Notes

Arizona Pit Mine Safety Inspections: An Analysis of Legal Incentives

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The safety of underground miners has been a subject of acute interest to all segments of the mining industry throughout the 20th century. Dramatized by sympathetic journalism[1] and union activity,[2] the underground miner's dangerous working conditions have been eased somewhat by a tightening of federal control.[3] Although numerous dangers of underground mining[4] have yet to be resolved,[5] the frequency

1. *See* BUSINESS WEEK, Aug. 31, 1963, at 26-27; 198 NATION 255 (1964).

2. *See* Ferguson, *The Role of the United Mine Workers in Coal Mine Safety*, in CENTRAL TREATY ORGANIZATION, CENTO SYMPOSIUM ON MINE HEALTH AND SAFETY 81, 83 (1966); Howerton, *The Federal Coal Mine Health and Safety Act of 1969*, 16 ROCKY MT. M.L. INST. 539, 542 (1971).

3. In 1910, after a series of mine disasters, congressional action in the area of underground mine safety began. *See* U.S. CODE CONG. & AD. NEWS 2504 (1969). The Bureau of Mines was established under the Department of the Interior to investigate mine safety and means necessary to prevent mining accidents. Act of May 16, 1910, Pub. L. No. 179, ch. 240, 36 Stat. 369 (codified at 30 U.S.C. §§ 1-16 (1970)). In 1941 federal inspectors were first authorized to enter coal mines for the purpose of investigating and identifying safety hazards. Act of May 7, 1941, Pub. L. No. 49, ch. 87, 55 Stat. 177 (repealed 1969). With passage of the Federal Coal Mine Safety Act in 1952, a federal-state system of cooperation was established to protect the safety of coal miners. Act of July 16, 1952, Pub. L. No. 552, ch. 877, 66 Stat. 692. This act was superseded by the Federal Coal Mine Health and Safety Act of 1969. 30 U.S.C. §§ 801-960 (1970). Under the new law a prior exemption for underground mines employing 14 men or less was omitted. *See* 30 U.S.C. § 803 (1970). Additionally, the Act provided increased penalties for operators who violate safety laws, *id.* § 813, and established an intensified educational program relating to coal mine safety. *Id.* § 952. *See also* U.S. CODE CONG. & AD. NEWS 2504-05 (1969).

4. There are many dangers encountered by underground miners which are not present in open pit mines. For example, the severe effects of pneumoconiosis (black lung) are not as prevalent in open pit mines. *See* Howerton, *supra* note 2, at 544-45, 578-81. The danger of explosion in underground mines due to the accumulation of methane gas does not occur in open pits. Finally, unlike underground miners, pit miners are not endangered by asphyxiation from being trapped in a cave-in. *See* Comment, *The 1969 Coal Mine Health and Safety Act: A Survey of Mine Safety Legislation in Pennsylvania*, 31 U. PITT. L. REV. 665, 666-70 (1970).

5. On May 12, 1972, a fire in the Sunshine Silver Mine in Kellogg, Idaho, killed

of injuries and fatalities has decreased.[6]

Unlike underground mining, little attention has been given to the safety problems encountered by those who labor above ground in open pit mines[7] and quarries.[8] Perhaps this is because the danger of operating equipment and machinery[9] on the surface is not as obvious and accidents are less likely to involve large numbers of workers. Nevertheless, a malfunctioning braking system or defective transmission can produce injury and death as easily as those hazards which confront the underground miner.[10] Despite congressional efforts to reduce the high incidence of open pit mining accidents through enactment of the Federal Metal and Nonmetallic Mine Safety Act of 1966 [FMNMSA][11] the

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91 persons. Three days later a select House subcommittee was convened to investigate the causes of the fire. In his opening remarks, Chairman Dominick V. Daniels stated: "The sad fact is that we have firmer laws protecting animals we think of as endangered species than those protecting miners. We must take a lesson from this incredible disaster at Kellogg because American laboring men and women are fast becoming an endangered species themselves." *Hearings on Pub. L. No. 89-577 Before the Select Subcomm. on Labor of the House Comm. on Educ. & Labor*, 92d Cong., 2d Sess. 1 (1972) [hereinafter cited as *1972 Hearings*].

6. Bituminous coal and lignite mines have experienced a significant drop in the frequency of fatal and nonfatal injuries over the last 40 years. In 1930 a total of 83.75 nonfatal and 1.90 fatal injuries occurred per million man hours of exposure. By 1965 these figures had dropped to 42.29 and 1.04 respectively. *See* CENTRAL TREATY ORGANIZATION *supra* note 2, at 75; SECRETARY OF INTERIOR, 1970 ANN. REP., ADMINISTRATION OF THE FEDERAL METAL AND NONMETALLIC MINE SAFETY ACT 7-8 [hereinafter cited as 1970 ANNUAL REPORT].

7. Arizona defines an open pit mine as "any mine operated on the surface of the earth, including quarries, but excluding sand and gravel operations." ARIZ. REV. STAT. ANN. § 27-301(5) (Supp. Pamphlet 1973). The statute further specifies that a mine includes all parts of the plant, appurtenant buildings, shops, and equipment. *Id.* § 27-301(3). This definition parallels that of the Federal Metal and Nonmetallic Mine Safety Act of 1966 [FMNMSA]. 30 U.S.C. §§ 720-740 (1970). There, "mine" is defined to include the area of land from which the minerals are extracted, as well as private roadways, excavations, underground passageways, structures, equipment, machines, and tools. *Id.* § 721(b).

8. Quarries are open pit excavations from which only stone is taken. Marvel v. Merritt, 116 U.S. 11, 12 (1885). Both Arizona and the federal government include quarries within the coverage of their mine safety laws. *See* 30 U.S.C. § 721(b) (1970); ARIZ. REV. STAT. ANN. §§ 27-301(3), (5) (Supp. Pamphlet 1973).

Sand and gravel operations are also treated in the Arizona and federal mine safety laws. *See* 30 U.S.C. § 721(b) (1970); ARIZ. REV. STAT. ANN. § 27-441 (Supp. Pamphlet 1973); U.S. CODE CONG. & AD. NEWS 2851 (1966).

9. Equipment and machinery includes locomotives, cranes, power shovels, trucks, bulldozers, front-end loaders, scrapers, mucking machines, sorters, hoists, and conveyor belts. *See* ARIZ. REV. STAT. ANN. §§ 27-351, -367, -424 (Supp. Pamphlet 1973).

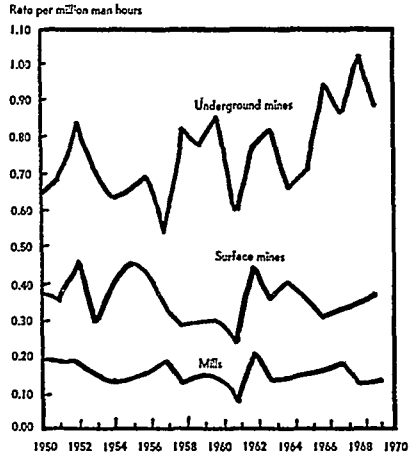
10. The 1972 injury rate per million man hours in American surface mines was slightly lower than the national average for all industry for the first time in many years. NATIONAL SAFETY COUNCIL, ACCIDENT FACTS 26 (1973). The injury severity rate, however, was the fifth worst in the nation. *Id.* In Arizona, there were 22 equipment-related pit mine fatalities between 1968 and 1974. *See* ARIZ. STATE MINE INSPECTOR, 57th-63d ANN. REPS. (1968-74).

11. 30 U.S.C. §§ 721-740 (1970). The FMNMSA was enacted to secure miner safety through a system of inspections, safety regulations, and penalties. *See generally* Pogson, *Federal Health and Safety Laws Affecting Mining, Milling, and Smelting Operations*, 17 ROCKY MT. M.L. INST. 225, 225-32 (1972).

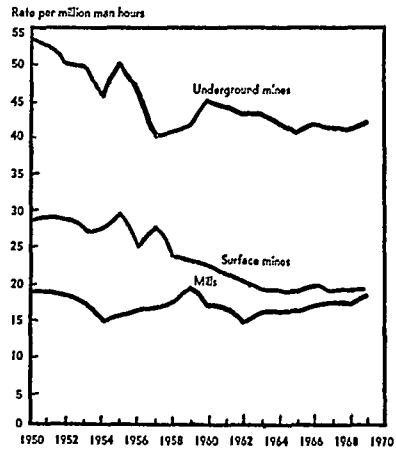
number of aboveground injuries has not been substantially diminished.[12]

Since a large number of pit mine injuries are caused by defective or malfunctioning equipment and machinery,[13] a decrease in injuries and fatalities could presumably be effected through development of an intense safety inspection program.[14] Such a program would make possible timely correction of accident-producing conditions. In Arizona five major groups involved with the pit mining industry have assumed varying degrees of responsibility for conducting inspections. Pit mine operators, employees, workmen's compensation insurance carriers, and state and federal agencies all inspect to some extent. While, assuredly, inspections are not the panacea for every safety problem in the pit mining industry, they constitute a central element in any effort to provide legal, rather than technological, solutions to the problems of pit mine safety.[15]

12. Fatality and injury trends may be determined from the following graphs included in the 1970 ANNUAL REPORT, *supra* note 6, at 7-8.



Fatal injury-frequency rates at underground and surface mines and mills, all noncoal mining, 1950-69



Nonfatal injury-frequency rates at underground and surface mines and mills, all noncoal mining, 1950-69

13. In a study of 44 fatalities occurring during the operation of front-end loaders, it was determined that a substantial number were caused by defects or malfunctioning rather than human error. *See* R. PYNNONEN & A. LOOK, U.S. BUREAU OF MINES INFORMATIONAL CIRCULAR NO. 8347: AN ANALYSIS OF 44 RECENT FATAL ACCIDENTS WITH FRONT-END LOADERS 2-4 (1967). The importance of defects in equipment as a major accident producer was brought home in a study of transportation accidents in the bituminous coal mine industry, which uses much of the same equipment used in pit mining. It was found that equipment defects equalled unsafe acts as an accident cause. *See* E. CURTH, U.S. BUREAU OF MINES INFORMATIONAL CIRCULAR NO. 8506: CAUSES AND PREVENTION OF TRANSPORTATION ACCIDENTS IN BITUMINOUS COAL MINES 1 (1971).

14. Inspection programs are often recommended to reduce the number of injuries caused by equipment defects and malfunctioning. *See, e.g.*, E. CURTH, *supra* note 13, at 97; C. EASTMAN, WORK-ACCIDENTS AND THE LAW 107-12 (reprint ed. 1969); R. PYNNONEN & A. LOOK, *supra* note 13, at 10.

15. Industry often looks to mechanical devices or safety appliances in upgrading the level of employee safety. *See* Harrison, *Industrial Health and Safety: The Need for*

This Note will approach pit mine safety through an analysis of the inspection process, focusing upon those branches of the industry and government which have a statutory or common law duty of inspection[16] or have voluntarily assumed such a duty. Attention will be directed to the liability incurred for breach of the duty to inspect, with a view toward providing incentives to conduct more thorough inspections.

INSPECTIONS BY PIT MINE OPERATORS

Damage Actions as an Inspection Incentive

The common law imposes upon an employer the duty to exercise reasonable care in providing a safe place for employees to work.[17] The objective of this duty is the prevention of accidents through maintenance of proper vigilance.[18] Thus it generally has been held that discharge of the duty to provide a safe place requires an employer to conduct reasonable inspections.[19] The extent and frequency of the required

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Extended Federal Regulation, 3 PROSPECTUS 171, 181 (1969). Although these items may be of inestimable value to the pit miner, other factors bearing on safety should not be ignored. For example, employer insensitivity to safety problems has tremendous bearing on employee safety. *See* Comment, *supra* note 4, at 665. In such nontechnological areas, legal solutions may better effect safety goals.

16. Employees do not have the duty to inspect and thus cannot be held liable for failure to inspect. *See generally* W. PROSSER, HANDBOOK OF THE LAW OF TORTS § 53 (4th ed. 1971). Employee participation, however, can benefit inspection programs in three ways. First, since employees are in contact with the working environment more than any other group, they are able to identify potential accident-producing situations which may escape the notice of the employer or government inspectors. Federal inspectors meet with both labor and management prior to inspection, and employee participation is considered desirable. *See* Pogson, *supra* note 11, at 229.

Some employers do not include employees on inspection trips. This may be due, in part, to the employees' ignorance of the value of their participation in mine safety. Since the existence and extent of inspection participation may be considered a condition of employment, it is a mandatory subject of bargaining. *See* 29 U.S.C. § 159(a) (1970). Thus employees ought to extend their bargaining pressure to this area. Employer refusal to bargain on the subject would be an unfair business practice. *See id.* § 158. *See 1972 Hearings, supra* note 5, at 2 (Representative Dominick V. Daniels stating that the employee's "right to accompany an inspector and the right to the results" of an inspection should be guaranteed).

Employee input is also valuable in the promulgation of safety regulations. In 1970 the Secretary of the Interior appointed three committees with representatives from labor, management, and state inspection agencies for the purpose of developing safety regulations pursuant to the FMNMSA. 1970 ANNUAL REPORT, *supra* note 6, at 3. Additionally, the Safety Division of the United Mine Workers of America has long cooperated with both management and government in promoting new safety regulations. *See* Ferguson, *supra* note 2, at 83. Finally, employers and governmental agencies often rely on employees to trigger remedial accident prevention. *See* ARIZ. REV. STAT. ANN. § 27-308 (Supp. Pamphlet 1973) (employee complaint to state mine inspector of dangerous working conditions); 30 C.F.R. § 55.3-9 (1975) (mandatory employee inspection of work area before starting work).

17. *See, e.g.*, Vickers v. Gercke, 86 Ariz. 75, 81, 340 P.2d 987, 992 (1959); Apache Ry. v. Shumway, 62 Ariz. 359, 367, 158 P.2d 142, 146 (1945); Robles v. Preciado, 52 Ariz. 112, 119, 79 P.2d 504, 507 (1938).

18. *See generally* W. PROSSER, *supra* note 16, § 80.

19. *See, e.g.*, Brann v. Chicago, R.I. & Pac. Ry., 53 Iowa 595, 6 N.W. 5 (1880); King's Van & Storage Co. v. Criner, 301 P.2d 1015, 1020 (Okla. 1956); Wood v. Southern Pac. Co., 216 Ore. 61, 66-67, 337 P.2d 779, 782 (1959). In *Brann* the court stated:

inspections depends on the nature of the place of employment and the danger anticipated if an inspection is not performed.[20] Accordingly, in light of the extreme hazards of pit mining,[21] discharge of the employer's duty would require frequent and extensive inspections.

An operator which negligently breaches its common law duty is liable for any work-related injuries to employees resulting therefrom.[22] Employees seeking common law recovery for their injuries, however, have encountered two barriers. First, jury questions are framed in terms of the reasonableness of the employer's inspections[23] and usually have been answered in the employer's favor.[24] Since defects in equipment often are not readily visible, a great burden would be placed upon the employer if an intensive maintenance inspection were required prior to every operation of equipment. Consequently, juries have concluded either that a reasonable inspection would not have uncovered the injury-producing defect[25] or that the employer's inspection was in fact reasonable.[26]

The doctrines of assumption of risk and contributory negligence constitute the second barrier to claims by employees based on common law negligence. The slightest inattentiveness on the part of an employee

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Negligence on the part of the corporation may consist of acts of omission or commission, and it necessarily follows that the continuing duty of supervision and inspection rests on the corporation. For it will not do to say that, having furnished suitable and proper machinery and appliances, the corporation can thereafter remain passive. The duty of inspection is affirmative, and must be continuously fulfilled and positively performed.

53 Iowa at 597, 6 N.W. at 6.

Arizona courts have not considered the employer's duty to conduct safety inspections. Arizona law does require an employer to warn of dangers not apparent or visible to his employees. Inspiration Consol. Copper Co. v. Lindley, 20 Ariz. 95, 100, 177 P. 24, 25 (1918); Flynn v. Lindenfield, 6 Ariz. App. 459, 462, 433 P.2d 639, 642 (1967). The employer is not absolved of the duty to warn merely because the employee may have general knowledge of the possibility of danger. Vickers v. Gercke, 86 Ariz. 75, 81, 340 P.2d 987, 992 (1959). An employer will be unable to fulfill this duty unless he discovers the hazards. *Cf.* Glowacki v. A.J. Bayless Mkts., Inc., 76 Ariz. 295, 306, 263 P.2d 799, 806 (1954). Thus, almost of necessity, the duty to inspect is implied in the Arizona cases.

20. *See* Devens v. Goldberg, 33 Cal. 2d 173, 178-79, 199 P.2d 943, 947 (1948); *cf.* Bailey v. Central Vermont Ry., 319 U.S. 350 (1943); Apache Ry. v. Shumway, 62 Ariz. 359, 368, 158 P.2d 142, 146 (1945).

21. *See* discussion note 10 *supra*. Open pit mining is included among the hazardous employments subject to the Employers' Liability Law. ARIZ. REV. STAT. ANN. § 23-803(8) (1956).

22. *See* Robles v. Preciado, 52 Ariz. 113, 118-19, 79 P.2d 504, 507 (1938); International Harvester Co. v. Hawkins, 180 Ark. 1056, 1061, 24 S.W.2d 340, 342 (1930); Stearns & Culver Lumber Co. v. Fowler, 58 Fla. 362, 368-70, 50 So. 680, 683 (1909); Eyre-Shoemaker Constr. Co. v. Mackin, 116 Md. 58, 60, 81 A. 267, 268 (1911).

23. *See, e.g.*, Louisville & N.R.R. v. Campbell, 97 Ala. 147, 12 So. 574 (1892); Smoot v. Mobile & M. Ry., 67 Ala. 13 (1880); Devens v. Goldberg, 33 Cal. 2d 173, 199 P.2d 943 (1948).

24. *See generally* W. PROSSER, *supra* note 16, § 80.

25. *See* Shea v. Wellington, 163 Mass. 364, 40 N.E. 173 (1895); Carlson v. Phoenix Bridge Co., 132 N.Y. 273, 30 N.E. 750 (1892).

26. *See* Louisville & N.R.R. v. Campbell, 97 Ala. 147, 12 So. 574 (1892); Smoot v. Mobile & M. Ry., 67 Ala. 13 (1880).

has been considered sufficient contribution to defeat recovery even though the negligence of the employer might have been greater.[27] Similarly, many courts have held that an employee assumes the risk of all harms incident to his employment.[28] Under this view, an employee may either continue to work and be barred from recovery for certain injuries, or forsake employment for his own safety.[29] The result is that injured employees who have sued for breach of the duty to provide a safe working place have been thwarted at every turn, and most have been compelled to bear the cost of their own injuries.[30] Since employers usually have not been held liable,[31] the common law has failed to provide an incentive compelling the type of inspections necessary to prevent injuries.

Because of the inequities of the common law, Arizona enacted the Employers' Liability Law[32] in 1912. Under this law, employees in specified hazardous industries,[33] of which pit mining is one,[34] may recover in a court action for injuries incurred while acting within the scope of their employment,[35] regardless of employer fault.[36] The law also softens the harshness of the common law rule by precluding altogether the defense of assumption of risk[37] and diminishing the effect of

27. *See* Schlemmer v. Buffalo, R. & P. Ry., 220 U.S. 590 (1911); W. PROSSER, *supra* note 16, § 80.

28. *See, e.g.*, Graham v. Thrall, 95 Ark. 560, 129 S.W. 532 (1910); Chicago, R.I. & Pac. Ry. v. Clark, 108 Ill. 113, 115 (1883); Conboy v. Crofoot, 194 Kan. 46, 49-50, 397 P.2d 326, 330 (1964). In Woodward Iron Co. v. Marbut, 183 Ala. 310, 320, 62 So. 804, 807 (1913), the court stated:

> The master is not required or expected to deal with his servant as with an automaton, as a person following a routine without intelligence. The servant may be expected to exercise some measure of intelligence and the instinct of self-preservation. It is a fair rule that "a servant assumes the risk of all dangers, however they may arise, against which he may protect himself by the exercise of ordinary observation and care."

29. *See* W. PROSSER, *supra* note 16, § 80.

30. Robles v. Preciado, 52 Ariz. 113, 119, 79 P.2d 504, 507 (1938).

31. *See* W. PROSSER, *supra* note 16, § 80. *See also* Posner, *A Theory of Negligence*, 1 J. LEGAL STUDIES 29, 68 (1972).

32. ARIZ. REV. STAT. ANN. §§ 23-801 to -808 (1956).

33. *See id.* § 23-803.

34. *See id.* § 23-803(8).

35. *Id.* § 23-805. In Consolidated Arizona Smelting Co. v. Egich, 22 Ariz. 543, 199 P. 132 (1920), Justice Baker noted in his concurring opinion that "an employee engaged in one of the hazardous occupations enumerated in the statute may recover for *any* accident occurring in the ordinary course of events during his work . . . ." *Id.* at 560, 199 P. at 137-38 (emphasis in original); *accord*, United Verde Extension Mining Co. v. Littlejohn, 279 F. 223 (9th Cir. 1922); Phoenix-Tempe Stone Co. v. Jenkins, 28 Ariz. 291, 237 P. 194 (1925). A deviation from the scope of employment which is only slight, however, will not leave the employee unprotected by the statute. *See* Peters v. Pima Mercantile Co., 42 Ariz. 454, 462, 27 P.2d 143, 146 (1933) (dictum). Even if the employee's injuries do not result from a hazardous condition which is inherent in the employment, he may recover so long as he was acting within the scope of his employment. *See* United Verde Extension Mining Co. v. Littlejohn, *supra*; Phoenix-Tempe Stone Co. v. Jenkins, *supra*.

36. ARIZ. CONST. art. 18, § 7; ARIZ. REV. STAT. ANN. § 23-801 (1956).

37. *See* Grasty v. Sabin, 32 Ariz. 463, 467-68, 259 P. 1049, 1050-51 (1927); Phoenix-Tempe Stone Co. v. Jenkins, 28 Ariz. 291, 295, 237 P. 194, 196 (1925). *See also* ARIZ. REV. STAT. ANN. § 23-806 (1956).

contributory negligence by permitting it only to reduce rather than defeat recovery.[38] Thus a miner may recover for injuries under this law without encountering many of the common law barriers.

Although the Employers' Liability Law could have aided employee safety by motivating the employer to prevent injuries for which he is strictly liable, the law has fallen into disuse due to the expansion of the workmen's compensation system.[39] The compensation system parallels the Employers' Liability Law in that an employee may receive compensation for work-related injuries[40] without regard to the employer's fault.[41] The compensation act goes further, however, since the employee's negligence has no effect whatsoever on his recovery.[42] Generally, if an employee elects to be governed by the compensation act, compensation is his exclusive remedy against the employer, and he may not sue under either the Employers' Liability Law or common law.[43]

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38. ARIZ. REV. STAT. ANN. § 23-806 (1956). *But see* Grasty v. Sabin, 32 Ariz. 463, 467, 259 P. 1049, 1050 (1927).

39. ARIZ. REV. STAT. ANN. §§ 23-901 to -1087 (1956), *as amended*, (Supp. 1975-76). In addition to the Employers' Liability Law, the Arizona Legislature also instituted a system of workmen's compensation pursuant to constitutional mandate. *See* ARIZ. CONST. art. 18, § 8 (1912). Under this system, an employee could elect compensation coverage or a suit under the applicable law subsequent to a work-related injury. *Id.; see* Industrial Comm'n v. Crisman, 22 Ariz. 579, 199 P. 390 (1921); Behringer v. Inspiration Consol. Copper Co., 17 Ariz. 232, 149 P. 1065 (1915). *See also* ARIZ. CONST. art. 18, § 6. This procedure came under attack because the compensation system was rarely used, and under the Employers' Liability Law, attorney fees consumed much of the injured employee's recovery. *See* J. MURDOCK, CONSTITUTIONAL DEVELOPMENT OF ARIZONA 143-45 (1930). The constitutional mandate for a workmen's compensation system was amended by referendum in 1925 to require an election prior to injury. ARIZ. CONST. art. 18, § 8. *See also* State *ex rel.* Industrial Comm'n v. Pressley, 74 Ariz. 412 250 P.2d 992 (1952). As a result, workmen's compensation is now the most widely used remedy.

40. ARIZ. REV. STAT. ANN. § 23-1021 (Supp. 1975-76). For an injury to be compensable, it must have been incurred while performing an act which is closely related, or at least incidental, to the employment. *See* Edwards v. Industrial Comm'n, 94 Ariz. 342, 385 P.2d 219 (1963). *See generally* 7 ARIZ. L. REV. 350 (1966).

41. *See* ARIZ. REV. STAT. ANN. § 23-1021 (1956). Though the employer's negligence or lack thereof may not affect employee compensation, the employer is not a general insurer of employee safety or health. Thus the employee may not recover for injuries not incurred in the course of employment; nor may he receive compensation for the normal wear and tear of daily living. *See* McNeely v. Industrial Comm'n, 17 Ariz. App. 185, 496 P.2d 611, *vacated on other grounds*, 108 Ariz. 453, 501 P.2d 555 (1972).

42. ARIZ. CONST. art. 18, § 8.

43. ARIZ. REV. STAT. ANN. § 23-1022(A) (Supp. 1975-76). Prior to any injury, the Workmen's Compensation Act requires an employee to elect between the benefits of the Act and a suit for damages. *Id.* § 23-906; *see* Red Rover Copper Co. v. Industrial Comm'n, 58 Ariz. 203, 214-15, 118 P.2d 1102, 1107 (1941). *See generally* discussion note 39 *supra*. Thus a miner is forced into the posture of a gambler. He can choose to bring himself within the terms of the Act and receive compensation upon injury, or he may reject compensation prior to an injury and take his chances on the success of a tort action.

There are several considerations which the miner must weigh carefully before electing or rejecting compensation. If compensation is not elected, a miner may sue under the Employers' Liability Law and recover for pain and suffering, which are not allowed under the Workmen's Compensation Act. *See* Myers v. Rollette, 103 Ariz. 225, 439 P.2d 497 (1968), *noted in* 11 ARIZ. L. REV. 193 (1969). Under the Employers' Liability Law, however, a miner runs the risk of having his recovery reduced because of his own negligence. See text accompanying note 38 *supra*. This problem is avoided if compensation is elected. *See* text & note 42 *supra*. If compensation is elected, the

While the advantage of certain recovery under the Arizona Workmen's Compensation Act is of much comfort to injured pit miners, the compensation system has deleterious effects upon incentives for inspection by the operator. Under workmen's compensation a pit mine operator is permitted to carry insurance to cover an injured miner's claim.[44] In theory, the operator's expenditures on safety programs and inspections will increase only insofar as they effectively reduce the number of injuries, thereby causing a decrease in insurance costs.[45] Outlays for inspection will normally cease at a point where the premium cannot be reduced further.[46] Thus the interplay between insurance premium payment and safety program outlays under the Arizona Workmen's Compensation Act insures that those accident-producing situations which would be detected by greater safety outlays by the employer will go undiscovered.

Recognizing that workmen's compensation systems may generate safety inadequacies, some states provide an award of extra compensation which is triggered whenever certain types of employer misbehavior contribute to an injurious accident.[47] With respect to employer incentive to conduct inspections, the Ohio and California systems are two of the most effective. In Ohio an employer's failure to comply with industrial safety regulations entitles an injured employee to extra compensation.[48] The additional award is deemed a penalty and consequently is not covered by the employer's compensation insurance.[49] Thus the award serves both to compensate injured employees more adequately and to provide an incentive for employer compliance with industry regulations.[50]

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injured miner receives only a partial recovery, *see* ARIZ. REV. STAT. ANN. § 23-1044 (Supp. 1975-76), but he usually is not forced to pursue his claim in a long, drawn out court proceeding, *see* Pressley v. Industrial Comm'n, 73 Ariz. 22, 236 P.2d 1011 (1951), since the workmen's compensation system differs procedurally from the Employers' Liability Law in that determinations of compensability are made in an administrative proceeding rather than a court action. *See generally* ARIZ. REV. STAT. ANN. §§ 23-921 to -951 (1956), *as amended*, (Supp. 1975-76).

44. *See* ARIZ. REV. STAT. ANN. § 23-902 (Supp. 1975-76).

45. *See* Harrison, *supra* note 15, at 195-97.

46. *Id. See also* Posner, *supra* note 31, at 33.

47. *See, e.g.*, KY. REV. STAT. ANN. § 342.165 (Cum. Supp. 1974); MASS. ANN. LAWS ch. 152, § 28 (1965); UTAH CODE ANN. § 35-1-12 (1953). *See generally* 2 A. LARSON, THE LAW OF WORKMEN'S COMPENSATION § 69.10 (1975).

48. OHIO CONST. art. 2, § 35.

49. The extra award appears to be compensation to the employee, but a penalty on the employer. *See* State *ex rel.* Bailey v. Krise, 18 Ohio St. 2d 191, 198, 249 N.E.2d 55, 60 (1969); State *ex rel.* Emmich v. Industrial Comm'n, 148 Ohio St. 658, 668, 76 N.E. 710, 715 (1947).

50. The benefits derived from the Ohio system are dependent upon the existence of adequate safety regulations. Thus adoption of a similar plan in Arizona would enhance pit mine inspection programs only insofar as regulations mandate adequate employer inspections. Presently Arizona pit mine inspection regulations are severely lacking in specificity and comprehensiveness. For a discussion of the Arizona mine safety regulations, see text & notes 67-78 *infra*.

Under the California system an employee may receive 150 percent of the normal compensation award if his injury is caused by an employer's willful misconduct.[51] Willful misconduct under California law requires that an employer have a general intent[52] to perform or fail to perform an act[53] while possessing knowledge that the act or omission will probably result in injury to another.[54] While the increased award is not considered a penalty under California law,[55] the employer must pay it personally, without benefit of compensation insurance coverage.[56] Thus, like that of Ohio, the California system provides both more adequate compensation for injured employees and an incentive for employer attention to safety details.

Like California's law, the Arizona Workmen's Compensation Act affords an employee an additional benefit if his injuries result from an employer's willful misconduct.[57] The benefit, however, is not in the

51. CAL. LABOR CODE § 4553 (West Supp. 1975). The increased award may not exceed $10,000. *Id.* It has been noted that the California workmen's compensation system provides "penalties on both employers and employees for serious and willful misconduct in disregarding safety standards; fear of these penalties would naturally arouse concern for safety." P. NONET, ADMINISTRATIVE JUSTICE 49 (1969).

52. The employer need not intend the specific result, but need only intend to commit or omit the act. *See generally* Comment, *Serious and Wilful Misconduct Under the California Workmen's Compensation Act*, 42 CALIF. L. REV. 852 (1954).

53. The operation of the rule is no different if the employer, rather than acting wrongfully, fails to act. Both are willful misconduct. *See* Keeley v. Industrial Accident Comm'n, 55 Cal. 2d 261, 267, 359 P.2d 34, 37, 10 Cal. Rptr. 636, 639 (1961). *See generally* Comment, supra note 52, at 853-58.

54. The California supreme court first held that an employer has knowledge for purposes of finding willful misconduct if, upon turning his mind to the matter, he would have known or ought to have known that his conduct would jeopardize an employee's safety. *See* E. Clemens Horst Co. v. Industrial Accident Comm'n, 184 Cal. 180, 188, 193 P. 105, 108 (1920). In Mercer-Fraser Co. v. Industrial Accident Comm'n, 40 Cal. 2d 102, 117, 251 P.2d 955, 962-63 (1953), however, the court appeared to require actual knowledge of the probability of an injury. *Accord*, Hawaiian Pineapple Co. v. Industrial Comm'n, 40 Cal. 2d 656, 663, 255 P.2d 431, 435 (1953). *See* Comment, *supra* note 52, at 854-58.

While no case has decided the issue, it is possible that under California law an employer's willful failure to inspect or misperformance of an inspection could result in additional compensation to an injured employee. California courts have held that knowing violations of safety regulations by employers constitute willful misconduct. *See, e.g.*, Shoemaker v. Samuel Goldwyn Prods., Inc., 20 Cal. Compensation Cases 154 (1955); Chick v. Industrial Accident Comm'n, 16 Cal. Compensation Cases 58 (1951); Sabedra v. George R. Curtis Paving Co., 14 Indus. Acc. Comm'n 127 (1927); Comment, *supra* note 52, at 858-61. Mere violation of a safety regulation, however, does not alone constitute willful misconduct. *See* Mercer-Fraser Co. v. Industrial Accident Comm'n, 40 Cal. 2d 102, 117, 251 P.2d 955, 962 (1953); Comment, *Serious and Wilful Misconduct Clauses of California Workmen's Compensation Act*, 22 CALIF. L. REV. 432, 436-37 (1934). An injured employee must show that the employer had knowledge of the regulation and intentionally violated it with realization of the probable consequences. *See* Burns v. LaBataille, 22 Cal. Compensation Cases 250 (1957); Girard v. Pacific Fruit Express Co., 11 Indus. Acc. Comm'n 181 (1924).

55. State Dep't of Correction v. Workmen's Compensation Appeals Bd., 5 Cal. 3d 885, 489 P.2d 818, 97 Cal. Rptr. 786 (1971); E. Clemens Horst Co. v. Industrial Accident Comm'n, 184 Cal. 180, 192-93, 193 P. 105, 110 (1920). *But see* Mercer-Fraser Co. v. Industrial Accident Comm'n, 40 Cal. 2d 102, 108, 251 P.2d 955, 957 (1953). *See also* Comment, *supra* note 52, at 864 n.69.

56. *See* Mercer-Fraser Co. v. Industrial Accident Comm'n, 40 Cal. 2d 102, 108, 251 P.2d 955, 957 (1953); CAL. INS. CODE § 11661 (West 1972).

57. *See* ARIZ. REV. STAT. ANN. § 23-1022 (Supp. 1975-76).

form of an extra award. Rather, it consists of permitting an employee who has elected to be governed by the Workmen's Compensation Act to opt out of the Act's provisions and sue under common law or the Employers' Liability Law.[58] This provision is of dubious value. Its inutility stems from the statutory definition of willful misconduct which requires that an employer specifically intend to injure an employee.[59] Unlike the California definition, then, general intent coupled with knowledge of danger is insufficient.[60] If an employer intends to commit the act but does not intend the resulting injury, the employee may not exercise his statutory option to sue. The Arizona definition of willful misconduct is so narrow that the employee's option to sue is rarely available. Consequently, the concept of willful misconduct in the Arizona Workmen's Compensation Act serves neither to recompense a special class of claimants nor to motivate employer inspections.

The beneficial aspects of the Ohio and California compensation systems derive from giving effect to employer culpability. When an employer must respond in excess of normal compensation for culpable actions or omissions, it is furnished economic incentive to conduct more thorough and proper safety inspections. The Arizona Workmen's Compensation Act, however, does little to provide pit mine operators with incentive to conduct such safety inspections. This inadequacy, together with similar failings in the common law and the Employers' Liability Law, forces miners to look to the government for safety protection in the form of mandatory employer inspections.

Statutorily Mandated Operator Inspections

During the first half of this century, Arizona's safety laws were characteristic of weak safety legislation throughout the nation.[61] Prior to 1968, an Arizona pit mine operator was required only to make a daily inspection of hoisting apparatus.[62] Under the FMNMSA, enacted in 1966, the federal government established standards which state safety

58. *Id.*

59. The term "willful misconduct" is construed in Arizona to mean "an act done knowingly and purposely with the direct object of injuring another." *Id.* § 23-1022(B).

60. In Serna v. Statewide Contractors, Inc., 6 Ariz. App. 12, 429 P.2d 504 (1967), an employee was killed when the sides of a ditch in which he was working caved in and buried him. The employer had received numerous warnings over a 5-month period to have that very hazard remedied. Appealing from an adverse judgment, the deceased's widow argued that the employer's failure to comply with safety recommendations was willful misconduct, or at least constructively so. The court of appeals affirmed the lower court ruling, reasoning that recovery must be preceded by an act done knowingly and with the direct object of injuring the employee. *Accord*, Lowery v. Universal Match Corp., 6 Ariz. App. 98, 430 P.2d 444 (1967).

61. *See* discussion note 178 *infra.*

62. *See* Law of May 13, 1912, ch. 33, § 22(d), [1912] Ariz. Sess. Laws 1st Sess. 99 (now ARIZ. REV. STAT. ANN. § 27-352(A) (Supp. Pamphlet 1973)).

programs must satisfy in order to qualify for federal acceptance.[63] Approval of the state program frees pit mine operators in the state from the mandatory regulations and penalties of the FMNMSA.[64] In order for Arizona's mine safety laws to gain federal approval, several new provisions were enacted. Law relating to operator inspection now mandates regular inspection of mobile heavy duty equipment[65] and requires that an operator appoint a company inspector to identify and oversee the correction of all unsafe practices and defective equipment.[66] Since the new laws increase the safety of pit miners by directing inspections where there had been none, they are an improvement over the old mine safety laws.

As an adjunct to the Arizona mine safety laws, regulations have been promulgated by the Office of the Arizona State Mine Inspector.[67] These regulations are used by state inspectors as a basis for measuring the operator's compliance with Arizona's general statutory mandate of mine safety.[68] The provisions of these regulations are mandatory,[69] failure to comply subjecting the operator to various sanctions.[70]

While the mandatory regulations outline with some specificity matters pertaining to blasting[71] and prevention of fire hazards,[72] provisions requiring equipment inspections and inspections of mine premises are not included. The only mandatory regulations necessitating pit mine safety inspections are limited to the storage and use of acids.[73] Such meager coverage is obviously inadequate. In order to ensure protection of the pit miner, the subject matter of mandatory regulations must be amplified to include inspection of all activities and agencies which substantially contribute to miner injuries.[74] Since these regulations are

63. 30 U.S.C. § 735 (1970). See discussion of this provision in text & note 186 *infra.*

64. 30 U.S.C. § 735(e) (1970). For discussion of the federal government's deference to state safety programs, see text & notes 184-95 *infra.*

65. ARIZ. REV. STAT. ANN. § 27-424(B) (Supp. Pamphlet 1973). These include locomotives, cranes, power shovels, trucks, bulldozers, front-end loaders, and scrapers. *See id.* §§ 27-351, -367, -424(A).

66. *Id.* § 27-304(C).

67. *See* MINING CODE OF THE STATE OF ARIZONA (rev. ed. 1972).

68. The regulations "are applicable to and will be enforced in all operations subject to the jurisdiction of the State Mine Inspector . . . ." *Id.* rule 1:32.

69. The terms "shall" and "must," as used in the Code, are mandatory. *Id.* rule 1:21. While there are several regulations which do not contain the words "shall" or "must," the Code indicates that all regulations are mandatory and that none is only advisory in nature. See *id.* rule 1:32. The current practice of the Office of the State Mine Inspector comports with this interpretation. Telephone interview with Bert Romero, Arizona State Mine Inspector, Phoenix, Arizona, Feb. 13, 1975.

70. *See* ARIZ. REV. STAT. ANN. §§ 27-302(C), -307(B), -463 (Supp. Pamphlet 1973). For a discussion of these sanctions, see text & notes 81-84 *infra.*

71. *See generally* MINING CODE OF THE STATE OF ARIZONA rules 2:11-:86 (rev. ed. 1972).

72. *Id.* rules 3:01-:36.

73. *See id.* rules 15:05, :08, :09, :15, :18(6).

74. Federal regulations enacted pursuant to 30 U.S.C. § 725 (1970) do not provide

promulgated in furtherance of mine safety statutes,[75] they may and should be utilized to detail more explicitly the operator's statutory inspection duties by specifying inspection methodology, minimum safe operating standards for specific items of equipment, and the scope of required operator inspections.

Of course, mandatory regulations cannot provide precise inspection instructions for every hazardous piece of equipment and dangerous activity in the pit mine. Indeed, some operator discretion is desirable in order to allow adaptation of state regulations to individual operations. Nevertheless, pit mining operations are sufficiently similar in terms of equipment utilized and activities conducted that fairly specific and comprehensive guidelines can be promulgated.[76]

Under the FMNMSA, nonmandatory or advisory regulations have been enacted to serve as an adjunct to the federal mandatory regulation scheme.[77] The Arizona State Mine Inspector, however, has not issued any nonmandatory regulations.[78] While such regulations would be advisory only and would carry no penalty for failure to comply, they could serve a valuable function.[79] If revised, Arizona's mandatory regulations should specify what and when an operator must inspect. Supplemental advisory regulations could then be issued to focus on particular troublespots and provide techniques and suggestions for inspection efficiency. In this manner a comprehensive scheme would exist specifically delineating an operator's inspection duties.

In order to enforce the statutes and regulations dictating mine safety, a system of penalties has been enacted in Arizona. Penalties can be invaluable as an incentive to an operator's discharge of his statutory inspection duties.[80] At present, violation of any of the Arizona mine safety statutes or regulations subjects an operator to penalties including fines ranging from $50 to $300[81] or immediate cessation of operations

an adequate model for Arizona to follow. Mandatory regulations require only inspection of working areas before each shift and after blasting, 30 C.F.R. § 55.3-8 (1975), inspection of firefighting equipment, *id.* § 55.4-23, and drilling equipment and drilling area. *Id.* §§ 55.7-2 to -3.

75. *See* ARIZ. REV. STAT. ANN. § 27-462 (Supp. Pamphlet 1973).

76. In order to facilitate a coordination of effort between the pit mine operator and the corps of state mine inspectors, mandatory regulations which parallel and complement the scope of statutory state inspections should be established. For a discussion of the items which the state must inspect, see text accompanying note 151 *infra*.

77. *See* 30 U.S.C. § 725 (1970); 30 C.F.R. § 55.1 (1975).

78. Telephone interview with Bert Romero, *supra* note 69. Arizona does not at present have explicit enabling legislation to permit the promulgation of advisory regulations. If ARIZ. REV. STAT. ANN. § 27-462 (Supp. Pamphlet 1973) is not construed to imply such power, then enabling legislation should be enacted.

79. *But see* 1972 HEARINGS, *supra* note 5, at 238.

80. *See* C. EASTMAN, *supra* note 14, at 107-12.

81. ARIZ. REV. STAT. ANN. § 27-302(C) (1975-76). Until 1921 the penalty for operator violation of any provision of the mine safety statutes was more severe than it is today. Penalties included a fine of not less than $100 nor more than $500, a maxi-

for failure to correct an extremely dangerous condition.[82] Unfortunately, these penalties have proven ineffective. The maximum fine is so insignificant in relation to mine revenue that its incentive value is almost negligible. Also, though federal prompting has resulted in an increase in the number of state penalties levied in the past few years,[83] these penalties still are not imposed with sufficient frequency to affect inspection incentives.[84] Thus the present system of state sanctions falls far short of its intended purpose. Because inspection ceases when it is no longer economically beneficial, state penalties must be increased and more rigidly imposed in order to affect the frequency and scope of inspections.

It can be seen, therefore, that statutorily mandated inspections by the pit mine operator have not served to reduce the number of accidents in Arizona's pit mine industry.[85] Mandatory inspection regulations have not been drawn with sufficient specificity and comprehensiveness, and no advisory regulations have been promulgated to aid the pit mine operator in determining the nature of required inspections. Additionally, penalties for operator violations are neither severe enough nor stringently imposed. Only when these defects are cured will the operator be motivated to perform the kind of inspections which will effectively protect the pit miner from the hazards of his profession.

INSURANCE CARRIER INSPECTIONS

Because the cost of industrial accidents is high,[86] pit mine operators have sought to spread their cost throughout the industry.[87] This is

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mum prison sentence of one year, or both. Law of May 13, 1912, ch. 33, § 14, [1912] Ariz. Sess. Laws 1st Sess. 94 (repealed 1921).

82. ARIZ. REV. STAT. ANN. § 27-307(C) (Supp. Pamphlet 1973). Prior to an order of cessation, the mine inspector must notify the operator of hazards in need of correction and specify the necessary changes. *Id.* § 27-307(A). A reasonable time for correction must be allowed. *Id.* Cessation of operations may be ordered only after a reexamination resulting in a determination that the hazards have not been corrected. *Id.* § 27-307(C). Judicial review of the order is available. *See id.* § 27-307(D). The chief failing of cessation orders is that miners are left unprotected during the period between identification of a hazard and closure.

83. The following chart depicts the number of orders written by the Arizona state mine inspector requiring correction of violations or shutdowns of mines for dangerous conditions since the state plan became effective. Information was compiled from the *Annual Reports* of the state mine inspector for the years 1970-74.

	1970	1971	1972	1973	1974
Regulation violations	171	796	1,925	2,785	4,184
Shutdown orders	0	0	0	47	26

84. Despite an increase in penalties imposed, the accident rate in Arizona's pit mines has not substantially diminished. *See* The Arizona Republic, Feb. 16, 1975, § A, at 1, col. 2; The Arizona Daily Star, Nov. 10, 1975, § B, at 1, col. 5; discussion note 10 *supra*; note 144 *infra*.

85. *See* ARIZ. STATE MINE INSPECTOR, 57th-63d ANN. REPS. (1968-74). *See also* discussion note 144 *infra*.

86. *See generally* G. BOWEN & D. WHYTOCK, ECONOMICS OF SAFETY (1964).

87. In English v. Industrial Comm'n, 73 Ariz. 86, 89, 237 P.2d 815, 817 (1951),

accomplished within the workmen's compensation system by means of an insurance premium paid to an insurance carrier who accepts the risks of employee injuries for which the operator would be otherwise liable. Insurance carriers themselves, therefore, conduct pit mine safety inspections in an effort to reduce compensation payments and maximize profits.

The usual insurance contract for workmen's compensation coverage contains a clause reserving to the carrier the right to inspect the insured's premises.[88] Though the nature of the inspection may vary from policy to policy, there are three basic types of inspection conducted by insurance carriers. The first is conducted for the purpose of classifying the relative risk of the insured and collecting underwriting information in order to calculate the correct premium.[89] This inspection is minimal, usually consisting of a cursory determination of hazards which may adversely affect the premium rate.[90] If hazards are detected, a second inspection ensues.[91] This followup inspection consists of a check on the insured's correction of previously identified hazards.[92] After the second inspection the premium rate is fixed. The third type of inspection is the most important for purposes of safety control. This is the inspection and safety engineering service often advertised by insurance companies as a sales feature for attracting new business.[93] If the insurance carrier is able to effect a reduction of injuries through a program of safety inspections, liability on its policies may be reduced commensurately.[94] Thus insurance carriers conduct the third type of safety inspection, not from altruistic motives, but to maximize profits.[95]

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the court noted that the purpose of the Workmen's Compensation Act was "to protect the workman and to relieve society of the burden caused by industrial accidents. Industry is chargeable with and must bear the burden of the loss by injury and death to the human machine." *See* Vukovich v. Ossic, 50 Ariz. 194, 70 P.2d 324 (1937); Ocean Accident & Guar. Corp. v. Industrial Comm'n, 32 Ariz. 265, 257 P. 641 (1927).

88. A typical insurance inspection clause provides:

> Inspection and Audit. The Company and any rating authority having jurisdiction by law shall each be permitted to inspect the workplaces, machinery and equipment covered by this policy and to examine and audit the Insured's books, vouchers, contracts, documents and records of any and every kind at any reasonable time during the policy period and any extension thereof and within three years after termination of this policy, as far as they relate to the premium bases or the subject matter of this insurance.

Blan, *Safety Inspections—Safe or Unsafe?* 6 FORUM 232, 233 n.1 (1971).

89. *Id.* at 233.

90. *Id.*

91. *Id.*

92. *Id.*

93. *See* 16 J. APPLEMAN, INSURANCE PRACTICE § 8883, at 641 (1968). *See generally* 2 A. LARSON, *supra* note 47, § 72.90, at 226.48.

94. *See* 2 A. LARSON, *supra* note 47, § 72.90, at 226.48; Blan, *supra* note 88, at 233-34.

95. In Brown v. Travelers Ins. Co., 434 Pa. 507, 515, 254 A.2d 27, 30 (1969), the court stated: "Admittedly, these [inspection] programs are not motivated by an altruistic feeling toward workers, since it is to the financial advantage of the insurance carrier

Though the frequency and extent of the third inspection varies with the insurer and the contract, such an inspection is often periodic, with attention paid to dangerous defects in machinery.[96] In other words, the carrier often conducts the same type of inspection which the employer would have performed to avoid liability for negligence.[97] Additionally, the insurance inspector's report of suggestions for eliminating specific defects is often sent to the employer after the inspection has been completed.[98]

Carrier inspections may be of some benefit to the mining industry. From a safety standpoint, they supplement the inspections conducted by the employer and governmental agencies. Such inspections, however, if conducted negligently, can actually work to the detriment of the pit miner who has reduced his vigilance in reliance on their adequacy. In an attempt to provide incentives for proper carrier inspection and to compensate more adequately an injured employee, courts in some jurisdictions permit employees to maintain an action against a carrier that has inspected negligently.[99] These courts note that while an insurance carrier has no affirmative duty to conduct safety inspections,[100] once a carrier undertakes such action it has a duty to conduct the inspection in a reasonable manner.[101] A breach of this duty subjects the carrier to liability for employee injuries.[102] Considerations of public policy or

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to reduce accidents and safety programs reduce accidents." *See* Gerace v. Liberty Mut. Ins. Co., 264 F. Supp. 95, 97 (D.D.C. 1966); Blan, *supra* note 88, at 234.

96. *See* Nelson v. Union Wire Rope Corp., 31 Ill. 2d 69, 83, 199 N.E.2d 769, 777 (1964).

97. Bartolotta v. Liberty Mut. Ins. Co., 411 F.2d 115, 119 (2d Cir. 1969).

98. *See* Clark v. Employees Mut., 297 F. Supp. 286, 289 (E.D. Pa. 1969); Viducich v. Greater New York Mut. Ins. Co., 80 N.J. Super. 15, 18, 192 A.2d 596, 598 (App. Div. 1963); Blan, *supra* note 88, at 233.

99. *See, e.g.*, Nelson v. Union Wire Rope Corp., 31 Ill. 2d 69, 199 N.E.2d 769 (1964); Fabricius v. Montgomery Elevator Co., 254 Iowa 1319, 121 N.W.2d 361 (1963); Smith v. American Employers' Ins. Co., 102 N.H. 530, 163 A.2d 564 (1960).

100. *See* Mann v. Highland Ins. Co., 461 F.2d 541 (5th Cir. 1972); Ruddy v. United States Fidelity & Guar. Co., 288 F. Supp. 315, 318 (M.D. Pa. 1968). Since carriers do not have an affirmative duty to inspect, no action will lie if the carrier does not conduct a safety inspection. *See, e.g.*, Horne v. Security Mut. Cas. Co., 265 F. Supp. 379, 385 (E.D. Ark. 1967); Thompson v. National Press Corp., 264 F. Supp. 668 (D.D.C. 1966); Steele v. Eaton, 130 Vt. 1, 3-4, 285 A.2d 749, 751 (1971).

101. *See, e.g.*, Nelson v. Union Wire Rope Corp., 31 Ill. 2d 69, 83, 199 N.E.2d 769, 778 (1964); Ray v. Transamerica Ins. Co., 10 Mich. App. 55, 58, 158 N.W.2d 786, 787 (1968); Corson v. Liberty Mut. Ins. Co., 110 N.H. 210, 265 A.2d 315 (1970). Liability for negligence while performing a gratuitous service is imposed under the Good Samaritan doctrine: "[O]ne who assumes to act, even though gratuitously, may thereby become subject to the duty of acting carefully, if he acts at all." Glanzer v. Shepard, 233 N.Y. 236, 239, 135 N.E. 275, 276 (1922); *see* RESTATEMENT (SECOND) OF TORTS §§ 323, 324A (1965). Arizona recognizes the Good Samaritan doctrine. Owl Drug Co. v. Crandall, 52 Ariz. 322, 80 P.2d 952 (1938).

102. *See, e.g.*, Ruth v. Bituminous Cas. Corp., 427 F.2d 290 (6th Cir. 1970); Mays v. Liberty Mut. Ins. Co., 323 F.2d 174 (3d Cir. 1963); Corson v. Liberty Mut. Ins. Co., 110 N.H. 210, 265 A.2d 315 (1970). The action against the carrier lies in tort rather than contract. No court has ever utilized a contract theory to provide recovery for an injured employee. A contention that the action was contractual was expressly rejected in Bacican v. American Mut. Liab. Ins. Co., 29 F.R.D. 133, 135 (E.D. Pa. 1961). The

interpretation of state workmen's compensation statutes, however, have led other courts to immunize carriers from liability for negligent inspection.[103] In Arizona the issue of carrier liability in this situation remains unresolved. Thus it is necessary to explore policy considerations and the Arizona Workmen's Compensation Act to determine if carrier liability for negligent inspection should be imposed.

Policy Considerations Regarding Carrier Liability

Many courts which have held a negligently inspecting carrier immune from liability have rested their decisions on grounds of public policy.[104] These courts reason that if a carrier is held liable, it will discontinue the valuable service of safety inspection.[105] Central to this reasoning is a balancing of the relative benefits of at least some type of inspection against the detriment of a total absence of carrier inspection.[106] The courts conclude that if a carrier is liable for negligent inspections and chooses to eliminate the risk of liability by not inspecting, an overall drop in employee safety would result.[107] Thus, in *Nelson v. Union Wire Rope Corp.*,[108] a dissenting member of the court stated:

> [N]o insurer will hereafter dare offer to perform, or perform, limited inspection services for fear of incurring liability. Undoubtedly such services, though limited, have contributed to the safety of workers and prevented economic loss. Sound policy would seem to dictate that the kind of service rendered by this insurer should be encouraged rather than discouraged.[109]

This argument has been countered in two ways. First, a carrier may find it more profitable to inspect thoroughly than not at all. Although statistical evidence proving or disproving this point is not

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court held that the action sounded in tort because a contract action would require a showing of privity between the employee and the insurance carrier.

103. *See, e.g.*, Bartolotta v. Liberty Mut. Ins. Co., 411 F.2d 115 (2d Cir. 1969); State Compensation Ins. Fund v. Superior Court, 237 Cal. App. 2d 416, 424-25, 46 Cal. Rptr. 891, 896-97 (Dist. Ct. App. 1965); Kerner v. Employers Mut. Liab. Ins. Co., 35 Wis. 2d 391, 151 N.W.2d 72 (1967).

104. *See, e.g.*, Modjeski v. Atwell, Vogel & Sterling, Inc., 309 F. Supp. 119 (D. Minn. 1969); Gerace v. Liberty Mut. Ins. Co., 264 F. Supp. 95, 97 (D.D.C. 1966); Brown v. Travelers Ins. Co., 434 Pa. 507, 514-15, 254 A.2d 27, 30 (1969).

105. *See, e.g.*, Kotarski v. Aetna Cas. & Sur. Co., 244 F. Supp. 547, 558-59 (D. Mich. 1965), *aff'd*, 372 F.2d 95 (6th Cir. 1967); Matthews v. Liberty Mut. Ins. Co., 354 Mass. 470, 473, 238 N.E.2d 348, 350 (1968); Brown v. Travelers Ins. Co., 434 Pa. 507, 515, 254 A.2d 27, 30 (1969).

106. *See* cases cited note 105 *supra*.

107. *See, e.g.*, Kotarski v. Aetna Cas. & Sur. Co., 244 F. Supp. 547, 558-59 (E.D. Mich. 1965), *aff'd*, 372 F.2d 95 (6th Cir. 1967); Matthews v. Liberty Mut. Ins. Co., 354 Mass. 470, 473, 238 N.E.2d 348, 350 (1968); Brown v. Travelers Ins. Co., 434 Pa. 507, 514, 254 A.2d 27, 29 (1969).

108. 31 Ill. 2d 69, 199 N.E.2d 769 (1964).

109. *Id.* at 121, 199 N.E.2d at 797. (House, J., dissenting.)

readily available, some courts seem disposed to accept it.[110] As the number of accidents is reduced, the carrier's liability on its policies decreases. Thus the expenditure of additional funds for the purpose of conducting thorough inspections should reap larger profits in the long run,[111] and the fear that insurance carriers will discontinue inspections is probably exaggerated. Safety inspections are too important a part of the carrier's profit picture to be totally abandoned. At most, a carrier might pass on to its insured the added expense of performing more thorough inspections or paying civil damages to injured employees.

Second, even if imposition of liability will reduce carrier inspections, no inspection may be preferable to negligent inspection.[112] In situations where the carrier has not adequately funded its inspection program or has employed undertrained safety engineers, miners who rely[113] on the carrier's inspection will be less vigilant, thereby exposing themselves to an increased risk of harm.[114] Since some inspections must be conducted by the operator and governmental agencies, irrespective of any carrier inspections,[115] the absence of a carrier inspection would not be as detrimental to miner safety as a negligent one.

Despite the policy argument in favor of carrier immunity, there are positive advantages to affording an injured employee the opportunity to sue an insurance carrier that has inspected negligently. The availability of such a third party action in lieu of compensation benefits would afford more adequate recovery to the employee who has been foreclosed

110. *See* Bryant v. Old Republic Ins. Co., 431 F.2d 1385, 1388 (6th Cir. 1970); Fabricius v. Montgomery Elevator Co., 254 Iowa 1319, 1327, 121 N.W.2d 361, 366 (1963). In Mays v. Liberty Mut. Ins. Co., 323 F.2d 174, 178 (3d Cir. 1963) the court noted: "It is obvious that the cost of workmen's compensation becomes less and less expensive as more and better safety methods are devised and put into operation. . . . [A] policy of inspection has practical advantages for the insurer, as well as for the employer and his workmen."

111. *See* Harrison, *supra* note 15, at 195-97.

112. *See* Fabricius v. Montgomery Elevator Co., 254 Iowa 1319, 1327, 121 N.W.2d 361, 366 (1963).

113. For discussion of employee reliance in relation to carrier liability, see note 143 *infra*.

114. Justice Cardozo's remarks in Marks v. Nambil Realty Co., 245 N.Y. 256, 157 N.E. 129 (1927), a case involving negligent repair by a landlord, are prophetic and applicable to the case of an employee injured by a carrier's negligent inspection. "His case is made out when it appears that by reason of such negligence what was wrong is still wrong, though prudence would have made it right . . . . The inference is permissible that the [defendant's conduct] cloaked the defect, dulled the call to vigilance, and so aggravated the danger." *Id.* at 259, 157 N.E. at 130; *accord,* Corson v. Liberty Mut. Ins. Co., 110 N.H. 120, 256 A.2d 315 (1970).

115. *See* Evans v. Liberty Mut. Ins. Co., 398 F.2d 665, 667 (3d Cir. 1968). The employer's duty to provide a safe place to work is nondelegable in the sense that the employer may not escape liability by permitting the carrier to inspect in its stead. *See* Ray v. Transamerica Ins. Co., 10 Mich. App. 55, 64, 158 N.W.2d 786, 790 (1968). If the carrier does not inspect completely, the employer may still be held liable. *Cf.* Morrell v. City of Phoenix, 16 Ariz. 511, 147 P. 732 (1915). The Arizona state mine inspector is also charged with the duty to inspect and will do so regardless of the existence of carrier inspections. For discussion of inspections by the state mine inspector, see text & notes 145-60 *infra*.

from an action against his employer by electing compensation.[116] Also, imposition of carrier liability may have the salutary effect of motivating the insurance industry to conduct more thorough inspections. In the long run, it will be less expensive for the carrier to inspect with an eye to avoiding negligence than to pay high damages to injured employees.[117] Holding carriers accountable for their negligence would help incorporate the goal of employee safety into the Arizona workmen's compensation system and might protect miners from injury due to negligent carrier inspections. Accordingly, Arizona should recognize liability for carrier negligence.

Carrier Immunity Under the Arizona Workmen's Compensation Act

In addition to considerations of public policy, some courts have immunized carriers from liability for negligent inspection based on construction of their states' workmen's compensation acts.[118] The Arizona act neither expressly permits nor precludes carrier liability. Hence it is necessary to examine pertinent portions of the Arizona act and the construed acts of other states in order to determine whether an Arizona carrier is subject to liability for negligent inspection on this basis.

Often an employee is injured by the negligent acts of a person other than the employer. In order to cover these situations, most compensation acts,[119] including Arizona's,[120] contain a third party tortfeasor provision which permits the employee to maintain an action against such "other person" in lieu of collecting compensation benefits. Under some workmen's compensation acts, however, the term "employer" is defined to include the workmen's compensation carrier and vice versa.[121] Thus, in these states the carrier is not considered "some person other than the employer" for purposes of third party actions, and the employee's remedy against a negligent carrier is, like the remedy against the employer, limited to compensation.[122]

116. *See* ARIZ. CONST. art. 18, § 8; ARIZ. REV. STAT. ANN. § 23-906 (Supp. 1975-76); *see generally* discussion notes 39, 43 *supra*.

117. The ultimate recovery by 18 plaintiffs in Nelson v. Union Wire Rope Corp., 31 Ill. 2d 69, 199 N.E.2d 769 (1964), for instance, was over $1½ million. *See* Mahoney, *A Closer Look at Nelson v. Union Wire Rope*, 34 INS. COUNSEL J. 255 (1967).

118. *See, e.g.*, Bartolotta v. Liberty Mut. Ins. Co., 411 F.2d 115 (2d Cir. 1969); Williams v. United States Fidelity & Guar. Co., 358 F.2d 799 (4th Cir. 1966); Kerner v. Employers Mut. Liab. Ins. Co., 35 Wis. 2d 391, 151 N.W.2d 72 (1967).

119. *E.g.*, DEL. CODE ANN. tit. 19, § 2363 (1974); FLA. STAT. ANN. § 440.39 (Supp. 1975-76); OKLA. STAT. ANN. tit. 85, § 44 (Supp. 1975-76).

120. ARIZ. REV. STAT. ANN. § 23-1023 (Supp. 1975-76).

121. *See, e.g.*, ALA. CODE tit. 26, § 262(d) (Cum. Supp. 1973); DEL. CODE ANN. tit. 19, § 2301(a) (Supp. 1974); GA. CODE ANN. § 114-101 (Cum. Supp. 1975).

122. *See* Williams v. United Fidelity & Guar. Co., 358 F.2d 799 (4th Cir. 1966); Burns v. State Compensation Ins. Fund, 265 Cal. App. 2d 98, 71 Cal. Rptr. 326 (Ct.

The Arizona statute, however, does not expressly equate employer and carrier in its definitional sections,[123] and is therefore not subject to this interpretation. In other jurisdictions where workmen's compensation laws fail to equate explicitly the employer and carrier, some courts have interpreted the act as a whole to infer such a result.[124] By virtue of this construction, the employer and carrier are considered one and the same for purposes of liability.[125] Two interrelated lines of reasoning have been employed by courts reaching this conclusion. The first hinges on the concept of an integrated unit whose members are immune from employee suit; immunity is afforded because the carrier is a member of the workmen's compensation family[126] or of the employer's business unit.[127] The touchstone of this argument appears to be that the carrier has assumed the employer's burden of making compensation payments and therefore ought to receive the employer's benefit of immunity as well.[128] Arizona law does not preclude application of this rationale. However, Arizona's recognition that the Workmen's Compensation Act does not immunize a negligent employee from liability to a coemployee seems to negative the business unit approach.[129]

App. 1968). *But see* Beasley v. MacDonald Eng'r Co., 287 Ala. 189, 249 So. 2d 844 (1971) (finding that even though the definition of employer included the carrier, such inclusion did not extend to the exclusive remedy provision of the act, and therefore, the carrier was not immune from an employee suit).

123. There is no definition of "employer" in the Arizona statute. *See* ARIZ. REV. STAT. ANN. § 23-901 (Supp. 1975-76).

124. *See, e.g.*, Bartolotta v. Liberty Mut. Ins. Co., 411 F.2d 115 (2d Cir. 1969); Mustapha v. Liberty Mut. Ins. Co., 268 F. Supp. 890 (D.R.I.), *aff'd*, 387 F.2d 631 (1st Cir. 1967); Barrette v. Travelers Ins. Co., 28 Conn. Supp. 1, 246 A.2d 102 (Super. Ct. 1968).

125. *See, e.g.*, Bartolotta v. Liberty Mut. Ins. Co., 411 F.2d 115 (2d Cir. 1969); Barrette v. Travelers Ins. Co., 28 Conn. Supp. 1, 246 A.2d 102 (Super. Ct. 1968); Flood v. Merchants Mut. Ins. Co., 230 Md. 373, 187 A.2d 320 (1963). This conclusion is expressed in a variety of ways: that the carrier is deemed to stand in the shoes of the employer, Horne v. Security Mut. Cas. Co., 265 F. Supp. 379, 383 (E.D. Ark. 1967); that there is a blending of jural personalities, Barrette v. Travelers Ins. Co., *supra* at 5, 246 A.2d at 105; or that the carrier is the employer's legal representative. Mull v. Aetna Cas. & Sur. Co., 120 Ga. App. 791, 791, 172 S.E.2d 147, 148 (1969).

126. *See, e.g.*, Modjeski v. Atwell, Vogel & Sterling, Inc., 309 F. Supp. 119 (D. Minn. 1969); Mustapha v. Liberty Mut. Ins. Co., 268 F. Supp. 890 (D.R.I.), *aff'd*, 387 F.2d 631 (1st Cir. 1967); West v. Atlas Chem. Indus., Inc., 264 F. Supp. 697 (E.D. Mo. 1966); Kotarski v. Aetna Cas. & Sur. Co., 244 F. Supp. 547 (D. Mich. 1965), *aff'd*, 372 F.2d 95 (6th Cir. 1967).

127. *See* Williams v. United States Fidelity & Guar. Co., 358 F.2d 799 (4th Cir. 1966); *cf.* Bryant v. Old Republic Ins. Co., 431 F.2d 1385 (6th Cir. 1970).

128. *See* Bartolotta v. Liberty Mut. Ins. Co., 411 F.2d 115, 119 (2d Cir. 1969); Donahue v. Maryland Cas. Co., 248 F. Supp. 588, 591-92 (D. Md. 1965), *aff'd per curiam*, 363 F.2d 442 (4th Cir. 1966). This argument ignores the fact that a carrier inspects for its own pecuniary advantage. *See* discussion note 95 *supra*. Thus, to provide the carrier with immunity in addition to its regular premium payments is tantamount to providing the carrier with a double benefit. *See generally* 2 A. LARSON, *supra* note 47, § 72.90, at 226.53-.57.

129. In Williams v. United States Fidelity & Guar. Co., 358 F.2d 799, 802 (4th Cir. 1966), the court held that the insurance carrier was immune from third party tort liability because it was part of the industrial family. It distinguished those cases where the carrier was held liable on the grounds that the workmen's compensation statutes in those states permit an action for injuries against a coworker. Hence, in those states there was

A second line of reasoning depends on the subrogation provision found in most workmen's compensation acts,[130] including Arizona's.[131] This subrogation provision generally allows an employee who has instituted a private action against a third party tortfeasor to collect compensation benefits during the pendency of the suit; however, in order to prevent double recovery, the insurance carrier has an enforceable lien on any ultimate recovery by the employee equal to the amount of compensation benefits paid.[132] Courts have noted that because of the operation of subrogation provisions, a carrier held liable as a third party tortfeasor would be subrogated to recovery against itself.[133] This result is considered so incongruous that a third party action against the carrier is deemed not to have been within the contemplation of the legislature.[134]

Arguably, existence of the subrogation provision in Arizona law would make this rationale applicable. Other courts, however, have imposed carrier liability despite subrogation provisions on the theory that a carrier-third party tortfeasor is permitted to set off from an employee's recovery against it an amount equal to compensation already paid.[135] Since in Arizona there is no prohibition disallowing a setoff to prevent double recovery if the carrier is sued, carrier liability would not be foreclosed because of the Arizona subrogation provision. Thus it is not clear in Arizona whether the carrier would be deemed implicitly aligned with the employer by virtue of the subrogation provision.

Arizona's compensation act does contain a provision that compensation shall be the exclusive remedy against the employer.[136] While some courts have limited an injured employee's recovery against a carrier merely on this basis,[137] a number of other courts have permitted

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no industrial family which would serve to immunize the carrier. In Arizona, an injured employee may pursue a common law remedy against a negligent coworker even though the injury is compensable under the Workmen's Compensation Act. Kilpatrick v. Superior Court, 105 Ariz. 413, 466 P.2d 18 (1970). Thus it appears that in Arizona the carrier may not seek immunity under the business unit or industrial family rationale.

130. *See, e.g.*, KY. REV. STAT. ANN. § 342.700(1) (Cum. Supp. 1974); MINN. STAT. ANN. §§ 176.061(5)-(6) (Supp. 1975-76); MO. ANN. STAT. § 287.150 (Vernon 1965).

131. ARIZ. REV. STAT. ANN. § 23-1023(C) (Supp. 1975-76).

132. *See* statutes cited notes 130-31 *supra*.

133. *See, e.g.*, Mustapha v. Liberty Mut. Ins. Co., 268 F. Supp. 890, 893 (D.R.I.), *aff'd*, 387 F.2d 631 (1st Cir. 1967); Barrette v. Travelers Ins. Co., 28 Conn. Supp. 1, 6, 246 A.2d 102, 105 (Super. Ct. 1968); Flood v. Merchants Mut. Ins. Co., 230 Md. 373, 378, 187 A.2d 320, 323 (1963).

134. *See* cases cited note 133 *supra*.

135. *See, e.g.*, Nelson v. Union Wire Rope Corp., 31 Ill. 2d 69, 101-02, 199 N.E.2d 769, 787 (1964); Fabricius v. Montgomery Elevator Co., 254 Iowa 1319, 1325-26, 121 N.W.2d 361, 365 (1963); Smith v. American Employers' Ins. Co., 102 N.H. 530, 534, 163 A.2d 564, 567 (1960).

136. *See* ARIZ. REV. STAT. ANN. § 23-1022 (Supp. 1975-76).

137. *See, e.g.*, Mustapha v. Liberty Mut. Ins. Co., 268 F. Supp. 890, 893 (D.R.I.), *aff'd*, 387 F.2d 631 (1st Cir. 1967); Barrette v. Travelers Ins. Co., 28 Conn. Supp. 1, 3, 246 A.2d 102, 104 (Super. Ct. 1968); Flood v. Merchants Mut. Ins. Co., 230 Md. 373, 378, 187 A.2d 320, 323 (1963).

an employee to maintain a private action for damages against a negligently inspecting carrier.[138] These courts simply have reasoned that in the absence of any clear expression of legislative intent, the exclusive remedy provision will not be read to immunize the carrier,[139] and the third party tortfeasor provision will be read to include the carrier as a "person" amenable to suit.[140] These arguments, however, leave open the question of explicit or implicit alignment and thus are not dispositive of the issue of carrier liability.

In general, workmen's compensation acts similar to Arizona's have been found susceptible to constructions permitting and precluding carrier liability.[141] Since the Arizona act neither expressly compels nor prohibits carrier immunity, strained attempts at statutory construction will not resolve the issue. Rather the argument seems to reduce itself to one of policy considerations.[142] In light of the policy reasons here advanced for holding a negligently inspecting carrier liable to suit, Arizona courts should resolve doubts in favor of an employee who is injured by reason of carrier negligence and should allow recovery from the carrier.[143]

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138. *See, e.g.*, Stacy v. Aetna Cas. & Sur. Co., 334 F. Supp. 1216 (D. Miss. 1971); Ray v. Transamerica Ins. Co., 10 Mich. App. 55, 158 N.W.2d 786 (1968); Smith v. American Employers' Ins. Co., 102 N.H. 530, 163 A.2d 564 (1960).

139. *See* Bryant v. Old Republic Ins. Co., 431 F.2d 1385, 1388 (6th Cir. 1970); Mays v. Liberty Mut. Ins. Co., 323 F.2d 174, 176-77 (3d Cir. 1963); Stacy v. Aetna Cas. & Sur. Co., 334 F. Supp. 1216, 1221 (D. Miss. 1971).

140. *See* Banner v. Travelers Ins. Co., 31 Mich. App. 608, 610, 188 N.W.2d 51, 52 (1971); Ray v. Transamerica Ins. Co., 10 Mich. App. 55, 59, 158 N.W.2d 786, 787 (1968); Smith v. American Employers' Ins. Co., 102 N.H. 530, 532-33, 163 A.2d 564, 566 (1960).

141. Some acts similar to Arizona's have been construed to provide for carrier immunity. *See, e.g.*, Williams v. United States Fidelity & Guar. Co., 358 F.2d 799 (4th Cir. 1966); Modjeski v. Atwell, Vogel & Sterling, Inc., 309 F. Supp. 119 (D. Minn. 1969); West v. Atlas Chem. Indus., Inc., 264 F. Supp. 697 (D. Mo. 1966). Other statutes, however, have been construed as providing no carrier immunity. *See* Mays v. Liberty Mut. Ins. Co., 323 F.2d 174 (3d Cir. 1963); Smith v. American Employers' Ins. Co., 102 N.H. 530, 163 A.2d 564 (1960).

142. *See* Kotarski v. Aetna Cas. & Sur. Co., 244 F. Supp. 547 (E.D. Mich. 1965), *aff'd*, 372 F.2d 95 (6th Cir. 1967); Matthews v. Liberty Mut. Ins. Co., 354 Mass. 470, 238 N.E.2d 348 (1968).

143. Even if it is established that a carrier may be held liable for conducting a negligent inspection, an employee must still overcome many barriers to demonstrate that the facts of his case warrant the imposition of liability. One obstacle which may defeat employee recovery is establishing breach of duty by the carrier. Whether a carrier has breached its duty of careful inspection because it has failed to detect a defect is a question which might be difficult to resolve in favor of the employee. In light of the contractual nature of the carrier's duty to inspect, the degree and nature of inspection required by the agreement may preclude a finding of liability for failure to detect certain defects. Additionally, the highly complex nature of mining equipment may decrease the probability that defects would have been discovered by a reasonable inspection.

Proximate causation may also defeat employee recovery. *See* Ruddy v. United States Fidelity & Guar. Co., 288 F. Supp. 315 (M.D. Pa. 1968) (employer's failure to inspect was an intervening cause relieving the carrier of liability). Additionally, some courts require proof that the employee relied on the carrier's inspection or that the inspection increased the employee's risk of harm. *See* Evans v. Liberty Mut. Ins. Co., 398 F.2d 665, 667 (3d Cir. 1968); Clark v. Employers Mut., 297 F. Supp. 286, 289

Carrier inspections can be a valuable contribution to safety in Arizona's pit mines through filling the gaps left by employer and governmental inspections. When conducted negligently, however, they can be the source of considerable harm to miners. Hence a negligent carrier should not be permitted to hide behind the employer's immunity. The imposition of liability, at the very least, would give the miner an opportunity to bring an action at law and perhaps receive fuller recovery for his injuries. Since insurance carriers are strongly entrenched in the workmen's compensation system, including precautionary inspections, it is unlikely that any would be frightened away by the prospects of potential liability. Moreover, carrier liability may also motivate the carrier to conduct its inspections with more circumspection. The latter result would depend on whether or not the insurer determines that the inspections it is already conducting to minimize compensation payments are also adequate to protect optimally against liability due to negligence.

INSPECTIONS BY GOVERNMENT AGENCIES

Even though safety inspections are conducted by the employer and insurance carrier, the frequency and severity of injuries in the pit mining industry have not declined.[144] Consequently, both federal and state governments have assumed some of the responsibility for pit mine inspections.

(E.D. Pa. 1969). Although these two theories are interrelated, *compare* RESTATEMENT (SECOND) OF TORTS § 342A, comment *e* at 144 (1965), *with* Corson v. Liberty Mut. Ins. Co., 110 N.H. 210, 213-14, 265 A.2d 315, 318-19 (1970), one court has dealt with reliance and increased risk as alternative theories of causation. *See* American Mut. Liab. Ins. Co. v. St. Paul Fire & Marine Ins. Co., 48 Wis. 2d 305, 179 N.W.2d 864 (1970).

Several courts have drawn a distinction between situations where the carrier has conducted only a partial, risk-classifying inspection and situations where the carrier has conducted periodic and extensive inspections. Courts have determined that partial inspections, as a matter of law, cannot be relied on and do not increase the risk of harm. *See, e.g.*, Evans v. Liberty Mut. Ins. Co., 398 F.2d 665 (3d Cir. 1968); Ulwelling v. Crown Coach Corp., 206 Cal. App. 2d 96, 23 Cal. Rptr. 631 (Dist. Ct. App. 1962); Viducich v. Greater New York Mut. Ins. Co., 80 N.J. Super. 15, 192 A.2d 596 (App. Div. 1963). On the other hand, where the carrier's inspection has been extensive, reliance or increased risk has been found, and liability has been imposed upon the carrier. *See* Nelson v. Union Wire Rope Corp., 31 Ill. 2d 69, 199 N.E.2d 769 (1964). This distinction is justified since it would place an unreasonable burden on the carrier if it were subject to liability for an activity which must be conducted in order for insurance coverage to be offered.

144. In 1970, the first effective year of the FMNMSA, the accident rate per million man hours in the entire mining industry was 27.34. BUREAU OF MINES, U.S. DEPT. OF THE INTERIOR, INJURY EXPERIENCE AND WORKTIME IN THE SOLID MINERAL MINING INDUSTRIES, 1969-70. During the first three quarters of 1974, this rate had dropped to 20.93. Letter from Thomas C. Lukins, District Manager, MESA, to Verne C. McCutchan, Arizona State Mine Inspector, Sept. 30, 1974, on file in the *Arizona Law Review* offices. At 30.89, the Arizona rate during this time was one of the worst in the nation. *Id.*

State Inspections

State inspections in Arizona are conducted under the auspices of the Office of the State Mine Inspector[145] which maintains jurisdiction over activities relating to the extraction and milling of rough ores.[146] The Office consists of an elected state mine inspector[147] and seven appointed deputies.[148] Although other state agencies are concerned with various phases of the mining industry,[149] only the state inspector and his deputies are charged with responsibility for conducting safety inspections. State law requires inspections of pit mines with six or more employees to be conducted at least once per year.[150] During these inspections, state inspectors must examine mine operation and conditions, safety appliances, machinery, sanitation, ventilation, means of ingress and egress, and precautions taken to protect the lives and safety of miners.[151] Inspectors also must conduct an investigation following any mine fatality[152] or upon employee submission of a written complaint alleging dangerous conditions at the mine.[153] After concluding these various inspections and investigations, notification of defects and identification of possible hazards is sent to the operator.[154] If the operator

145. *See* ARIZ. REV. STAT. ANN. §§ 27-121 to -128 (Supp. Pamphlet 1973).

146. Initially, the Office of the State Mine Inspector had no jurisdiction over mills and smelters. Opinion No. 61-48, 1961 OP. ARIZ. ATT'Y GEN. 79. Recent amendments to the mine safety laws, however, include mills and smelters within the meaning of an "operation" which is subject to the control of the inspector. *See* ARIZ. REV. STAT. ANN. §§ 27-301(9), -302 (Supp. Pamphlet 1973); ARIZ. STATE MINE INSPECTOR, 62D ANN. REP. 4 (1973) (stating: "The State Mine Inspector's Office is responsible for the health and safety of all employees in the mines, smelters, quarries, mills, and sand and gravel operations within the State of Arizona . . . ."). The inclusion of smelters within the state mine inspector's jurisdiction has resulted in inspections overlapping those conducted by the federal Occupational Safety and Health Administration [OSHA]. At least one company has protested the inspection pursuant to the FMNMSA and has suggested a court action be initiated to determine which agency's inspection is to take precedence. The state mine inspector, in turn, has suggested that his authority to inspect smelters will be upheld on the theory that he is an agent of OSHA for this limited purpose. *See* Arizona Daily Star, May 7, 1976, § A, at 6, col. 6.

147. *See* ARIZ. CONST. art. 19. The qualifications of the state inspector include, among others, being "practically engaged in, and acquainted with mines and mining in this state, and . . . at least seven years' experience in underground mining." ARIZ. REV. STAT. ANN. § 27-121(A) (Supp. Pamphlet 1973).

148. *See* ARIZ. STATE MINE INSPECTOR, 63D ANN. REP. 49-50 (1974). Although at present there are only seven deputy mine inspectors, state law provides for as many as are needed to discharge the duties of the Office of the State Mine Inspector. ARIZ. REV. STAT. ANN. § 27-122 (Supp. Pamphlet 1973).

149. Other Arizona agencies interested in various phases of the mining industry are the Department of Mineral Resources, *see* ARIZ. REV. STAT. ANN. §§ 27-102 to -111 (1956), *as amended*, (Supp. Pamphlet 1973), the Arizona Bureau of Mines, *id.* §§ 27-151 to -155, and the Copper Tariff Board. ARIZ. REV. STAT. ANN. §§ 27-171 to -172 (Supp. Pamphlet 1973).

150. ARIZ. REV. STAT. ANN. § 27-124(A) (Supp. Pamphlet 1973).

151. *Id.*

152. *See id.* § 27-309. The state mine inspector investigates fatalities in order to improve mine safety precautions. *See* Opinion No. 57-115, 1957 OP. ARIZ. ATT'Y GEN. 114, 115.

153. *See* ARIZ. REV. STAT. ANN. § 27-308 (Supp. Pamphlet 1973).

154. *See id.* § 27-307(A).

fails to make required changes, he is subject to penalties provided by statute.[155]

In determining required changes, inspectors rely on standards and regulations contained in the Mining Code of the State of Arizona[156] and various provisions of the state mine safety law.[157] These are the same statutes and regulations which guide the operator's inspection program.[158] Thus, state inspectors engage primarily in a review of operators' existing safety programs in order to ensure that they meet state minimums.

While review of the operator's safety program is important, the Office of the State Mine Inspector should assume a more active role in initiating a total program of accident prevention, since it is constitutionally charged with responsibility for mine safety. Disseminating safety literature, conducting educational programs on mine safety, executing numerous spot inspections of pit mining operations, and sponsoring safety studies would all serve this end.[159] Nevertheless, to the extent they do exist, present inspections serve a beneficial purpose. Their chief value lies in the fact that they are conducted by parties who supposedly have no economic interest in mine operations.[160] State inspectors are free to insist that employee safety be accorded primary attention, whereas employer and carrier inspections are dominated by considerations of self-interest.

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155. *See id.* §§ 27-302, -307(C). For discussion of state penalties, see text & notes 81-84 *supra.*

156. "These rules are applicable to and will be enforced in all operations subject to the jurisdiction of the State Mine Inspector unless the terms of the rule or the heading of the section indicates that a rule or rules will apply only to certain types of operations." MINING CODE OF THE STATE OF ARIZONA rule 1:32 (rev. ed. 1972).

157. *Id.* rule 1:31.

158. For discussion of state statutes and regulations governing operator inspections, see text & notes 65-79 *supra.*

159. Since budgetary limitations make instituting many of these programs impossible, one step toward decreasing Arizona's pit mine injury rate would be to increase the state mine inspector's proposed fiscal year 1975-76 nonsalary budget of $178,100. *See* STATE OF ARIZONA, EXECUTIVE BUDGET 114 (1975-76).

The budgetary limitations contribute also to the problem of an overworked staff. In 1974, the Office of the State Mine Inspector, with a field staff of 15, *see* ARIZ. STATE MINE INSPECTOR, 63D ANN. REP. 49-50 (1974), inspected mines, smelters, mills, sand and gravel operations, and abandoned mines. They sampled dust, gas, and radon; attended inquests; and issued diesel permits. *Id.* at 48. In all, 234,071 miles were traveled. *Id.* With an increase in budget and staff, the state mine inspector may be able to place emphasis on initiating affirmative accident prevention programs rather than merely supervising operator inspections.

160. Arizona, until recently, had been unable to rid itself of conflict of interest within the Office of the State Mine Inspector. Prior to 1975, many deputy inspectors were on leave of absence from the very mines which they inspected in their official capacities. The current State Mine Inspector, Bert Romero, has taken steps to prevent future conflicts by forcing deputy inspectors to sever any employment relationships with Arizona mines and by reassigning them to areas where they will not be called upon to inspect their former employers. *See* The Arizona Daily Star, Feb. 22, 1975, at 1, col. 6.

Budgetary and manpower limitations may often diminish the effectiveness of state inspections; thus injuries occur which might otherwise be avoidable. Most of these injuries may be compensated only by workmen's compensation, and their causes can be remedied only by prospective legislative correction of inspection deficiencies. Where injury can be attributed to a state inspector's negligent failure to discover a defect, however, a third party tortfeasor action against the state under the doctrine of respondeat superior may be considered.

Historically, states and their political subdivisions were immune from torts committed by their agents in the performance of governmental duties.[161] Conversely, if the duty were proprietary, liability could be imposed.[162] In *Stone v. Arizona Highway Commission* Arizona repudiated the governmental-proprietary dichotomy and abrogated governmental tort immunity.[163]

Post-*Stone* cases make clear that the abrogation of governmental tort immunity in no way changed the elements of actionable negligence.[164] If the injured pit miner is to make good his claim, he must still prove duty, breach, and proximate causation.[165] In *Massengill v. Yuma County*,[166] the court established the rule for determining whether a breach of duty by a public official gives rise to a private action for damages. The court held that if the duty is owed to the general public, a public action is the only remedy available for breach.[167] If the duty is owed to an individual, however, a private action for damages is appropriate.[168] A private duty arises when the government, by its conduct,

161. *See* Larsen v. County of Yuma, 26 Ariz. 367, 225 P. 1115 (1924); State v. Sharp, 21 Ariz. 424, 189 P. 631 (1920). For a good discussion of the history of governmental tort immunity, see Stone v. Arizona Highway Comm'n, 93 Ariz. 384, 381 P.2d 107 (1963); Comment, *Governmental Immunity in Arizona—the Stone Case*, 6 ARIZ. L. REV. 102 (1964).

162. *See* Lee v. Dunklee, 84 Ariz. 260, 326 P.2d 117 (1958); Larsen v. County of Yuma, 26 Ariz. 367, 225 P. 1115 (1924). One underlying reason for finding nonliability in the various cases seems to be a concern that governmental entities would be unable to pay claims to the entire public for certain torts committed by them. Thus public policy prohibits extension of liability in many cases. *See* Dalehite v. United States, 346 U.S. 15 (1953).

163. 93 Ariz. 384, 381 P.2d 107 (1963).

164. *See, e.g.*, Massengill v. Yuma County, 104 Ariz. 518, 456 P.2d 376 (1969), *noted in* 12 ARIZ. L. REV. 229 (1970); Veach v. City of Phoenix, 102 Ariz. 195, 427 P.2d 335 (1967); Duran v. City of Tucson, 20 Ariz. App. 22, 509 P.2d 1059 (1973).

165. *See* Massengill v. Yuma County, 104 Ariz. 518, 521, 456 P.2d 376, 379 (1969).

166. 104 Ariz. 518, 456 P.2d 376 (1969).

167. *Id.* at 521, 456 P.2d at 379; *see* Leger v. Kelly, 142 Conn. 585, 589-90, 116 A.2d 429, 432 (1955) ("[I]f the duty which the official authority imposes upon an officer is a duty to the public, a failure to perform it, or an inadequate or erroneous performance, must be a public, not an individual injury, and must be redressed, if at all, in some form of public prosecution."). Although both *Massengill* and *Leger* allowed redress through public action, neither case indicated what type of public action would be appropriate. Termination of employment for dereliction of duty may be the only public remedy available in some situations. Other remedies include criminal prosecution and remedial legislative action.

168. *See* Massengill v. Yuma County, 104 Ariz. 518, 456 P.2d 376 (1969); Duran

narrows a public obligation into a special duty owed to a particular individual.[169]

A mine safety inspection would probably be deemed a public duty for two reasons. First, statutory requirements generally give rise to public duties.[170] Second, government services such as safety inspections traditionally have been considered public duties.[171] In *Duran v. City of Tucson*,[172] the plaintiff alleged that a fire in which he was injured was caused by the fire department's negligent inspection of an open flame heater. In holding that the city was not liable to the plaintiff, the court stated that fire inspections are a public duty because they arise "with the provision of a governmental service to protect the public generally from external hazards."[173] Mine inspections, like fire inspections, are directed toward the protection of an unknown number of persons from external hazards.

Despite the foregoing argument, the duty to conduct pit mine inspections may be deemed private rather than public where prompted by an employee complaint. In *Veach v. City of Phoenix*,[174] plaintiff's home was damaged by fire after the city had failed to respond to the plaintiff's request for a properly located fire hydrant. The supreme court held that the city could be held liable. The distinguishing factor in *Veach* appears to be that the governmental agency or official had

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v. City of Tucson, 20 Ariz. App. 22, 509 P.2d 1059 (1973). The *Massengill* court held that a person may have a private remedy when he can show that a duty was owed to him individually and that he has suffered a special injury as a result of its breach. 104 Ariz. at 521, 456 P.2d at 379. A special injury is one which is unique to the individual and not suffered by the public at large. *See* Massengill v. Yuma County, *supra*; Veach v. City of Phoenix, 102 Ariz. 195, 427 P.2d 335 (1967).

169. *See* Massengill v. Yuma County, 104 Ariz. 518, 523, 456 P.2d 376, 381 (1969). The *Massengill* court hinged this conclusion on the statement of Chief Judge Cardozo in H.R. Moch Co. v. Rensselaer Water Co., 247 N.Y. 160, 167, 159 N.E. 896, 898 (1928): "If conduct has gone forward to such a stage that inaction would commonly result, not negatively merely in withholding a benefit, but positively or actively in working an injury, there exists a relation out of which arises a duty to go forward."

170. *See* People v. Maryland Cas. Co., 132 F.2d 850 (7th Cir. 1942); Tillotson v. Fair, 160 Kan. 81, 85, 159 P.2d 471, 474 (1945).

171. A wealth of case law exists which indicates that, unless narrowed, safety inspections and similar duties are owed to the public. Such public duties include: building inspections, *see, e.g.*, Modlin v. Miami Beach, 201 So. 2d 70 (Fla. 1967); Hoffert v. Owatonna Inn Towne Motel, Inc., 293 Minn. 220, 199 N.W.2d 158 (1972); Valenti v. Mosholu Housing Corp., 164 Misc. 788, 299 N.Y.S. 590 (Bronx County Sup. Ct. 1937), fire inspections, *see* Duran v. City of Tucson, 20 Ariz. App. 22, 509 P.2d 1059 (1973); Rivera v. City of Amsterdam, 5 App. Div. 2d 637, 174 N.Y.S.2d 530 (1958), police protection, *see, e.g.*, Massengill v. Yuma County, 104 Ariz. 518, 456 P.2d 376 (1969); Tomlinson v. Pierce, 178 Cal. App. 2d 112, 2 Cal. Rptr. 700 (Dist. Ct. App. 1960); Rubinow v. County of San Bernardino, 169 Cal. App. 2d 67, 336 P.2d 968 (1959), and fire protection. *See* Steitz v. City of Beacon, 295 N.Y. 51, 64 N.E.2d 704 (1945); H.R. Moch Co. v. Rensselaer Water Co., 247 N.Y. 160, 159 N.E. 896 (1928).

172. 20 Ariz. App. 22, 509 P.2d 1059 (1973).

173. *Id.* at 25, 509 P.2d at 1062; *cf.* Riss v. City of New York, 22 N.Y.2d 579, 240 N.E.2d 860, 293 N.Y.S.2d 897 (1968).

174. 102 Ariz. 195, 427 P.2d 335 (1967).

direct contact with the plaintiff prior to the injury.[175] Arizona requires pit mine inspection by the state upon receipt of a written complaint from a mine employee.[176] Such a complaint may satisfy the *Veach* test of direct contact and narrow the duty to inspect to a private duty. Consequently, a subsequent injury to the complainant resulting from the hazard complained of may be actionable. This is, however, an extremely narrow duty since a complaint by a coworker or labor group apparently would not serve to narrow the duty to inspect to a private duty vis-à-vis an injured miner who did not personally complain.

While private damage actions against the state may be available in some circumstances, the goal of the law should be primarily to reduce injuries rather than to afford compensation for injuries already suffered. Damage actions will not, of themselves, motivate the state mine inspector to conduct more frequent and careful inspections. Rather, it is the legislature's duty to redesign the state inspection machinery so that conflict will be avoided and inspections will be conducted at a level more comprehensive than mere supervision of operator inspections. Of course, budgetary restrictions must be overcome in order to accomplish these goals.

Federal Inspections

Due to the rising toll of accidental injuries in metalliferous mining[177] and lax mine safety legislation prevalent in most states,[178] the Secretary of the Interior in the early 1960's conducted a study of the effectiveness of state mine safety regulations.[179] The Secretary's report, presented to Congress two years later,[180] led to the enactment of the FMNMSA.[181] This Act was a significant development because it subjected metalliferous pit mines to federal control for the first time. Control is exercised through the Mining Enforcement and Safety Administration [MESA],[182] a subdivision of the Department of the Interi-

175. *See id.* at 197, 427 P.2d at 337.
176. *See* ARIZ. REV. STAT. ANN. § 27-308 (Supp. Pamphlet 1973).
177. *See* charts note 12 *supra* for the years prior to 1960.
178. *See* U.S. CODE CONG. & AD. NEWS 2846, 2848-50 (1966). Prior to the enactment of the FMNMSA, at least one half of the states had no noncoal mine safety laws or had noncoal mine safety laws which were severely deficient. *Id.* at 2849.
179. *See* Act of Sept. 26, 1961, Pub. L. No. 87-300, § 2, 75 Stat. 649. Representatives of the Secretary of the Interior were authorized to enter mines for the purpose of studying the scope and effectiveness of state safety plans. *See generally* Pogson, *supra* note 11, at 226.
180. *See* Pogson, *supra* note 11, at 226. For a reproduction of portions of this report, see U.S. CODE CONG. & AD. NEWS 2847-50 (1966).
181. 30 U.S.C. §§ 721-740 (1970). This was not, however, the federal government's first action in the field of mine safety. See discussion note 3 *supra*.
182. *See* 30 U.S.C. § 724 (1970). In 1970, the Department of the Interior assigned 1,500 federal inspectors to posts throughout the United States. 1970 ANNUAL REPORT, *supra* note 6, at 13.

or which conducts FMNMSA inspections. The Senate report to Congress on the FMNMSA states that the objectives of this control are

> to reduce the high accident rate and improve health and safety conditions in mining and milling operations carried on in the metal and nonmetallic mineral industries. It establishes a Federal program of systematic inspection . . . of such operations which affect commerce and requires the development, promulgation, and enforcement of health and safety standards.[183]

Since it would be a difficult task for the federal government alone adequately to police the thousands of underground mines, pit mines, quarries, and sand and gravel operations subject to the jurisdiction of the Act,[184] Congress expressly disclaimed federal preemption of the field.[185] MESA therefore defers to state mine safety laws if the state's safety program has received federal approval.[186] Arizona's program was approved in 1970.[187] Consequently, pit mine operators in Arizona are not subject to federal regulations[188] or penalties.[189]

Despite this federal deference, MESA is authorized to conduct inspections in conjunction with the Arizona Office of the State Mine Inspector.[190] MESA, however, is merely permitted, not required, to inspect pit mines.[191] This approach places the burden of pit mine inspection upon states, such as Arizona, which are ill-equipped in terms

183. U.S. CODE CONG. & AD. NEWS 2846 (1966).
184. *See* 30 U.S.C. § 722 (1970).
185. *Id.* § 735.
186. *See id.* § 735(c)(1). The criteria for approval of a state plan are several. The state agency which enforces mine safety must have rules and standards which are as effective as the federal standards, qualified personnel, adequate funding, and adequate safety laws regarding abandoned mines, and must submit required reports to the Secretary of the Interior. *Id.* §§ 735(c)(2)-(6). *See* ARIZ. STATE MINE INSPECTOR, 62D ANN. REP. 4 (1973); Pogson, *supra* note 11, at 231-32.
187. On July 28, 1970, Arizona became the first state to have its state plan approved by the Secretary of the Interior. 1970 ANNUAL REPORT, *supra* note 6, at 3, 57.
188. For discussion of federal regulations, see note 74, text & note 77 *supra.*
189. A system of penalties was enacted under the FMNMSA. Since federal statutes and regulations have been displaced in Arizona by a federally approved state plan, the federal government has retained only limited authority to levy penalties. Further, federal inspectors in Arizona only have authority to close a mine if there is imminent danger to miners. *See* 30 U.S.C. § 727 (1970). Penalties for violation of mandatory regulations, not assessable in Arizona, include fines ranging from $100 to $3,000, imprisonment not exceeding 60 days, or both. *Id.* § 733(b).
190. *See id.* §§ 723-724.
191. *See id.* § 723. In contrast, the FMNMSA mandates federal inspection of underground mines at least once per calendar year. *Id.* Legislative history indicates that the difference is based upon the belief that open pit mines are less hazardous than underground mines. *See* U.S. CODE CONG. & AD. NEWS 2852 (1966). This view gives insufficient weight to the extreme dangers inherent in pit mines. *See* text & notes 7-12 *supra.*
When MESA does inspect pit mines, one of three classes of inspections is made: (1) regular inspection of the entire mine including working places, haulways, escapeways, and associated surface and maintenance facilities; (2) inspection of a limited mine area when the mine is too large for one inspector to complete an inspection in one week, items inspected being identical to those in the first class; or (3) spot inspections and followup. *See* 1970 ANNUAL REPORT, *supra* note 6, at 23.

of manpower, training, and budget to discharge the function adequately.[192]

In Arizona, some federal inspections are conducted, but their function is primarily to monitor the adequacy of the state safety plan.[193] MESA utilizes the federal regulations enacted pursuant to the FMNMSA as standards against which to measure this adequacy.[194] Thus the main goal of federal inspections is supervision rather than safety control. MESA's deference to the state plan and its emphasis on supervision serves to shift the major responsibility for pit mine safety inspections to the state. Since the state inspectors' primary role is presently supervision of operator inspections,[195] the result is that neither state nor federal inspection agencies are directly committed to accident prevention in Arizona's pit mines.

The inadequacy of the present limited federal safety inspections warrants further congressional action.[196] First, permitting deference to

192. A study of state mine safety conducted by the Secretary of the Interior prior to the enactment of the FMNMSA revealed an industry fraught with hazards. *See* U.S. CODE CONG. & AD. NEWS 2846 (1966). State agencies charged with responsibility for safety were found to be ineffective because of inadequate numbers of inspectors, lack of training or experience, and low salary schedules incapable of attracting qualified personnel. *Id.* at 2849. Some of these deficiencies have been corrected in Arizona. The statutory number of deputy inspectors has been increased from six to any number needed "to perform the duties of the state mine inspector as prescribed by law." ARIZ. REV. STAT. ANN. § 27-122 (Supp. Pamphlet 1973). The requirements for deputy mine inspector are now graduation from a school of mining or geology and three years of experience, at least one of which was in the field of mine ventilation and dust control work. *Id.* While these requirements may presently be adequate, the task at hand is so great that they perhaps should be increased to require an advanced degree. While the salaries of deputy inspectors are determined by the legislature, ARIZ. REV. STAT. ANN. § 38-611(A) (Supp. 1975-76), the elected state mine inspector receives a fixed remuneration of $17,000, ARIZ. REV. STAT. ANN. § 27-121(D) (Supp. Pamphlet 1973), hardly sufficient to attract most qualified persons. If Arizona is to upgrade its program of state safety inspection, many deficiencies in budget, qualifications, and training must be corrected.

193. *See* Letter from Thomas C. Lukins, *supra* note 144; The Arizona Daily Star, Mar. 14, 1975, § C, at 8, col. 8. Monitoring is accomplished by comparing state and federal inspection reports. Letter from Thomas C. Lukins, *supra*; *see* 30 U.S.C. § 735(d) (1970). State inspectors cite only half as many violations when inspecting alone than when inspecting in the presence of a MESA representative. Letter from Thomas C. Lukins, *supra*. Where a state does not have an approved plan, however, MESA is not limited to this supervisory capacity. *See* 30 U.S.C. § 735 (1970). It then has authority to assess federal penalties for operator violation of mandatory safety regulations. *Id.* § 733(b).

194. Interview with James J. Inderberg, Assistant District Supervisor, MESA, in Phoenix, Arizona, Nov. 13, 1974. This is a dubious method for evaluating state plan effectiveness because the federal regulations are much too lenient. *See* discussion note 74 *supra*.

195. See text & notes 156-58 *supra*.

196. To be sure, Congress explicitly deferred to the states in the FMNMSA because of the nearly impossible task of inspecting the thousands of mines, quarries, and sand and gravel operations which are subject to the Act. *See* 30 U.S.C. § 735 (1970); U.S. CODE CONG. & AD. NEWS 2847 (1966). The task could be accomplished, however, if sand and gravel operations were exempted from the jurisdiction of the Act. *See id.* at 2874 (remarks of Senator Paul Fannin). In Arizona, for example, these operations are the most numerous of those subject to the FMNMSA. *See* ARIZ. STATE MINE INSPECTOR, 63D ANN. REP. 48 (1974). Moreover, their small size and peculiar characteristics

state safety plans should be discarded. This would force MESA from its limited supervisory role, compelling it to participate more actively with state mine safety agencies. Moreover, if MESA were to discontinue its policy of deference, pit mine operators would be directly subject to federal regulations and penalties. Second, pit mine inspection by MESA should be made mandatory rather than merely discretionary. Finally, federal regulations and penalties with respect to mandatory operator inspections need to be revised and strengthened.[197] Only if these improvements are implemented, will the FMNMSA be an effective device for guarding the pit miner from the hazards of his industry.

CONCLUSION

While the federal government has long recognized and attempted to treat the problems of underground coal mine safety, appreciation of corresponding difficulties in open pit mining has only recently been evidenced. In Arizona, the FMNMSA, in conjunction with new state

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make them difficult to administer along with dissimilar metal mines. *See* U.S. CODE CONG. & AD. NEWS 2874 (1966).

Damage suits brought by miners injured due to negligent inspections will probably provide no improvement through incentives. In the first place, the government has not undertaken to assure safety. It merely supervises. *See* discussion note 193 *supra.* Thus, no suit would succeed unless injury could be attributed to improper supervision. Even if the government were to undertake affirmative safety inspections, it is not clear whether the Federal Tort Claims Act, 28 U.S.C. §§ 2671-2680 (1970), could be utilized to hold the government liable for pit mine inspections. The problem centers around the discretion involved in mine inspections. The decision to inspect or to limit the scope of inspection may be the type of policy decision for which liability could not be imposed under the Act. *See* Dalehite v. United States, 346 U.S. 15 (1953). Indian Towing Co. v. United States, 350 U.S. 61 (1955), however, indicates that once a decision to provide certain services has been made, liability may be imposed for negligence at the operational level, regardless of the use of some discretion in the field. *Id.* at 69. Thus it is possible that in some instances the federal government may be held liable for negligent inspection. For a persuasive argument in favor of discretionary immunity, however, see Jaffe, *Suits Against Governments and Officers: Damages Actions,* 77 HARV. L. REV. 209, 218-25 (1963).

Even though liability may be imposed on the government in certain situations, *see* Roberson v. United States, 382 F.2d 714 (9th Cir. 1967) (applying Arizona law), it would probably be very difficult to demonstrate that a finding of liability is warranted. Because MESA's inspections presently are merely supervisory, a finding of breach of duty is unlikely. Additionally, the public nature of the duty of inspection may not afford a basis for private liability. *See* text & notes 161-73 *supra.*

197. Strengthening federal regulations would serve a dual purpose. In states where no state plan has been approved, mine operators would have to exercise a higher standard of care under the regulations, causing a rise in mine safety. Also, in states where a state plan is in effect, stronger regulations would serve to strengthen the operator's safety program since MESA's level of monitoring would be increased.

In March of 1976, a gas explosion in an underground coal mine in Kentucky killed over 25 men. This tragedy has prompted a flurry of congressional hearings similar to that experienced after the Sunshine Silver Mine disaster in 1972. *See* discussion note 5 *supra.* The president of the United Mine Workers has suggested that mine inspections should be transferred from the Department of the Interior to OSHA which has a better record of collection of fines and is not resource oriented. *See* Tucson Daily Citizen, March 26, 1976, at 1, col. 1. This would be, at best, only a partial solution. The real solution lies in the establishment of legal incentives for each member of the mining industry to conduct proper and thorough inspections.

safety statutes and regulations, has inaugurated a new era of governmental control. Nevertheless, this tightening of safety control has not effectively reduced the toll of injury and death in Arizona's pit mine industry. The reasons are legion and do not spring solely from technological shortcomings or human error. A factor contributing to the hazardous nature of pit mining in Arizona is the lack of effective prior prevention. The legal relationships which have developed around the industry are not effective incentives to adequate safety inspections.

The Workmen's Compensation Act attempts to recompense injured miners, but in so doing, destroys much of the motivation for employer inspections. Additionally, operation of the principle of diminishing returns in the area of compensation insurance permits many injuries to occur which might have been avoided by inspections more thorough than those needed to achieve minimum premium payments. State and federal governments have not provided the solution. Their supervisory inspections are conducted with accident prevention only secondarily in mind. Moreover, laws regulating operator inspections are inadequate. Consequently, endangered pit miners can look only to prospective legislative correction of these problems.

It must be recognized that no single solution exists. First, more effective sanctions must be imposed by the Arizona Workmen's Compensation Act for employer culpability in failing to conduct adequate inspections. An increased award to an injured miner for gross culpability might be of some benefit. Second, compensation insurers should not be immunized from liability for their negligent inspections. Third, present regulations relating to inspections must be augmented by mandatory regulations which address specific problem areas and advisory regulations which provide suggested methodology for inspection. Fourth, state and federal budget and manpower limitations must be overcome in order to deal realistically with the numerous safety hazards of the pit mining industry. Finally, MESA should halt its policy of deference to state plans and assume more inspection responsibilities. If these steps are taken, pit mine safety laws will be much stronger. Also, proper inspection incentives will be built into the system so that the high number of injuries and fatalities in Arizona's pit mines can be decreased.