of a newly discovered carcinogen.¹³⁷ This puzzling phenomena attributes reactions that are based not upon the chances or severity of an injury, but upon the amount of publicity it receives.

Along with the increased awareness and perception of risk comes an increase in claimants seeking redress for injury. Lawyers specializing in

¹³⁰ See *id.*

¹³¹ Public Service Announcement, *The Crying Indian*, (Young & Rubicam's Martellar, Inc., Mar. 1971), available at <http://www.kab.org> (on file with the San Joaquin Agricultural Law Review).

¹³² The Cuyahoga River Fire: June 22, 1969, available at <http://www.cwru.edu/artsci/engl/marling/60s/pages/richoux.TheFire.html> (n.d.) (on file with the San Joaquin Agricultural Law Review) (last visited Dec. 11, 2004).

¹³³ See *supra* text accompanying note 16.

¹³⁴ CAL. CIV. CODE § 3479 (Deering's 2004); PENAL CODE § 370 (Deering's 2004).

¹³⁵ William B. Johnson, Annotation, *Standing to Sue for Violation of State Environmental Regulatory Statute*, 66 A.L.R. 4th 685 (2002).

¹³⁶ W. Kip Viscusi, *Risk Perceptions in Regulation, Tort Liability, and the Market*, available at <http://www.cato.org/pubs/regulation/reg14n4-viscusi.html>, REGULATION (Jan. 2005) (on file with the San Joaquin Agricultural Law Review).

¹³⁷ *Id.*

mass torts have long known that a critical factor in motivating people to pursue a claim is publicity.¹³⁸ The link between publicity and awareness was a driving force in increasing the number of plaintiffs in lawsuits against the manufacturer of the Dalkon Shield.¹³⁹ The bottom line is clear. More publicity means more potential claims.

VI. EXPANSION OF TORT LIABILITY, FORESEEABILITY, AND REASONABLENESS

Now it is time to ask if this increase in public exposure of dust's considerable contribution to air pollution will combine with its well documented health hazards to alter the delicate balance necessary to cross the threshold of foreseeability. The factors would apply to actions in nuisance as well, because actions involving unintentional invasions of the land of another will look to the rules that establish negligent conduct.¹⁴⁰ So, does farming now carry unreasonable risks of liability?

The essence of negligence is embodied in conduct, "that should be recognized as involving unreasonable danger to others."¹⁴¹ While foreseeability is but one of many factors to consider when evaluating a claim of negligence,¹⁴² it shows up in several key elements.¹⁴³ And as the actor's knowledge of the danger increases, the factors must be re-balanced. When the increased media exposure brings the dangers of agricultural dust squarely into the public's eye, the actor must surely recognize the increased risk, or should so recognize the potential increased probability that a specific action, such as dust producing agricultural activity, will increase the likelihood of causing an injury.

The traditional view of a land occupier's duty to those outside the premises is based upon the well reasoned principle that the land occupier is in the very best possible position to notice and correct dangerous conditions.¹⁴⁴ He is also the one most likely to create a dangerous condition upon the occupied land.¹⁴⁵ Although the land occupier has a right to use the land to his own benefit, the interests of those who may be affected by

¹³⁸ Frederick C. Dunbar, *Forecasting Mass Tort and Product Liability Claims*, *VIEWPOINT* 10, 11 (Nov. 1, 2002).

¹³⁹ *Id.*

¹⁴⁰ *RESTATEMENT (SECOND) OF TORTS* § 822 (1979).

¹⁴¹ *W. PAGE KEETON, PROSSER AND KEETON ON THE LAW OF TORTS* § 31, at 169 (5th ed. 1984).

¹⁴² *Id.* § 43, at 298.

¹⁴³ *Id.*

¹⁴⁴ *Id.* § 57, at 386.

¹⁴⁵ *Id.*

the benefit will serve to temper such rights.¹⁴⁶ This heightened awareness could bring the actor's duty to bear in establishing the first clear element to the prima facie case of negligence against a land occupier. With these ideas in mind, it is apparent that the farmer, in possession of the land, would have a duty to those who may be injured by the release of dust into the atmosphere as a consequence of a dust producing activity.

A. *Negligence Per Se*

With the duty having been so established, the next step is to look to the *per se* theory of negligence relying upon the various statutes and regulations enacted to prevent air pollution, some of which, interestingly enough, do offer a private right of action.¹⁴⁷ Legislation or administrative regulations can provide the standard by which conduct can be measured.¹⁴⁸ Here, the regulations set forth specific goals¹⁴⁹ and penalties for noncompliance.¹⁵⁰

For legislation to apply as a standard of conduct, it must be tested against a variety of criteria to ensure that it is appropriate.¹⁵¹ First, the class of persons and type of interest must be those that the legislation seeks to protect.¹⁵² Next, the harm that occurred must be the harm that the legislation is seeking to prevent. Here, the regulations are an attempt to curtail the emissions that cause unhealthy air in the San Joaquin Valley. The poor air quality is harmful to the citizens of the region. Clearly, the interests, harm and persons are the same.

Having established that the statute may be applied as a standard to the conduct, the plaintiff may go forward with an inference of negligence.¹⁵³ There are several ways in which a farmer could attempt to show that a violation would be excused for purposes of negligence, such as a case where they are unable, even after due diligence, to comply.¹⁵⁴ For instance, suppose a farmer had made all of the necessary adjustments to his farming operation, but was found to be in non-compliance during a spe-

¹⁴⁶ *Id.*

¹⁴⁷ 42 U.S.C. § 7604 (2004).

¹⁴⁸ RESTATEMENT (SECOND) OF TORTS § 285 (1965).

¹⁴⁹ San Joaquin Valley Unified Air Pollution Control Board RULE 8011.1.0 (Nov. 15, 2001) (reduce ambient concentrations of particulate matter).

¹⁵⁰ San Joaquin Valley Unified Air Pollution Control Board RULE 1090.2.0 (Nov. 15, 2001) (non-compliance can result in penalty and is a misdemeanor and each day of such non-compliance is a separate offense).

¹⁵¹ RESTATEMENT (SECOND) OF TORTS § 286 (1965).

¹⁵² *Id.*

¹⁵³ RESTATEMENT (SECOND) OF TORTS § 288B (1979).

¹⁵⁴ RESTATEMENT (SECOND) OF TORTS § 288A (1965).

cific period of time when unusually high winds caused excessive dust entrainment. His non-compliance condition occurred despite his efforts at compliance and was beyond his control. In this instance, the violation of the statute would be excused. What is interesting to note, here, however, is that the list of excuses is not limited to the restatement, giving the court discretion to use its judgment. Additionally, there may be cases where conduct may not be excused even where there is no criminal prosecution for the violation.

B. Reasonable Person

Another focus would fall upon a traditional analysis weighing the chances of a mishap, known as the probability of occurrence, coupled with the gravity of harm that could be inflicted against the burden of protections and the utility of the conduct at issue to society as a whole.¹⁵⁵

In this case, the probability of an occurrence, as discussed above, is extremely high, as indicated by the many well-documented activities that contribute to airborne dust particles.¹⁵⁶ Extreme, but not unexpected natural phenomena will increase this probability. The EPA even has a policy in place whereby a state that is able to demonstrate that elevated airborne PM-10 concentrations were caused by natural events, such as high winds, can exclude those levels so that they are not taken into account when determining a region's compliance with the National Ambient Air Quality Standards (NAAQS).¹⁵⁷ Drought conditions¹⁵⁸ and periods of high winds, neither of which are strangers to the San Joaquin Valley,¹⁵⁹ are well known contributors to high levels of airborne dust in other regions of the world.¹⁶⁰ Similar conditions in the San Joaquin Valley would be certain to significantly increase the likelihood and severity of PM-10 entrainment into the atmosphere.¹⁶¹ While not a certainty, and extremely variable depending on a myriad of factors,¹⁶² including crop

¹⁵⁵ W. PAGE KEETON, *supra*, § 31, at 171; *See also* RESTATEMENT (SECOND) OF TORTS § 826 (1979).

¹⁵⁶ *See generally* Mark Grossi, *supra* note 50.

¹⁵⁷ Colorado Department of Public Health and Environment, Technical Support Document for the March 31, 1999 High Wind Event 1 (Sept. 28, 1999).

¹⁵⁸ Larry L. Dale & Lloyd S. Dixon, *The Impact of Water Supply Reductions on San Joaquin Valley Agriculture During the 1986-1992 Draught*, RAND 2 (1998).

¹⁵⁹ United States Department of Agriculture, *supra* note 7.

¹⁶⁰ Richard Greene, et. al., Recent Aeolian Dust Activity in Australia, Australian National University, 1 (2004).

¹⁶¹ Colorado Department of Public Health, *supra* note 157, at 9.

¹⁶² Barnard, *supra* note 35, at 21.

types¹⁶³ and precautions taken,¹⁶⁴ even limited activities are likely to cause dust to become airborne. In fact, anyone who has ever walked along a dusty trail can attest to the little clouds that rise with each foot-fall.

The next factor to consider, the gravity of the harm,¹⁶⁵ or its potential severity, would depend upon the type of conduct in question and expected harm thereof. When one considers the vast assortment of ailments attributable to dust, this factor would be highly fact dependent, and may increase as more knowledge and information becomes available. From the inconvenience of itchy, watery eyes to someone who suffers from an attack of ischemic heart disease with a potentially fatal result,¹⁶⁶ the gravity can become serious. Indeed, it would not take a long stretch of the imagination to envision just such a result. Add a healthy dose of publicity and that stretch becomes even shorter.

Once the factors of probability and gravity have been properly evaluated, they can be contrasted and weighed against the actor's conduct.¹⁶⁷ These factors include the burden on the actor to protect against just such a harm and the utility of the injury causing conduct to society.¹⁶⁸ Farmers have an enormous and costly burden to keep dust on the ground and out of the air that we breathe.¹⁶⁹ The new generation of regulations has required many farmers to abandon time honored methods of farming in favor of newer, less invasive techniques.¹⁷⁰ Farmers have been urged to incur enormous capital expenses for new, redesigned equipment, specially engineered to minimize dust.¹⁷¹ These enormous expenses are then coupled with additional outlays for watering roads¹⁷² and applying dust suppressants to unpaved equipment areas¹⁷³ or paving them outright,¹⁷⁴ and other various dust abatement practices, making the burden quite large. None of these things are free or easy. The agricultural pro-

¹⁶³ Agriculture Improving Resources, *supra* note 22, at 1.

¹⁶⁴ *Id.*

¹⁶⁵ W. PAGE KEETON, *supra*, § 31, at 171.

¹⁶⁶ Cardiovascular Disorders, THE MERCK MANUAL, (15th ed., 1987), § 3, Ch. 27, 482.

¹⁶⁷ RESTATEMENT (SECOND) OF TORTS § 826 (1979).

¹⁶⁸ *Id.*

¹⁶⁹ See generally Agriculture Improving Resources, *supra* note 22 (various methods for complying with dust control regulations).

¹⁷⁰ *Id.*

¹⁷¹ See generally Eric McMullin, *supra* note 69 (describes new equipment designed to minimize dust during harvest).

¹⁷² Agriculture Improving Resources, *supra* note 22, at 13.

¹⁷³ *Id.* at 12.

¹⁷⁴ *Id.*

ducer has to shoulder the burden of the cost and efforts to achieve and maintain the protection.

This has the potential to wreak havoc on a farming operation's cash flow. Increased debt from expenditures for required new equipment, pending lawsuits, and exposure from potential environmental regulation violations or pollution claims are all factored into a farm's financial management plan. These are all questions that an agricultural lender is likely to ask,¹⁷⁵ and because the lender wants a reasonable assurance of the borrower's ability to repay a loan,¹⁷⁶ the answers may have a deleterious effect upon the farmer's ability to secure the necessary financing to continue operations.

Finally, the utility of the conduct must be evaluated.¹⁷⁷ That said, it would take a vivid imagination to picture a scenario where the production of food would not have anything but an enormous utility for society. Indeed, it would be hard to envision otherwise. The production of food, obviously a vast undertaking considering the quantity of food that is produced,¹⁷⁸ however, may serve to dilute the burden of protection. Where the answer falls would depend, of course, upon the circumstances as well as the public climate, induced in large part by the media.

On the other hand, the playing field seems to be equal for all but the smallest farms. Farms smaller than 100 acres are currently exempt from enforcement and not required to formulate Conservation Management Plans.¹⁷⁹ Since all farming operations, except those small farms that are exempt, are held to the same standards, none would seem to possess an unfair advantage. Furthermore, since the burden is one which is required by statute, therefore applied uniformly across the board, any measure of severity may be a moot point. Or is it? According to the U.S. Department of Agriculture, in 2002 the average farm size was less than 500 acres.¹⁸⁰

California's farms are even smaller, with fully 72% of the more than 27 million acres of farmland residing in farms smaller than one hundred acres.¹⁸¹ In Fresno County, the heart of the San Joaquin Valley, the aver-

¹⁷⁵ KAREN KLONSKY, SMALL FARM CENTER, HOW TO FINANCE A SMALL FARM (2005).

¹⁷⁶ *Id.*

¹⁷⁷ RESTATEMENT (SECOND) OF TORTS § 826 (1979).

¹⁷⁸ See *Generally*, Summary of County Agricultural Commissioner's Reports, *supra* note 6.

¹⁷⁹ Agriculture Improving Resources, *supra* note 22, at 1.

¹⁸⁰ U.S.D.A. Farm Structure: Overview, available at <http://www.ers.usda.gov> (May 28, 2002) (on file with San Joaquin Agricultural Law Review).

¹⁸¹ U.S.D.A. Fact Sheets: California, available at <http://www.ers.usda.gov> (Dec. 15, 2004) (on file with San Joaquin Agricultural Law Review).

age-sized farm is 285 acres, well under the state average of 318.¹⁸² In fact, over 60% of Fresno County's farms are smaller than fifty acres. While no generally accepted definition exists for "small farms" or "family farms"¹⁸³ the Economic Research Service, a division of the U.S. Department of Agriculture, recognizes small farms as essentially small businesses.¹⁸⁴ Their criteria are organizational in nature, looking at the operation as a sole or family proprietorship, partnership or family corporation.¹⁸⁵ They further define a farm as a place where more than one thousand dollars worth of agricultural products were sold, and a small farm is one where the production does not exceed fifty thousand dollars;¹⁸⁶ however, there are many different thresholds depending upon the circumstances.¹⁸⁷ There are some references in several places in the United States Code.

(c) "small farm" means any farm (1) producing family net income from all sources (farm and nonfarm) below the median nonmetropolitan income of the State; (2) operated by a family dependent on farming for a significant though not necessarily a majority of its income; and (3) on which family members provide most of the labor and management. 7 U.C.S. § 2666¹⁸⁸

The Bankruptcy Code defines a "farming operation" as one that includes activities such as farming, tillage, dairy, ranching, and growing crops.¹⁸⁹ Each of these small farms would be exempt from enforcement of the new regulations. Would the exemption also shield them from civil liability?

Not in the slightest. The heightened standard of reasonableness will result in more exposure to all farms. It is highly probable that agricultural producers, both large and small, will face increased liability claims for dust related injuries resulting from the increased awareness and publicity about the danger of dust and the poor air quality. And the smallest farms, those under the 100 acre threshold, are the ones most likely to be hit the hardest.

¹⁸² Fresno County Farm Bureau, Ag Facts, available at <http://www.fcfb.org> (n.d.) (on file with San Joaquin Agricultural Law Review).

¹⁸³ U.S.D.A., Farm Structure, Questions and Answers, available at <http://www.ers.usda.gov> (updated Jul. 9, 2002) (on file with San Joaquin Agricultural Law Review).

¹⁸⁴ *Id.*

¹⁸⁵ *Id.*

¹⁸⁶ U.S.D.A., Farm Structure, Glossary, available at <http://www.ers.usda.gov> (updated Jul. 9, 2002) (on file with San Joaquin Agricultural Law Review).

¹⁸⁷ *Id.*

¹⁸⁸ 7 U.S.C.S. § 2666 (MB 2005).

¹⁸⁹ 11 U.S.C.S. § 101(21) (MB 2005).

The issue of causation, often problematic with non-point source¹⁹⁰ defendants in environmental cases, in many respects is similar to toxic-tort claims, where there may be a lack of a direct causal nexus,¹⁹¹ or in instances where multiple defendants are implicated. But there seems to be no end to the creative ways to establish cause, even to the extent of establishing a causal link to specific defendants for climate changing emissions, also known as global warming.¹⁹²

Courts have seen some novel theories of causation advanced, from the traditional apportionment of harm approach¹⁹³ to the Federal Court's Sixth Circuit's consideration of applying Michigan's law of joint and several liability. In *Mitchie v. Great Lakes Steel*, the court indicated that where independent actions combine to cause an indivisible injury,¹⁹⁴ it was an unfair burden for the plaintiff to be required to show which alleged tortfeasor caused what harm.¹⁹⁵

VII. INSURANCE INDUSTRY RESPONSE

If such claims are expected to increase, where will agricultural producers turn for help? Insurance, specifically liability insurance, is the logical choice. Risks resulting from tort and environmental liability are of major concern to agricultural producers. The costs of insuring against these risks play a major role in the economics of running a farm.¹⁹⁶ The farm liability coverage form insurance policy is the likely candidate.¹⁹⁷ This should be adequate for many smaller operations, but a policy of special environmental insurance, such as Environmental Impairment Liability (EIL) or Pollution Legal Liability (PLL)¹⁹⁸ coverage could be

¹⁹⁰ EPA, Sources of Pollutants in the Ambient Air, available at <http://www.epa.gov/apti/course422/ap3.html> (last updated Aug. 3, 2004) (a point source refers to a fixed point that emits pollutants, such as a smokestack) (on file with San Joaquin Agricultural Law Review).

¹⁹¹ David A. Grossman, *Warming up to a Not So Radical Idea: Tort Based Climate Change Litigation*, 28 Colum. J. Envtl. L 1, 22 (2003).

¹⁹² *Id.* at 2.

¹⁹³ RESTATEMENT (SECOND) OF TORTS § 433A (1965).

¹⁹⁴ *Mitchie v. Great Lakes Steel*, 495 F.2d 213, 216 (6th Cir. 1974).

¹⁹⁵ *Id.*

¹⁹⁶ Joana Greene, Cornell University, *Managing Risks on Your Small Farm*, available at <http://hortmgt.aem.cornell.edu> (n.d.) (on file with the San Joaquin Agricultural Law Review).

¹⁹⁷ Insurance Services Office, *Farm Liability Coverage Form FL 00 20 01 98* (2004) (a standard form policy used by many of the insurers) (on file with the San Joaquin Agricultural Law Review).

¹⁹⁸ David J. Dybdahl, American Risk Management Resources Network, *A User's Guide to Environmental Insurance* 27 (n.d.).

used to fill gaps in existing coverage for larger operations who fear increased liability.

In its most basic form, a policy of insurance is simply a “contract whereby one undertakes to indemnify another against loss, damage, or liability arising from a contingent or unknown event.”¹⁹⁹ This basic definition, with only minor variations in style of language is fairly consistent amongst various jurisdictions across the land.²⁰⁰ This contract creates a duty upon the insurer to indemnify an insured “for those sums that the insured becomes legally obligated to pay as damages” in the event of a covered loss.²⁰¹ This is coupled with a duty to defend²⁰² an insured against losses that fall within the broadly construed insuring agreement.²⁰³ This has the effect of affording the insured with the widest possible scope of potential coverage.²⁰⁴

As indicated above, insurable risks are those risks that are either contingent or unknown.²⁰⁵ They can even be losses that are inevitable and certain to occur, such as damage from earthquakes in California. The contingent nature of the event makes it insurable, even though it might inevitably happen.²⁰⁶ It is by the doctrine of fortuity²⁰⁷ that a loss becomes covered, so long as the “efficient proximate cause”²⁰⁸ falls within the insuring language or is not specifically excluded.

Bringing a claim within the potential scope of coverage triggers the insurer’s duty to defend²⁰⁹ or the duty to indemnify.²¹⁰ Once the claim falls within the potential for coverage, the insurer can apply an applicable

¹⁹⁹ Cal. Ins. Code § 22 (Dearings 2004).

²⁰⁰ See also Conn. Gen. Stat. § 38a-1 (2003), N.Y. Ins. § 1101 (Consol. 2003).

²⁰¹ *Aerojet-General Corp. v. Transp. Indem. Co.*, 948 P.2d 909, 919 (Cal. 1997).

²⁰² *Gray v. Zurich Ins. Co.*, 419 P.2d 168, 177 (Cal. 1966), (criticized on other grounds).

²⁰³ *Id.* at 174.

²⁰⁴ *Westchester Fire Ins. Co. v. Pittsburg*, 768 F. Supp. 1463, 1468 (D. Kan., 1991), (quoting Peters, *Insurance Coverage for Superfund Liability: A Plain Meaning Approach to the Pollution Exclusion Clause*, 27 Washburn L.J. 161, (1987)).

²⁰⁵ *E.g.*, Cal. Ins. Code § 250 (Deering’s 2004), See also 43 AM. JUR. 2d *Insurance* § 479 (2004).

²⁰⁶ *Montrose Chemical Corp. v. Admiral Insurance Co.*, 913 P.2d 878, 904 (Cal. 1995).

²⁰⁷ *Mayor of Baltimore v. Utica Mutual Insurance*, 802 A.2d 1070, 1100 (Md. Ct. Spec. App. 2002); *Montrose Chemical Corp. v. Admiral Insurance Co.*, 913 P.2d 878,904 (Cal. 1995); *Outboard Marine Corp. v. Liberty Mutual Insurance Co.* 607 N.E.2d 1204, 1210 Ill. (1992); 43 AM. JUR. 2d *Insurance* § 479 (2004).

²⁰⁸ See AM. JUR 2d *Insurance* § 480 (2004) (distinguishing proximate cause from the traditional meaning in tort cases, focusing on policy language rather than a sequence of events).

²⁰⁹ *Gray v. Zurich Ins. Co.*, 419 P. 2d. 168, 177 (Cal. 1966).

²¹⁰ *Aerojet-General Corp v. Transp. Indem. Co.*, 948 P. 2d 909, 919 (Cal. 1997).

exclusion.²¹¹ Pollution claims, however, can create unique problems with causation. Establishing the actual date and location of a loss, as well as cause and effect relationships to injury, presents challenges to anyone trying to establish a claim or defense for environmental claims.²¹²

At this point, a brief summary of the principles of insurance policy construction is in order. Since insurance policies are generally viewed as contracts, many of the same principles of construction that govern contracts apply to insurance policies.²¹³ The ultimate goal of interpreting a policy, like any contract, is to manifest the intent of all parties.²¹⁴

Generally, courts interpret insurance policies by using several sequenced steps.²¹⁵ Courts first look to the plain meaning rule,²¹⁶ relying upon the plain meaning of the words, reading them in their “ordinary and popular sense” within the context of the policy.²¹⁷ This is done using the perspective of a layperson, not an expert in law or insurance.²¹⁸ This use of plain language comports with the general rules of contract interpretation.²¹⁹

As one might expect, however, the courts must look beyond the plain meaning in the event of an ambiguity. Ambiguity arises when there is doubtfulness, uncertainty, or an uncertain meaning²²⁰ that is ascribed to the words in the insurance policy.²²¹ When this occurs, a second tier of construction, the Doctrine of Objective Reasonable Expectations (DORE) is often applied.²²² This rule seeks to interpret ambiguity of the insurance policy language using the standard of what the insured person’s reasonable expectations would be when the policy was issued.²²³ This rule is applied objectively, creating balance to the otherwise insured-friendly bias that is inherent in the DORE test.²²⁴

²¹¹ Appleman on Insurance § 21-132.2[3], (2nd Ed. 2004); *see also* Cincinnati Ins. Company v. Flanders Electric Motor Service, Inc., 40 F.3d 146, 151 (7th Cir. 1994).

²¹² David J. Dybdahl, American Risk Management Resources Network, *A User's Guide to Environmental Insurance* 14 (n.d.).

²¹³ Appleman on Insurance § 16-116.3.a., (2nd Ed. 2004).

²¹⁴ *Id.*

²¹⁵ *Id.* §§ 3.d.

²¹⁶ *Id.* §§ 15-113.B.

²¹⁷ *Id.* §§ 16-116.3.d.1.

²¹⁸ *Id.*

²¹⁹ *See* Restatement (Second) of Contracts § 202 (1981); Restatement (Second) of Contracts § 203 (1981); Restatement (Second) of Contracts § 204 (1981).

²²⁰ BLACK’S LAW DICTIONARY 88 (8th ed. 1969); WEBSTER’S NEW COLLEGIATE DICTIONARY 35 (1979).

²²¹ Appleman, at § 15-113.B.

²²² *Id.* §§ 16-116.D.2.

²²³ *Id.*

²²⁴ *Id.*

If DORE fails to resolve any ambiguity, courts will resolve it by using *contra proferentem*,²²⁵ or, the “contra-insurer” rule as it is applied to insurance policies.²²⁶ This rule, the bane of insurance defense teams, resolves ambiguity against the drafting insurance company, and closely follows general contract law whereby contractual provisions are construed against the writer.²²⁷

One may notice that an underlying theme to all of these rules is to frame the meaning of the ambiguous language within the context of the policy as a whole.²²⁸ This is the philosophy that will be brought to bear when interpreting an insuring agreement against a potential liability. The insuring language states generally, “We will pay those sums that the [insured] becomes legally obligated to pay as damages because of [bodily injury] or [property damage] to which this insurance applies. We will have the right and duty to defend the [insured] against any [suit] seeking those damages.”²²⁹ This language, when taken alone, is plainly broad in scope, casting a wide net of coverage upon potential claims. Clearly, a claim by a person who may be injured at the hand of an insured would fall within this scope of coverage.

This potential becomes clouded, however, when one tries to apply a potential exclusion, such as the standard pollution exclusion.

This insurance does not apply to: ...c. Pollution

(1)[Bodily injury] and [property damage] arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of pollutants:

(a) At or from any premises, site or location which is or was at any time owned or occupied by, or rented or loaned to, any [insured];

(b) At or from any premises, site or location which is or was at any time used by or for any [insured] or others for the handling, storage, disposal, processing or treatment of waste;

(c) Which are or were at any time transported, handled, stored, treated, disposed of, or processed as waste by or for any [insured] or any person or organization for whom you may be legally responsible; or

²²⁵ *Id.* §§ 3. (“construction against the profferor/author of the ambiguous contract language”).

²²⁶ *Id.*

²²⁷ RESTATEMENT (SECOND) OF CONTRACTS § 206 (1981), *See also* 43 AM. JUR. 2d *Insurance* § 309 (2004).

²²⁸ *American States Insurance v. Koloms*, 687 N.E.2d 72, 75 (Ill. 1997); *See also* Appleman, *supra* note 212, §16-116.D.3.

²²⁹ Insurance Services Office, *Farm Liability Coverage Form*, FL 00 2 01 98 § 1.1.a. (2004) (words and phrases enclosed in brackets denote terms defined elsewhere in the policy).

(d) At or from any premises, site or location on which any "insured" or any contractors or subcontractors working directly or indirectly on any [insured's] behalf are performing operations:

(i) If the pollutants are brought on or to the premises, site or location in connection with such operations by such [insured], contractor or subcontractor; or

(ii) If the operations are to test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of pollutants. . . .²³⁰

Liability insurance policy exclusions, such as the one above, are construed narrowly and against the drafter.²³¹ This manifests the effect of giving the benefit of interpretation to the insured by relying on the maxim of *contra proferentem*.²³² It furthermore increases the threshold by shifting the burden upon the insurer to prove that a particular loss falls within the terms of the exclusion.²³³

As a result of increased litigation, the pollution exclusion has evolved over the past decades from its initial inception in the standard form Commercial General Liability (CGL) policy in 1970.²³⁴ Continued litigation necessitated a revision of the language to further clarify the language of the provision.²³⁵ Debate has continued, culminating in drafting another version of the exclusion, known as the "absolute pollution exclusion."²³⁶

By relying on broad and literal definitions for policy terms such as "discharge" and "pollutant," insurers have attempted to invoke the exclusion under circumstances that would encompass virtually any imaginable set of circumstances that might involve a substance that can be characterized as an irritant or contaminant.²³⁷ By relying on the policy definition of terms, for example, "[p]ollutants means any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes,

²³⁰ *Id.* at I.2.c.

²³¹ Appleman, *supra* note 211, § 16-116.D.3.

²³² *Id.*

²³³ Pan American World Airways Inc. v. Aetna Casualty & Surety Co., 505 F.2d 989, 999 (2nd Cir. 1974).

²³⁴ American States Ins. Co. v. Harvey Koloms, 687 N.E. 2d 72, 80 (Ill. 1997) (the case provides a concise history of the evolution of the pollution exclusion); *see also* Nancer Ballard & Peter M. Manus, *Clearing Muddy Waters*, 75 Cornell L. Rev. 610, 622 (1990).

²³⁵ American States Ins. Co., 687 N.E.2d at 80.

²³⁶ *Id.* at 81.

²³⁷ MacKinnon v. Truck Insurance Exchange, 73 P.3d 1205, 1214 (Cal. 2003).

acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed.”²³⁸

By literal interpretation of the above definition, virtually any substance could be defined as a pollutant, resulting in unreasonable interpretation that would lead to “absurd results,”²³⁹ as the *MacKinnon* court said when describing the need for reasonable limitations to be set forth when interpreting the pollution exclusion. This becomes clear when viewed in conjunction with the fundamental purpose of liability insurance, which is “to provide the insured with the broadest spectrum of protection against liability for unintentional and unexpected personal injury or property damage arising out of the conduct of the insured’s business.”²⁴⁰

VIII. CONCLUSION

Bringing agricultural producers into the realm of enforcement for clean air regulations brings with it the distinct possibility of increased liability for dust related injuries. Of course, even with sufficient insurance coverage, the overall cost is borne by all of society.²⁴¹ The consumers of farm products will be vicariously footing the bill for increased production costs caused by higher liability insurance premiums passed along through higher prices at the checkstand. There is a danger to the nation’s small farms as well. Small farms, on average, are not able to effectively absorb increased costs. Many small farms rely upon off-farm income just to survive²⁴² and would be ill able to afford higher operating expenses, whether from paying for damages directly or from increased insurance premiums. The public’s demand for abundant, reasonably priced food, however, dictates that those who are charged with producing the nation’s food be given as much protection as is reasonable while they strive to do their part in cleaning the air we breathe.

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²³⁸ Insurance Services Office, *supra* note 197, §§ I.2.c.(2)(b).

²³⁹ *MacKinnon* at 1214.

²⁴⁰ *Id.* at 1217.

²⁴¹ Dybdahl, *supra* note 213 at 13.

²⁴² U.S.D.A., Agriculture Information Bulletin No. 769, America’s Diverse Family Farms 5 (May 2001).