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An Agricultural Law Research Article

A Primer Concerning Industrial Timber Litigation with Emphasis Upon Mississippi Law

by

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Originally published in MISSISSIPPI LAW JOURNAL 59 MISS. L. J. 387 (1989)

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A PRIMER CONCERNING INDUSTRIAL TIMBER LITIGATION WITH EMPHASIS UPON MISSISSIPPI LAW

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A PRIMER CONCERNING INDUSTRIAL TIMBER LITIGATION WITH EMPHASIS UPON MISSISSIPPI LAW

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I. A HISTORICAL OVERVIEW AND ECONOMIC ANALYSIS OF THE TIMBER INDUSTRY IN THE STATE OF MISSISSIPPI

Forests are the most valuable natural resource in the State of Mississippi.¹ Although commercial forestry enterprises had appeared in the state in the early 1800's, forest-based industries did not become important to the economy of Mississipi until the 1880's.² Then, during the years immediately before and after the turn of the century, capital investment in Mississippi's forest industry skyrocketed above \$39 million.³ Today, with the harvest values having topped a record \$640 million in 1989,⁴ the forests of Mississippi are important to its own future, as well as that of the entire South, in timber production and processing.⁵

As the lumber industry became one of Mississippi's leading enterprises, lumber companies brought new employment opportunities to the state. Such opportunities came at a price, however, and some companies involved in the production of lumber

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¹ N. HICKMAN, *Mississippi Forests*, in 2 HISTORY OF MISSISSIPPI 212 (R.A. McLemore ed. 1973).

² Id. at 213.

³ Id. at 214.

^{*} Miss. Bus. J., \$640 Million in Wood 29 (March 12, 1990); see also Forestry Logs a Record Year in Mississippi, The Clarion Ledger, June 25, 1989, at 1G, col. 5 (1988 harvest values were \$611 million).

⁵ S.H. Bullard & R.J. Moulton, The Economics of Public Assistance for Non-INDUSTRIAL PRIVATE TIMBER SALES IN MISSISSIPPI 1 (Mississippi Agricultural and Forestry Experiment Station Technical Bulletin No. 147, 1988).

adopted the common practice of "cut out and get out," leaving desolation where forests had once stood and ghost towns where mills once had served as hubs to Mississippi communities.

Possie N. Howell and men like him led early efforts to regenerate Mississippi forest land after the harvest of its virgin timber. Howell was known for his habit of "laying claim" to any pine tree that had the makings of a good seed tree and posting signs proclaiming "Do not cut this mother tree," "Mother trees bear seed," or simply "Leave this tree." His Johnny Appleseed approach to regeneration caught the eye of prominent Mississippians and led to his appointment by Governor Henry L. Whitfield in 1926 to the first Mississippi Forestry Commission.

Howell achieved only limited success with his regeneration effort, however.¹⁰ In the first two decades of the twentieth century, the disappearance of the virgin forests caused many lumber companies to take vigorous steps toward disposing of their millions of acres of denuded lands, generally by selling them to prospective farmers.¹¹ These farming operations largely failed, leaving unproductive agricultural lands as dead weight to their owners.¹²

The solution to the problem of vast areas of denuded, unproductive land lay in the growth of a second forest, and the state eventually took steps to encourage reforestation. The adoption of a severance tax law in 1940 established that timberlands and agricultural lands should not be taxed the same.¹³ The re-

^{*} Miss. Forestry Comm'n. Elementary Forestry for Mississippi 6-7 (1945).

⁷ See N. Hickman, supra note 1, at 224 (noting efforts by Mississippi companies and individuals to promote reforestation of cut-over lands).

^{*} See id. (noting Howell's successful effort to have his employer leave one seed tree per acre to encourage reforestation).

NATIONAL ASSOC. OF STATE FORESTERS, FORESTS AND FORESTRY IN THE AMERICAN STATES, 470-71 (1968).

¹⁰ See N. Hickman, supra note 1, at 224 (noting heavy toll that wild fires, wildlife, and indiscriminate burning had on natural reforestation efforts).

¹¹ Id. at 222.

¹² See id. at 223 (noting that efforts by Midwestern immigrants to farm denuded lands failed because of costs of production and inability to farm land naturally suited to forest growth).

¹³ Prior to the adoption of severance tax laws, real property was assessed "according to its true value, taking into consideration the improvements and timber thereon." Miss. Code Ann. § 3145 (1930). With the adoption of severance taxes in 1940, the taxing of

peal of ad valorem taxes on timber, the low assessment of timberlands, and the taxing of timber only when severed from the land combined to create an opportunity for industrial forestry companies to enter once again into land ownership.¹⁴

Following World War II, the growth of the pulp and paper industry was important to the economy of the state. Favorable tax laws created an environment in which it was economically possible for industrial forestry companies to regenerate formerly unproductive lands. By the 1950's, this regeneration effort was partially responsible for the reversal of the historical trend of drain which exceeded growth. The impact of industrial forestry upon the economy of the state was easily recognized in the 1950's. By 1956, one-half of all workers in the state were employed in some phase of forestry or forestry-based industries. Mississippi's paper mills produced paper valued at \$50 million and consumed in excess of 2,000,000 cords of wood acquired at a price exceeding \$32 million.

This trend continued into the 1960's. By 1962, forest industries owned more than twenty percent of the forest land in twenty of Mississippi's 82 counties.²⁰ Well known industrial for-

timber was deferred until it was severed from the land. See Miss. Code Ann. § 9406 (1942) (requiring value of timber to be computed as of date of severance in unmanufactured state).

¹⁴ N. HICKMAN, supra note 1, at 225.

¹⁸ See id. at 227-28 (noting that lower power costs, cheap labor, modern plants and increased product demands stimulated expansion of paper industry).

¹⁶ Id. at 227.

¹⁷ Id. at 228. Drain is generally defined as the annual loss "in growth stock on commercial forest land due to volume removal through cutting, fire, or natural causes." Society of American Foresters, Forest Terminology 26 (3d ed. 1964). Conversely, growth denotes an increase in growth stock over a given period of time and can be measured by an increase in diameter, basal area, height, volume, quality or value of individual trees or stands. Id. at 42.

The trend of growth exceeding drain was apparent throughout the Southeast, including Mississippi. N. HICKMAN, supra note 1, at 228. In addition to regeneration, other causes of this reversal included a decreased demand for timber logs and utilization of waste products through paper manufacturing. Id.

¹⁸ N. Hickman, supra note 1, at 228.

¹⁰ Id. A cord is a unit of measurement of stacked wood. A standard cord contains 128 cubic feet, and its dimensions are four by four by eight feet. Society of American Foresters, supra note 17, at 18.

²⁰ Southern Forest Experiment Station, Mississippi Forest Atlas 11 (1962).

estry corporations such as Georgia Pacific, Weyerhaeuser Corporation, St. Regis Paper Company, and International Paper Company extended their land holdings and plants.²¹ Although lumber production still remained first among forest industries, paper mills made significant inroads into timber industry production, as evidenced in their consumption of approximately forty-eight percent of the timber harvested in 1959.²²

The forest industry continued to shine in the state's development through the 1970's and 1980's. In the years from 1982 to 1987, 570 new or expanding forest-related industries added over 17,000 jobs to the Mississippi economy and boosted new investments in the state to more than \$672 million.²³ Forest industries contributed over \$1 billion to the state's economy in 1987,²⁴ and Mississippi's annual tree harvests continue to set record-breaking figures. The projected demand for Mississippi forest products continues to rise because of the fiber needs of mills, factories, and other industries in Mississippi and neighboring states, as well as in foreign countries.²⁵

From the late nineteenth century to the present, Mississippi's economy has grown increasingly dependent upon timber and timber-based activities.²⁶ Although forest products were second only to cotton in producing the highest crop value during 1988, the net profit from trees exceeded that of any other crop in the state.²⁷ With 56% of the state's land occupied by forested acreage, the forest economy has a firm base on which to grow raw material and provide stability to the state's total economic outlook for the future.²⁸

²¹ N. Hickman, supra note 1, at 230.

²² Id.

²³ Mississippi Forestry Commission, Forest Industry: Shining Star in State's Development, Forestry Forum, Winter 1988, at 4.

²⁴ Id.

²⁵ Forestry Logs a Record Year in Mississippi, supra note 4.

²⁶ Miss. Forestry Comm'n, Facts at a Glance, 4 (1988). Forest industries in Mississippi have income and employment multipliers averaging 20% greater than other sections of the economy. Flick, *The Wood Dealer System in Mississippi*, 29 J. Forestry Hist. Ind. 138 (July 1985). The expansion of forest industries has a ripple effect upon the entire state's economy due to their economic link with other aspects of Mississippi life, including their purchase of raw materials from other Mississippi industries. *Id.* at 138.

²⁷ Forestry Logs a Record Year in Mississippi, supra note 4.

²⁸ Miss. Forestry Comm'n, supra note 26. A recent examination of the present and

II. A SURVEY OF INDUSTRIAL FORESTRY COMPANIES CONCERNING TIMBER LITIGATION

Assuming a predominant role in the state's economy forces the forest industry to face business problems in the potential for litigation that have also affected other industrial leaders. Almost three-fourths of the approximately 200,000,000 acres of commercial forest land in the South are owned by private individuals.²⁹ Mississippi is typical of its sister states in that most of its timberland is also owned by private individuals.³⁰ A fact of economic reality is that industrial forestry companies will choose to manage large numbers of timberland acres in order to supply their raw material needs, thereby placing themselves across the negotiating table from Mississippians for many years to come. Similarly, the vast quantities of acreage owned by industrial forestry companies create the possibility of a wide variety of disputes that can arise with neighboring landowners.

In an effort to determine the legal issues that face industrial forestry companies, the author conducted an informal survey in June of 1989 of 157 entities (108 members) listed in the January, 1989 Timber Harvesting "Woodlands Directory." The survey was not designed to obtain any degree of statistical accuracy, but rather to serve as a forum for receiving input from industrial forestry companies as to their views involving timber litigation issues. The inclusion of particular issues in this paper results from frequent mention by those respondents who managed timberlands in the State of Mississippi. Certain issues receive

future prospects of forestry in Mississippi resulted in the publication of a special section of the Mississippi Business Journal entitled "Forestry in Mississippi."

²⁹ H.L. WILLISTON, W.E. BALMER, & D.H. SIMS, MANAGING THE FAMILY FOREST IN THE SOUTH 1 (U.S. Department of Agriculture Management Bulletin R8-MB, 1988).

³⁰ S. H. Bullard & R. J. Moulton, supra note 5.

³¹ The survey was conducted solely for use in connection with this paper, and participants were informed that composite information would be utilized for this purpose. Replies to the survey were solicited with the understanding that responses would be kept confidential. A copy of the survey sent to directory members is included in the Appendix.

³² Of the 108 members of the "Woodlands Directory" contacted, 46 (42.6%) responded. Issues included in this paper were those receiving a 50% or better combined rating of F (frequent) or S (seldom) based on a weighted average of acres in the state controlled by individual respondents. Other issues have been included at the author's

only superficial treatment because of their complexity and breadth; other issues lend themselves to more detailed treatment. Current issues and recent developments in Mississippi law have been given special emphasis.

III. INDUSTRIAL TIMBER LITIGATION ISSUES

A. Independent Contractors

There are two primary areas of dispute pertaining to the status of persons as either independent contractors or employees of industrial forestry companies. One involves negligence claims by third parties against the forestry company; the second involves claims by the injured worker under the Workers' Compensation Act. In both situations the industrial forestry company has traditionally asserted that the individual who caused the injury or the one who was injured was an independent contractor, not an employee.

The status of the worker as an employee or independent contractor turns on the facts and circumstances of each case. In reaching this decision, the court will consider such factors as the following: whether the company has the power to terminate the contract at will, to fix the price for the work, or control the manner and time of payment; who furnishes means and appliances for the work, controls the premises, furnishes materials upon which the work is done, and receives the output of the work; who has the right to prescribe the kind and character of work, to supervise and inspect the work, to direct the manner in which the work is to be done, to employ and discharge sub-employees, and to fix their compensation; and who is obligated to pay the wages of the employees.³³

Claims by third parties against industrial forestry companies frequently arise from automobile accidents involving persons engaged to cut and haul wood. Broken down pulpwood trucks left after dark on the highway with no lights³⁴ and jack-

discretion.

³³ Kisner v. Jackson, 159 Miss. 424, 428-29, 132 So. 90, 91 (1931).

³⁴ See Hobbs v. International Paper Co., 203 So. 2d 488, 489 (Miss. 1967).

knifed pulpwood trucks blocking the highway at night without flares, flashlights or warning devices³⁵ create the possibility of litigation against industrial forestry companies.³⁶ If the truck driver or truck owner is found to be an independent contractor, the employer is not liable for his negligence. If, however, the driver or owner is determined to be an employee rather than an independent contractor, the law of principal and agent will hold the employer liable for an employee's negligence committed during the course of and within the scope of his employment.³⁷

Obviously, a contract between the worker and the forestry company setting out the relationship of the parties and reflecting that the forestry company does not have control over the worker is a good preventive action for any forestry company to take. Yet, while the contract is relevant to the issue of the legal relationship between the company and the worker, courts have expressed their desire to "look at the transactions in their actual character, piercing through the screen of technical attitudes to what are the realities . . . regard[ing] substance rather than formal similitudes."³⁸

A determination of whether or not a worker is an independent contractor frequently arises in the context of workers' compensation claims by injured workers. For purposes of the Workers' Compensation Act, an "independent contractor" is defined as:

Any individual, firm or corporation who contracts to do a piece of work according to his own methods without being subject to the control of his employer except as to the result of the work, and who has the right to employ and direct the outcome of the workmen independent of the employer and free from any superior or authority in the employer to see how the specified work shall be done or what the laborers shall do as the work pro-

³⁵ See Leaf River Forest Prods. v. Harrison, 392 So. 2d 1138, 1139 (Miss. 1981).

³⁶ See Powell v. Masonite Corp., 214 So. 2d 469, 470 (Miss. 1968) (holding that truck driver was not agent of defendant at time of accident despite fact that truck driver was purchasing truck from defendant by having money regularly deducted from wages received from defendant).

⁸⁷ Blackmon v. Payne, 510 So. 2d 483, 488 (Miss. 1987).

³⁸ Leaf River Forest Products, 329 So. 2d at 1141 (citing Hederman v. Cox, 188 Miss. 21, 40, 193 So. 19, 24 (1940)).

gresses; one who undertakes to produce a given result without being in any way controlled as to the methods by which he attains the result.³⁹

The Workers' Compensation Act has been liberally construed in favor of the claimant in order to carry out the essential purposes of the Act.⁴⁰ In reaching a determination as to whether at any given time a worker is an independent contractor or employee, the courts apply the primary test of who had "the *right* to control, not actual control of, the details of the work."⁴¹

Industrial forestry companies would be well advised to develop a standard contract for use with independent contractors which specifically notes that workers are not subject to the company's control and that the independent contractor should carry his own workers' compensation insurance.⁴² In a close case, such a contract itself could provide the winning edge to the industrial forestry company.⁴³

The language of the contract will not generally be dispositive on the issue of the relationship of the parties. If an industrial forestry company requires its contractors to provide insurance and yet is aware that this requirement is not being met, the court may find that the injured party is an employee and hold that the company is estopped from denying workers' compensation liability.⁴⁴ Similarly, regardless of the contractual relation-

³⁹ Miss. Code Ann. § 71-3-3(r) (1972).

⁴⁰ Champion Cable Constr. Co. v. Monts, 511 So. 2d 924, 928 (Miss. 1987); see also Leaf River Forest Products, 392 So. 2d at 1140 (noting that evidence in workers' compensation cases is liberally construed in favor of claimants in order to carry out beneficent purposes of Act).

⁴¹ Georgia-Pacific Corp. v. Crosby, 393 So. 2d 1348, 1349 (Miss. 1981) (citing Boyd v. Crosby Lumber & Mfg. Co., 250 Miss. 433, 440, 166 So. 2d 106, 108 (1964)) (emphasis added). In *Georgia-Pacific*, the court held that the four principal factors to be considered under the control test are the right to exercise control, method of payment, furnishing of equipment, and right to fire. *Id.* (citing *Boyd*, 250 Miss. at 440, 166 So. 2d at 108).

⁴² See Leaf River Forest Products, 392 So. 2d at 1138. But see Brown v. E.L. Bruce Co., 253 Miss. 1, 8, 1 So. 2d 151, 156 (1965) (holding contract hauler entitled to compensation despite terms of written contract since hauler's business had meshed with and become integral to employer's business).

⁴³ See Hutchinson-Moore Lumber Co. v. Pittman, 154 Miss. 1, 13, 112 So. 191, 193 (1929) (holding that provisions of contract established that injured worker was independent contractor).

[&]quot; Champion Cable Constr. Co., 511 So. 2d at 927-29.

ship between the parties, the company would be best advised not to become intimately involved in the business practice of individual third party contractors. If it does so the court may find employment based on the entire relationship between the parties.⁴⁵

B. The Migrant and Seasonal Agricultural Worker Protection Act

In 1964, the United States Congress adopted the Farm Labor Contractor Registration Act⁴⁶ (FLCRA), which was designed to regulate independent middlemen who supplied laborers to agricultural concerns across the nation and were in a position to exploit both operators and workers. Subsequent amendments to FLCRA spawned a flood of litigation, which ultimately led to the enactment of the Migrant and Seasonal Agricultural Worker Protection Act⁴⁷ (MSPA) in 1983. MSPA is a comprehensive federal statute requiring employers of migrant and seasonal farm workers to comply with various record-keeping and disclosure requirements.⁴⁸

The traditional interpretation of the Department of Labor has been that forestry workers were not engaged in "agricultural employment" within the meaning of MSPA.⁴⁹ The first hint that

⁴⁸ An example of excessive involvement in the business practices of third party contractors is provided in Brown v. L.A. Penn & Son, 227 So. 2d 470 (Miss. 1969). In Brown, a timber purchaser co-signed notes, sold parts to, and paid for repairs for wood haulers so that the haulers could continue delivering wood to the purchaser as needed. Brown, 227 So. 2d at 471. The court ultimately held that the haulers were subject to the control of the timber purchaser and thus did not constitute independent contractors. Id. at 474. Therefore, the purchaser was liable under the Workers' Compensation Act for injuries to the haulers. Id.

^{46 7} U.S.C. § 2041 (repealed 1983).

^{47 29} U.S.C. §§ 1801-1872 (1983).

¹⁶ Note, The Joint Employer Doctrine Under the Federal Migrant and Seasonal Agricultural Workers Protection Act, 18 RUTGERS L.J. 863 (1987); see also 29 U.S.C. § 1801 (1982) (noting that purposes of MSPA are to remove restraints on commerce caused by activities detrimental to migrant and seasonal agricultural workers, to require farm labor contractors to register under Act, and to assure necessary protection for migrant and seasonal agricultural workers and employers).

^{**} Bracamontes v. Weyerhaeuser Co., 840 F.2d 271, 276 (5th Cir. 1988), cert. denied, 109 S. Ct. 219 (1989).

The term "agricultural employment" is defined under MSPA to include activity under certain provisions of the Fair Labor Standards Act, 26 U.S.C. § 3121(g) (1982), as

migrant agricultural worker laws might be applied to the forestry industry came in dicta in a 1983 Eleventh Circuit decision dealing with FLCRA, the predecessor of MSPA.50 Four years later, the issue of whether MSPA applied to migrant and seasonal commercial forestry workers was squarely faced by the United States Court of Appeals for the Ninth Circuit in Bresgal v. Brock. 51 In Bresgal, the court held that, while forestry workers are not commonly viewed as agricultural workers, those who "raise trees as a crop for harvest are engaged in agricultural employment for the purposes of [MSPA]."52 The court affirmed the decision of the district court, only modifying its injunction against William Brock, Secretary of Labor. It enjoined him and his successors from refusing to enforce MSPA as to "recruiting, soliciting, hiring, employing, furnishing or transporting any migrant or seasonal worker for all predominantly manual forestry work, including but not limited to tree planting, brush clearing, pre-commercial tree thinning and forest fire fighting."53

In Bracamontes v. Weyerhaeuser Company,⁵⁴ the United States Court of Appeals for the Fifth Circuit, stating that it "joined the Ninth and Eleventh Circuits," applied federal migrant protection laws to the forestry business.⁵⁵ Although the court noted the Department of Labor's position that forestry workers did not perform agricultural employment within the meaning of MSPA and stated that the argument was one with considerable force, the court reviewed the legislative history of the 1974 amendments to the FLCRA and held that Congress intended that agricultural employment include forestry operations even when not performed on a traditional farm.⁵⁶ The court spe-

well as "the handling, planting, drawing, packing, packaging, processing, freezing or grading prior to delivery for storage of any agricultural or horticultural commodity in its unmanufactured state." 29 U.S.C. § 1802(3) (1982).

⁸⁰ Davis Forestry Corp. v. Smith, 70 F.2d 1325, 1328 n.3 (11th Cir. 1983).

⁵¹ Bresgal v. Brock, 833 F.2d 763, 771 (9th Cir. 1987), modified, 843 F.2d 1163 (9th Cir. 1988); see Dingfelder, 1983 Migrant and Seasonal Agricultural Workers Act Results in a Harvest of Litigation Ripe for the Picking, 5 Lab. Law. 239 (1989).

⁵² Bresgal, 843 F.2d at 1166.

⁸⁸ Id. at 1172.

^{54 840} F.2d 271 (5th Cir. 1988).

⁵⁵ Bracamontes, 840 F.2d at 274.

⁵⁶ Id. at 276.

cifically referred to a 1974 United States Senate report indicating that the provisions were intended to apply to contractors, including those who regularly employ illegal aliens as "tree planters, thinners, and other forest laborers." Accordingly, the court reversed the district court's grant of a motion to dismiss in favor of Weyerhaeuser⁵⁸ and remanded to the lower court the issue of whether Weyerhaeuser should be enjoined from using farm labor contractors until the company had registered with the Department of Labor as required by MSPA.⁵⁹

Unless an industrial forestry company is found to be a joint employer under MSPA, ⁶⁰ its only obligation should be to verify that its independent contracts are registered with the Department of Labor for each farm labor contracting activity performed by the contractor. ⁶¹ Farm labor contracting activities are defined under MSPA as "recruiting, soliciting, hiring, employing, furnishing or transporting any migrant or seasonal agricul-

⁵⁷ Id. at 274 (citing S. Rep. No. 1295, 93d Cong., 2d Sess., reprinted in 1974 U.S. Code Cong. & Admin. News 6441, 6444).

⁵⁶ The district court's ruling was based upon its conclusion that the *Bracamontes* case was factually indistinguishable from Aguirre v. Davis Forestry Corp., No. B-81-142 (S.D. Tex. Mar. 13, 1987), in which the court decided that FLCRA could not apply to parties engaged exclusively in forestry activities.

⁵⁰ Bracamontes, 840 F.2d at 272. 29 U.S.C. § 1811 (1982) requires any person engaged in farm labor contracting activities to register with the Secretary of Labor. Id.

^{*}O The term "employ" as used in MSPA is defined as having the same meaning as provided under the Fair Labor Standards Act of 1938. 29 U.S.C. § 1802(5) (1982). Other regulations enacted pursuant to MSPA have further demonstrated congressional intent to adopt the joint employment principles applicable under the Fair Labor Standards Act. Note, supra note 48, at 867 (citing 29 C.F.R. § 500.20(h)(4) (1989)). If a forestry company is held to be a joint employer of the migrant or seasonal worker, it would be responsible for full compliance with the Act. Cf. Hodgson v. Griffin & Brand of McAllen, Inc., 471 F.2d 235, 238 (5th Cir.) (farmer and crew leader held to be joint employees rather than having contractor-independent contractor relationship), cert. denied, 414 U.S. 819 (1973). Five factors have been used as guidelines in determining whether an independent contractor or joint employer situation exists: (1) whether or not employment takes place on the premises of the company; (2) how much control the company exerts over employees; (3) whether the company has the power to fire, hire, or modify conditions of employment; (4) whether employees perform a specialty job within a production line; and (5) whether the employees may refuse to work for the company or work for others. Note, supra note 48, at 867; see also Linder, Employees, Not-so Independent Contractors and the Case of Migrant Farm Workers: A Challenge to the "Law and Economics" Agency Doctrine, 15 Rev. L. & Soc. Change 435 (1986-87).

^{61 29} U.S.C. § 1802(6) (1982).

tural worker."62

The enforcement provisions of MSPA include criminal sanctions of up to \$10,000 and a three-year prison term,⁶³ injunctive relief by the Secretary of Labor,⁶⁴ private suits by injured persons for actual damages or statutory damages of up to \$500 per plaintiff per violation, with a \$500,000 limit on class action relief,⁶⁶ and administrative sanctions of not more than \$1,000 for each violation.⁶⁶ The private action relief can include the appointment of an attorney to represent a class and payment of attorneys' fees.⁶⁷

C. Best Management Practices

The 1948 Federal Water Pollution Control Act⁶⁸ (Clean Water Act) was recently amended by the Water Quality Act of 1987.⁶⁹ The Water Quality Act requires each state to submit a management program aimed at controlling pollution added to navigable waters from non-point sources.⁷⁰ Surface runoff from

es Id. § 1851.

⁶³ Id. § 1852.

⁶⁴ Id. § 1854.

⁶⁵ Id.

⁶⁶ Id. § 1853(1).

⁶⁷ Id. § 1854(b).

⁶⁶ 33 U.S.C. §§ 1251-1337 (1982 & Supp. 1989). The original Clean Water Act has been amended extensively, with amendments occurring in 1972 (Federal Water Pollution Control Act Amendments of 1972), 1977 (Clean Water Act of 1977), 1981 (Municipal Waste Water Treatment Construction Grant Amendments of 1981) and 1987 (Water Treatment Act of 1987).

^{69 33} U.S.C. § 1329 (Supp. 1989).

^{70 30} U.S.C. § 1329(b)(1) (Supp. 1989). Point source pollution is "any discernible, confined and discrete conveyance... from which pollutants are or may be discharged." 33 U.S.C. § 1362(14) (Supp. 1989). Non-point source pollution is any pollution whose specific point of generation and point of entry into a water course cannot be determined. Miss. Forestry Comm'n, Mississippi's Best Management Practices Handbook 1 (Apr. 1989).

Navigable waters are defined as the "waters of the United States including territorial seas." 33 U.S.C. § 1362(7) (1976). The term was been interpreted as indicating the intent of Congress to use the full extent of its commerce power in order to achieve the "broadest possible constitutional interpretation." United States v. Byrd, 609 F.2d 1204, 1209 (7th Cir. 1979). Because the Clean Water Act has been held to authorize the Corps of Engineers to regulate discharges into navigable waters and their adjacent wetlands, many forestry activities conducted in low-lying areas or river and tributary bottomlands are subject to the Act. Cf. United States v. Riverside Bayview Homes, Inc., 474 U.S. 121,

silvicultural land arising out of forestry activities qualifies as non-point pollution.⁷¹ The Water Quality Act anticipated the involvement of local, public, and private agencies and organizations having expertise and control of non-point sources of pollution in preparation for the state management program.⁷²

The Environmental Affairs Committee of the Mississippi Forestry Association⁷⁸ developed the Best Management Practices Handbook utilized by the State of Mississippi.74 The term "best management practice" is defined in the Mississippi handbook as "a practice, or combination of practices that is determined to be the most effective, practical means of preventing or reducing the amount of pollution generated by non-point sources to a level compatible with water quality goals."75 The handbook also recommends best management practices for Mississippi's climate, soils, and topography, recognizing that such determinations must apply sound conservation principles consistent with economic objectives to minimize water pollution.⁷⁶ In addition, the handbook contains definitions and specific guidelines for such forest activities as woodland access to roads and trails, site preparation, tree planting, pesticide use control, forest harvesting, revegetation, and filter strips.77

Compliance with best management practices is, as a general rule, voluntary. Adherence to such practices may be mandatory, however, if a forestry company is relying upon the Clean Water Act's "agricultural exemption" from obtaining a permit for the discharge of dredged or fill material for the purpose of constructing or maintaining forest roads. Under the exemption,

^{134 (1985) (}enjoining development company from placing fill materials on wetland adjacent to navigable waters).

⁷¹ Miss. Forestry Comm'n, supra note 70.

^{72 33} U.S.C. § 1329(b)(3) (Supp. 1989).

⁷³ The Mississippi Forestry Association was formed on June 10, 1938, by a group of dedicated citizens who banded together to establish a statewide organization for the advancement of intelligent management and use of forestry, soil, water and wildlife resources. National Assoc. of State Foresters, supra note 9, at 475.

⁷⁴ Miss. Forestry Comm'n, supra note 70.

⁷⁵ Id.

⁷⁸ Id. at 1-2.

⁷⁷ See id. at 4, 6-31.

^{78 33} U.S.C. § 1344(f)(1)(E) (1982).

such a discharge must be undertaken "in accordance with best management practices" and in a manner that does not impair the flow, circulation patterns, or biological characteristics of navigable waters."

In United States v. Akers,⁸⁰ the court upheld an injunction obtained by the Corps of Engineers that prohibited a farmer from depositing dredge or fill materials into wetlands.⁸¹ The ruling was based upon the court's finding that the road constructed over the overflow channels of the Pit River failed to comply with best management practices and that the farmer was not entitled to exemption from a permit under the "agricultural exemption" to the Clean Water Act.⁸²

Similarly, if an industrial forestry company chooses to rely upon the agricultural exemption and does not obtain a permit from the Corps of Engineers, it must construct any forestry roads in low-lying areas, for harvesting or other silvicultural activities, in accordance with best management practices. In choosing a course of action, forestry companies should be aware that the Courts of Appeal for the Fifth and Seventh Circuits have narrowly construed the agricultural exemption to the Clean Water Act.⁸³

Voluntary adherence to best management practices will not automatically assure compliance with state water quality standards. In Northwest Indian Cemetery Protective Association v. Peterson,⁸⁴ environmentalists successfully brought suit against the United States Forest Service, contesting the Forest Service's plans to permit timber harvesting and road construction in national forests.⁸⁵ The government argued that the standards es-

⁷⁹ Id.; see 40 C.F.R. §§ 232.2(d), 232.3 (1989) (defining best management practices and setting forth certain activities not requiring permits for discharge).

^{80 785} F.2d 814 (9th Cir. 1986).

⁸¹ Akers, 785 F.2d at 821.

⁸² Id. at 820-21. The farmer admitted that significant "hydrological alteration" of the wetland area would be the direct result of his proposed farming activities. Id. at 820.

^{*}s Id. at 819 (citing United States v. Huebner, 752 F.2d 1235, 1240-41 (7th Cir.), cert. denied, 474 U.S. 817 (1985); Avoyelles Sportsmen's League, Inc. v. Marsh, 715 F.2d 897, 925 n.44 (5th Cir. 1983)).

^{84 764} F.2d 581 (9th Cir. 1985).

⁸⁵ Peterson, 764 F.2d at 584-85. The Peterson case also presented issues concerning the "free exercise clause" of the first amendment and federal use of certain tribal burial

tablished in the California Water Quality Plan were no longer applicable to the Forestry Service because those standards had been superseded by Best Management Practices (BMP's) that had been accepted by the state of California and the Environmental Protection Agency.⁸⁶ While the BMP's would not be violated by the proposed timber harvesting and road construction, the court rejected the argument that these were the only standards to be met.⁸⁷ Instead, the court held that the BMP's were merely one method of achieving the appropriate state water quality standards.⁸⁸ Because the Forest Service projects would violate the state water quality plan, adherence to BMP's would not insulate the project from the state plan requirements.⁸⁹

D. Trespass to Timber

Any person who cuts down trees belonging to another without the consent of the owner is guilty of trespass to timber. Diability for such actions is imposed by both statute and common-law tort principles. In 1989, the Mississippi Legislature radically changed the statutes dealing with civil damages for the wrongful cutting of timber. Decause the bill is applicable only to causes of actions accruing on or after July 1, 1989, any action for trespass to timber occurring before that date would be gov-

grounds. Id. at 585-86.

⁸⁶ Id. at 588-89.

⁸⁷ Id. at 588.

⁸⁶ Id. The court held that the Best Management Practices defined in federal regulations did not constitute "standards in and of themselves." Id.

⁸⁹ Id.

⁹⁰ Id. at 588-89.

⁹¹ In addition to civil liability, a person who knowingly, willfully and feloniously takes, steals, or carries away timber whether growing, standing or lying on the lands can be criminally prosecuted. See Miss. Code Ann. § 97-17-59 (1972) (setting forth criminal penalties for trespass to timber including imprisonment of up to five years and fines up to \$500.00 where value of trees exceeds \$25.00); see also id. § 97-17-81 (cutting or rafting trees or timber of certain species belonging to another subjects wrongdoer to maximum sentence of five months and \$1,000.00 fine); id. § 97-17-89 (person who unlawfully severs, destroys, carries away or injures any tree where such action is not larceny shall be guilty of misdemeanor and subject to six months in jail and \$500.00 fine); id. § 97-17-15 (altering or destroying boundary trees is criminal offense).

^{**} See Act of April 19, 1989, ch. 558, 1989 Miss. Laws 741-42 (codified at Miss. Code Ann. § 95-5-10 (Supp. 1989) (repealing prior statutes which had expressly provided damage amounts and establishing sanctions based on harm suffered by landowner)).

erned by the former statutes.98

1. Actions Prior to July 1, 1989

Before the 1989 legislation, any person who cut down, destroyed or carried away a tree⁹⁴ owned by another was liable for a statutory penalty of \$35 to \$55 per tree, depending upon the variety of the tree involved.⁹⁵ In the recent case of Berry v. Player,⁹⁶ the Supreme Court of Mississippi affirmed a trespass judgment against the defendants for \$8,803 in actual damages and \$71,225 in statutory damages.⁹⁷ The Berry court noted that good faith was a defense to imposition of the statutory penalties. However, the Mississippi court has traditionally construed this defense narrowly. As the court noted in a previous decision:

[D]ue and proper regard for the property of another requires of any person, before he engages in the deliberate act of cutting or destroying a tree, to take whatever precaution and safeguards as are reasonably necessary . . . to assure himself that he has the lawful authority to do so. If he fails to take such necessary steps he can hardly claim he has acted in good faith. 98

When suit was brought under a common-law tort of trespass or conversion and the cutting of the tree was willful, the guilty party was statutorily liable to the owner for the delivered value of the timber. Furthermore, a good faith purchaser of the timber who bought it from the willful treapasser was statutorily liable to the rightful owner for the delivered value. Where trees

⁹⁸ J.A

⁹⁴ Miss. Code Ann. §§ 95-5-1 to -5 (1972) (repealed 1989). The repealed statutes set forth specific penalties for the wrongful cutting of only the types of trees enumerated in the statutes. *Id*.

⁹⁸ Id.

^{98 542} So. 2d 895 (Miss. 1989).

⁹⁷ Berry, 542 So. 2d at 901. The court held that questions of ownership of timber must be resolved in "the supposed owner's favor prior to picking up the ax or cranking up the chain saw." *Id.* at 900 (citing Grisham v. Hinton, 490 So. 2d 1201, 1205 (Miss. 1986)).

⁹⁸ Grisham v. Hinton, 490 So. 2d 1201, 1205 (Miss. 1986).

⁹⁹ Masonite Corp. v. Williamson, 404 So. 2d 565, 568 (Miss. 1981).

¹⁰⁰ Masonite Corp., 404 So. 2d at 568-69.

had been cut and removed by mistake or inadvertence, however, the statute imposed liability upon the negligent party for the "stumpage value" only.¹⁰¹ Stumpage value was the value of the standing trees unenhanced by the labor of the trespasser.¹⁰²

2. Actions from and After July 1, 1989

The current statutes apply to actions accruing from and after July 1, 1989. The bill adopted by the legislature was originally proposed by the legislative committee of the Mississippi Forestry Association.¹⁰³ The Mississippi Legislature received further input from private landowners as well as industrial forestry companies in making minor revisions to the original version.¹⁰⁴ The current statutes abolish the good faith defense and impose strict liability upon a person who wrongfully cuts timber.¹⁰⁵ However, the revised statutes continue to make a distinction as to whether a wrongful cutting was willful. Although any wrongful cutting subjects the timber trespasser to damages of double the fair market value of the tree, plus reforestation costs of up to \$250 per acre,¹⁰⁶ an additional penalty of up to \$55 per tree will be imposed upon the willful trespasser.¹⁰⁷ In addition to statutory damages,¹⁰⁸ the court also has discretion to assess rea-

¹⁰¹ Id. at 568.

¹⁰² Id. (citing Chevron Oil Co. v. Snellgrove, 253 Miss. 356, 364, 175 So. 2d 471, 474-75 (1965)).

¹⁰³ Telephone interview with Senator Cecil Mills of Greene County, Mississippi, Chairman of the Forestry Committee (Sept. 18, 1989).

¹⁰⁴ Id. One example of the changes made by the legislature to the bill as originally submitted was the addition of the \$250 cap on the cost of reforestation.

¹⁰⁵ Miss. Code Ann. § 95-5-10 (Supp. 1989). In order to prove a prima facie case under the new act, a plaintiff is required to show that he is the owner of the timber and that the timber was cut down, deadened, destroyed or taken away by the defendant, his agents, or his employees without his consent. *Id.*

¹⁰⁶ Id.

willfully, or in reckless disregard of the rights of the owner, in addition to these damages, that person must pay the owner an additional penalty of \$55 for every tree that is 7" or more in diameter, 18" above the ground, or \$10 for every tree less than 7" in diameter, 18" above the ground. Id. In order to recover damages for willful conversion, the owner must establish that the defendant or his agents or employees acting under the command or consent of their principal willfully and knowingly, in conscious disregard of the rights of the owner, cut down, deadened or destroyed the tree. Id.

¹⁰⁸ Id. The damage remedies provided in this statute are in lieu of any other com-

sonable expert witness and attorneys' fees as court costs. 109

Many trespass to timber cases arise out of disputes over ownership of the property on which timber is cut. Therefore, great care must be taken by any person who cuts trees to clearly establish title to the property and the exact boundaries of the land. Under both the former and present Mississippi statutes concerning trespass to timber, failure to ascertain boundaries can result in liability for statutory penalties as well as actual and punitive damages.¹¹⁰

E. Claims of Negligence or Nuisance Pertaining to Timber Ownership and Operations

1. Damage or Destruction Caused by Fire

The negligent or intentional destruction of timber by fire¹¹¹ gives rise to both civil and criminal liability on the part of the person responsible for setting the fire.¹¹² Basic statutory provisions establish that any person who sets fire to the land of another or who wantonly or negligently allows fire to damage such land will be liable for the destruction of trees, timber, grass, buildings, fences and the like.¹¹³ In addition, a penalty of \$150 will be levied in favor of the owner.¹¹⁴ Under both statutory law and general principles of negligence, any person who sets a fire

pensatory, punitive, or exemplary damages for the cutting down, deadening or destroying or taking away of the tree but do not limit actions or awards for other damages caused by the person. *Id.*

¹⁰⁹ Id.

¹¹⁰ Shell Oil Co. v. Murrah, 493 So. 2d 1274, 1275-76 (Miss. 1986); Day v. Hamilton, 237 Miss. 472, 478, 115 So. 2d 300, 303 (1959).

The term "fire" in this section refers to "wildfire" only and does not include prescribed burning. Mississippi has historically been plagued with wildfire. Some land-owners burned off woodlands each year to have an early pasture for livestock or to kill snakes, ticks, boll weevils and other pests or insects. Hunters have burned the woods to drive out game. Others set fires "just for fun." Miss. Forestry Comm'n, supra note 6, at 87-92. Thirty-four of Mississippi's 82 counties have been classified as having a "very high" rate of fire occurrence. Southern Forest Experiment Station & Southeastern Forest Experiment Station, A Forest Atlas of the South 27 (1969).

¹¹⁸ See, e.g., Miss. Code Ann. § 49-19-25(a) (1972) (classifying negligent setting of fire as public nuisance); id. § 95-5-25 (setting forth civil penalties for wanton and negligent setting of fires); id. § 97-17-13 (setting forth criminal penalties for timber arson).

^{113 § 95-5-25.}

¹¹⁴ Id.

on his own property, even for a lawful purpose, is liable for any damages caused by the spread of the fire to property of another where he has been guilty of negligence in starting the fire or in guarding against its spread.¹¹⁵

In addition to holding the negligent party liable for both actual damages and the general statutory penalties, Mississippi statutes provide that any uncontrolled fire on forested or cutover lands, or brush or grass lands is a public nuisance.¹¹⁶ If the person responsible for the fire fails to control or extinguish it immediately, he is liable for the costs of abating the nuisance as well as court costs and attorneys' fees.¹¹⁷

Any person who willfully or maliciously sets fire to "woods, meadow, marsh, field or prairie" belonging to another is guilty of arson, a felony which carries a sentence of one or two years imprisonment and/or a fine of \$200 to \$1,000.¹¹⁸ Any such fire caused by recklessness or gross negligence is a misdemeanor and subjects the guilty party to a fine of \$20 to \$500 and/or three months in the county jail.¹¹⁸

Clearly, any person or corporation who undertakes to start a fire on his property must exercise reasonable care to prevent damage to adjoining lands. To do otherwise invites civil or criminal liability based upon general principles of negligence and violations of Mississippi statutory law.

Liability for Trees in or near Roadways, Streams or Navigable Waters

Mississippi statutes provide that any person who fells a tree into or otherwise obstructs any public highway, road or navigable water¹²⁰ without immediately removing it may be assessed the cost of removal¹²¹ and subject to criminal prosecution.¹²² Ob-

¹¹⁸ Wofford v. Johnson, 250 Miss. 1, 4, 164 So. 2d 458, 459 (Miss. 1964).

¹¹⁶ Miss. Code Ann. § 49-19-25(a) (1972).

¹¹⁷ Id.

^{118 § 97-17-13.}

¹¹⁹ Id.

¹²⁰ See id. § 1-3-31 (defining navigable waters as "[a]ll rivers, creeks and bayous . . . twenty-five miles in length, and having sufficient depth and width . . . to float a steamboat with carrying capacity of two-hundred bales of cotton").

^{121 § 65-7-7.} A civil action for the costs of removal may be brought before any justice

structing streams and canals also constitutes a criminal offense subjecting the offender to fines and imprisonment.¹²⁸

In Georgia Pacific Corp. v. Armstrong, 124 an upper riparian landowner called the court's attention to a statute making it a crime for a person or corporation to "push, fell or cut trees, logs or treetops" in excess of six inches in diameter into a running stream where such objects materially impede the flow or navigation upon the stream. 125 The chancellor personally viewed the lands and found that Georgia Pacific's logging operations on the lower riparian owner's land were the proximate cause of flooding on the upper riparian owner's land. 126 He concluded that the operations violated a common-law duty to conduct logging operations in a manner that did not create a nuisance such as excess flooding.127 The chancellor awarded damages in the amount of \$12,000 and issued an injunction requiring defendants to remove from the stream all obstructions that were the result of defendant's logging operations and to restore the canal to its condition prior to the cutting of timber.128

Dead or dangerous trees near any public road that endanger public travel may be removed by the board of supervisors of any county if the owner refuses to do so himself.¹²⁹ The value of the trees or timber will be assessed and paid by the county to the owner.¹³⁰ If the owner is dissatisfied with the assessed value, he must appeal to the circuit court within five days of receipt of the

court judge. Id.

 $^{^{128}}$ § 97-15-39. Convictions for obstructing a public highway may subject the offender to one week's imprisonment or a \$50 fine. Id.

¹²⁸ See id. (felling tree into and obstructing stream or canal not less than 150 feet wide is misdemeanor punishable by \$50 fine or imprisonment of not more than week); § 97-15-41 (pushing, felling or cutting trees, logs, or treetops in excess of 6 inches diameter that materially impede flow or navigation of stream is punishable by \$200 fine unless logs are moved in customary commercial manner).

^{124 451} So. 2d 201 (Miss. 1984).

¹²⁶ Armstrong, 451 So. 2d at 205 (citing Miss. Code Ann. § 97-15-41 (1972)).

¹²⁶ Id. at 204.

¹²⁷ Id. at 205-06.

¹²⁸ Id. at 204, 207. The supreme court interpreted the injunction to require Georgia Pacific to remove only obstructions that were cut with a saw or used to build bridges and the silt accumulated from those obstructions. Id. The injunction did not require Georgia Pacific to remedy any damage done to the canal by natural causes. Id.

¹²⁹ Miss. Code Ann. § 65-7-9 (1972).

¹⁸⁰ Id.

notice of assessment.¹³¹ The timber owner's receipt of the value of damaged or dead trees should be counted as a blessing when contrasted with the potential for liability to third parties injured by dead or diseased trees or limbs falling onto the highway.¹³²

Despite statutory provisions, the owner or possessor of land has not traditionally had an affirmative duty to remedy natural conditions upon the land, even though the conditions may be dangerous. This general rule applies to the owner of rural lands, who is under no duty to make certain that every tree is safe and will not fall into a public highway. However, if the owner knows the tree is dangerous, if the tree is in an urban area, or if the tree is planted in a row of trees next to the highway and therefore not a natural condition, the landowner may have a duty to exercise reasonable care, including a duty to inspect and to make sure the tree is safe. 136

F. Environmental Issues

1. Prescribed Burning

Prescribed burning is "the deliberate use of fire under specified and controlled conditions, to accomplish one or more of several objectives of forest land management"¹³⁶ and is generally recognized as one of the most effective and inexpensive manage-

¹³¹ Id.

¹³² See generally Annotation, Liability of Private Owner or Occupant of Land Abutting Highway for Injuries or Damage Resulting from Tree or Limb Falling onto Highway, 94 A.L.R.3d 1160, 1161-81 (1979) (private owner or occupant of land abutting a highway may be held liable on negligence or nuisance principles for injuries or damage resulting from tree or limb falling onto highway).

^{*}Liability of the landowner for damage due to fallen trees is based on a number of factors, including the amount of traffic on the road, the urban or rural location of the property, the amount of property held by the landowner, and the type of activity the landowner conducts on the land. *Id*.

¹⁸³ W.L. Prosser & W.P. Keeton, The Law of Torts § 57 (5th ed. 1984); see Restatement (Second) of Torts §§ 363(1)-(3), 364 (1965) (setting forth traditional rule holding that landowner has no duty to remedy natural conditions on property); McCleary, The Possessor's Responsibility as to Trees, 29 Mo. L. Rev. 159, 159 (1964).

¹³⁴ W.L. PROSSER & W.P. KEETON, supra note 133.

¹³⁵ Id.

¹³⁶ Miss. Forestry Comm'n, Pub. No. 52, The Role of Prescribed Burning in Managing Your Southern Pine Forest.

ment tools available to timberland owners.¹⁸⁷ In Mississippi, both the Bureau of Pollution Control Department of Natural Resources and the Mississippi Forestry Commission have authority over various aspects of prescribed burning and should be consulted before any such activity is undertaken.

The Bureau of Pollution Control requires that three conditions be met before prescribed burning is allowed. First, permission must be obtained from the Mississippi Forestry Commission. The Commission requires anyone undertaking prescribed burning first to contact the Commission's dispatching tower or the County Forester's office, and if the weather is amenable to safe burning, personnel at the dispatching tower will issue a burning permit number over the telephone. The second requirement of the Bureau of Pollution Control is that the burning must take place between one hour after sunrise and one hour before sunset unless the Mississippi Forestry Commission permits otherwise. Third, if any starter or auxiliary fuels are used, they may consist only of dry vegetation and/or petroleum type fuels; no other combustible materials are permitted.

2. Liability for Damage Resulting from Aerial Application of Pesticides, Herbicides, Seeds and Chemicals

The crop dusting industry blossomed dramatically in the period following World War II, largely as a result of an increased number of trained pilots and the availability of surplus aircraft, together with the development of new and effective pest control chemicals. This sudden growth of the crop dusting industry gave rise to new issues of liability. In Mississippi, the crop duster is assumed to be an independent contractor, and the per-

¹⁸⁷ Mobley, Prescribed Burning Reduces Fire Hazard, Promotes Regeneration and Wildlife Habitat, Forest Farmer 7 (Feb. 1982).

¹³⁸ Bureau of Pollution Control, Air Emission Regulation APC-S-1 § 3.7 (amended Dec., 1988).

¹³⁹ Miss. Forestry Comm'n, supra note 136.

¹⁴⁰ Miss. Forestry Comm'n, Policy-Procedures 14 (1987).

¹⁴¹ Id.

¹⁴² Id.

¹⁴⁸ Annotation, Liability for Injury Caused by Spraying or Dusting of Crops, 37 A.L.R.3d 833, 837 (1971).

¹⁴⁴ Id.

son responsible for hiring the crop duster is vicariously liable for damages resulting from the crop duster's negligence. To this extent, crop dusting is considered to be an inherently dangerous activity. Any person operating or employing airplanes for the purpose of spraying or dusting crops or other vegetation is held to a standard of due care in performing such operations.

Crop dusting activities are regulated by statute in Mississippi. Since the term "crop" is not statutorily defined, it could be applied to the timber industry. If hormone-type herbicides are dispersed by aerial application, any person engaged in the application of these herbicides must obtain a license from the state entomologist¹⁴⁸ and furnish a bond or other security of at least \$10,000.¹⁴⁹ Liability for damages resulting from the use of these herbicides is based on a negligence standard,¹⁵⁰ and a statutory penalty of up to \$500 for each offense is provided by statute.¹⁵¹

The aerial application of pesticides, poisons, seeds and chemicals is regulated by the Agricultural Aviation Licensing Law of 1966,¹⁶² which applies to agricultural aircraft operations, including "forest preservation." The statute provides for the

¹⁴⁸ Lawler v. Skelton, 241 Miss. 274, 288, 130 So. 2d 565, 569 (1961). The court held that farmers and horticulturists had a right to spray growing crops but could not avoid liability by using an independent contractor to conduct such activities. *Id.*

¹⁴⁸ Id

¹⁴⁷ Id. at 289, 130 So. 2d at 569, (citing 6 Am. Jun. Aviation § 44 (1950)).

¹⁴⁸ Miss. Code Ann. § 69-21-7 (1972).

¹⁴⁹ Id. § 69-21-13.

¹⁵⁰ Id. § 69-21-15.

¹⁵¹ Id. § 69-21-27.

⁻¹⁵² Id. §§ 69-21-101 to -125 (Supp. 1989).

¹⁶³ Id. § 69-21-105(a)(3). "Aircraft" is defined as "any contrivance now known or hereinafter invented that is used or designed for navigation of or flight in air over land and water, and that is designed for or adaptable for use in applying pesticides, defoliants, seeds and fertilizers." Id. § 69-21-105(e). Helicopters, as well as planes, would be included in this definition; both are frequently used by industrial forestry companies for setting control burns, application of seeds, herbicides, hardwood control, pine release, fertilization, inspection for pine beetle infestations, fire control and detection, aerial photography, and other forestry activities. See Mississippi Forestry Commission, Muddy Boots and Propwash, 3 Forestry Forum No. 2, at 34 (Winter 1989-90). See generally, Society of American Foresters, Forestry Handbook §§ 6.35-39, 7.13, 8.3, 19.1-27 (1955).

creation of a state Board of Agricultural Aviation.¹⁵⁴ The Board is empowered, among other things, to regulate the application of chemicals and pesticides, to restrict the use of certain chemicals and pesticides which are hazardous to the health, safety and welfare of the public, and to license pilots.¹⁵⁵ The Act imposes a negligence standard and requires any person damaged as a result of crop dusting activities to file a written statement with the Mississippi Department of Agriculture and Commerce within sixty days of the date the damage occurred.¹⁵⁶ Statutory penalties for violations of the Act include fines of \$100 to \$500 and/or imprisonment for up to six months.¹⁵⁷

3. Solid Waste

Solid waste disposal questions frequently encountered in the timber industry include disposal of solid waste generated from production facilities, as well as the unauthorized dumping on industry-owned land by trespassers. In 1974, Mississippi took its first step in addressing the environmental issues involved in the disposal of "solid waste" by enacting the Solid Wastes Disposal Law of 1974. Subsequently, the Mississippi Board of Health adopted regulations that prohibited the construction or operation of facilities for collecting, transporting, processing, or disposing of solid waste without a permit. An industrial tim-

¹⁵⁴ Miss. Code Ann. § 69-21-107 (Supp. 1989).

¹⁸⁵ Id. §§ 69-21-109, -113.

¹⁵⁸ Id. § 69-21-123.

¹⁶⁷ Id. § 69-21-125.

ANN. §§ 17-17-1 to -135 (Supp. 1989)); see EPA Solid Waste Disposal Facility Guidelines, 40 C.F.R. § 257 (1989) (setting forth criteria for classification of solid waste disposal facilities). Solid waste is defined as meaning any garbage, refuse, or sludge from waste water or air pollution treatment plants or control facilities and also includes other discarded materials resulting from industrial, commercial, mining, and agricultural operations, and community activities. Solid waste does not include material and domestic sewage, pollution governed by the Federal Water Pollution Control Act or nuclear or by-product material as defined by the Atomic Energy Act. Miss. Code Ann. § 17-17-3(a) (Supp. 1989).

¹⁹⁷⁴ Miss. Laws, 573, § 6 empowered the State Board of Health to adopt rules and regulations needed to specify procedures to meet the requirements of the Solid Waste Disposal Act of 1974. On September 14, 1978, the Mississippi State Board of Health, for the first time, adopted "Regulations Governing Solid Waste Management." Section D, paragraph 401.34 of those regulations contains the prohibition concerning col-

ber company generating solid waste must dispose of that waste according to the requirements of state law and regulations. Garbage and putrescible wastes must be placed in sanitary landfills where the solid waste is compacted and covered with earth each day. Rubbish not containing putrescible wastes must be placed in approved landfills where cover need not be applied on a daily basis. Solid waste generated in silvicultural activities is excluded from coverage under Mississippi law and may be left on-site since it is not required to be placed in an approved sanitary landfill or other facility. 162

An industrial timber company that generates solid waste from production facilities can dispose of its waste in approved off-site facilities or on its own land. Mississippi statutes specifically allow a firm to dispose of its own solid waste on its land, provided the waste is not hazardous. Any business disposing of solid waste on its lands is subject to solid waste disposal site investigations or inventories required by federal and state law; the business would also be subject to regulation under state law if the solid waste is determined to have characteristics that con-

¹⁶⁰ Miss. Code Ann. § 17-17-3(g) (Supp. 1989); see Mississippi Department of Natural Resources, Bureau of Pollution Control, Non-Hazardous Waste Management Regulation, No. PC/S-1, § D (July 6, 1988) (solid waste sanitary landfill regulation).

lecting, transporting, processing or disposing of solid waste without a permit. Procedures for obtaining permits and regulations concerning permitted facilities have changed since the adoption of the initial regulations in 1978. Administration and enforcement of the Solid Waste Disposal Law of 1974 were transferred from the State Board of Health to the Bureau of Pollution Control of the Mississippi Department of Natural Resources and the Mississippi Commission on Natural Resources by 1981 Miss. Laws, 528 (codified at Miss. Code Ann. § 17-17-2 (Supp. 1989). After this transfer was accomplished, subsequent solid waste regulations were adopted, including Mississippi Department of Natural Resources, Bureau of Pollution Control, Non-Hazardous Waste Management Regulation, No. PC/S-1 (Sept. 1984); Mississippi Department of Natural Resources, Bureau of Pollution Control, Non-Hazardous Waste Management Regulations, No. PC/S-1 (Sept. 1985), Mississippi Department of Natural Resources, Bureau of Pollution Control, Non-Hazardous Waste Management Regulations, No. PC/S-1 (June 1987), and Mississippi Department of Natural Resources, Bureau of Pollution Control, Non-Hazardous Waste Management Regulation, No. PC/S-1 (June 1987), and Mississippi Department of Natural Resources, Bureau of Pollution Control, Non-Hazardous Waste Management Regulation, No. PC/S-1 (July 6, 1988).

¹⁸¹ Miss. Code Ann. § 17-17-3(h) (Supp. 1989); see Mississippi Department of Natural Resources, Bureau of Pollution Control, Non-Hazardous Waste Management Regulation, No. PC/S-1, § E (July 6, 1988) (rubbish disposal facility regulations).

^{162 §} A, ¶ 2e (July 6, 1988) (examples of silvicultural activities specifically cited in regulations are "timber harvesting slash and land clearing debris").

¹⁶⁸ Miss. Code Ann. § 17-17-13 (Supp. 1989).

stitute a danger to the environment or the public health, safety or welfare.¹⁶⁴

Industrial timber companies owning large tracts of land in rural areas that do not have county or municipal garbage collection services or conveniently located public use sanitary landfills can face severe problems in controlling illegal or unauthorized dumping. Mississippi recognizes unauthorized dumping as a "public nuisance *per se*" and requires it to be eliminated by removal or on-site burial.¹⁶⁵

Violations of the provisions of Mississippi's Solid Wastes Disposal Law, or any rules, regulations or written orders promulgated pursuant to that law subject the wrongdoer to civil penalties of up to \$25,000 per violation, mandatory or prohibitory injunctive orders, damage equal to the cost incurred in restoring loss of wildlife, and costs of remedial or cleanup actions. In addition, a violator could be convicted of a misdemeanor and face criminal penalties of imprisonment for one year or less for each separate offense. In

4. Hazardous Substances and Hazardous Waste

Society's concern over hazardous substances and hazardous waste is shared by the forest products industry. Industries' transforming of raw materials into finished products frequently results in the generation of hazardous substances and hazardous waste. As owners of property, industrial timber companies also face potential liability for cleaning up hazardous materials on their property.

The Environmental Protection Agency (EPA) has various sources of regulatory power in dealing with hazardous chemicals. If the chemical is manufactured for nonpesticidal uses, it can be regulated under the Toxic Substances Control Act (TSCA). ¹⁶⁸ EPA can also regulate chemicals under the Federal Insecticide,

¹⁶⁴ Id. § 17-17-29.

¹⁶⁵ Id. § 17-17-17.

¹⁶⁶ Id. § 17-17-29(1).

¹⁶⁷ Id. § 17-17-29(5).

^{168 15} U.S.C. §§ 2601-27 (1982 & Supp. 1989).

Fungicide and Rodenticide Act (FIFRA).169

The release of hazardous substances into the environment is governed by two general categories of federal environmental laws, those concerning generation, transportation, storage and disposal of hazardous waste, and those dealing with hazardous waste emergencies and cleanup. 170 Laws in the first category are contained in the Solid Waste Disposal Act, more commonly known as the Resources Conservation and Recovery Act (RCRA).¹⁷¹ Administered by the EPA,¹⁷² RCRA is designed to provide a recording system for the movement of hazardous waste, to ensure disposal of hazardous waste is accomplished without environmental contamination, and to provide an enforcement mechanism to ensure compliance. 173 Hazardous waste emergencies and cleanup are dealt with in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Authorization Act of 1986.174 CERCLA authorizes the federal government to require or take remedial action upon the release of a hazardous substance into the environment. 176 CER-CLA also establishes a fund to be used by the government in implementing a cleanup and provides that owners and operators of facilities where hazardous substances have been released are potentially liable for the cleanup of such substances. 176

The United States may hold a person or entity liable for a cleanup if it is shown that the site is a "facility," a "release" a

^{169 7} U.S.C. § 136(a)-(y) (1982 & Supp. 1989).

¹⁷⁰ D.W. Steven, Law of Chemical Regulation and Hazardous Waste 5-6 (1989). State laws have also been enacted to deal with hazardous substances and hazardous waste. See, e.g., Miss. Code Ann. § 17-17-15 (1972 & Supp. 1989) (regulating disposal of hazardous waste); id. § 49-29-1 to -11 (1972 & Supp. 1989) (same).

¹⁷¹ 42 U.S.C. § 1-6987 (1982) (current version at 42 U.S.C. §§ 6901-6991 (Supp. 1989)).

¹⁷² Solid Wastes, 40 C.F.R. § 240-81 (1989).

¹⁷³ D.W. Steven, supra note 170, at 5-7.

¹⁷⁴ 42 U.S.C. §§ 9601-9657 (1982) (current version at 42 U.S.C. §§ 9601-9675 (Supp. 1987)).

¹⁷⁵ Id. § 9604.

¹⁷⁶ Id. § 9607(a).

¹⁷⁷ The term "facility" is defined in 42 U.S.C. § 9601(9).

¹⁷⁸ The term "release" is defined in 42 U.S.C. § 9601(22).

of a "hazardous substance"¹⁷⁹ from the site has occurred or is occurring, the release has caused the United States to incur response costs, ¹⁸⁰ and the defendant is a "person" as defined by CERCLA. ¹⁸¹ There are very few defenses to liability under CERCLA. A person otherwise liable can escape liability only by showing that the release of hazardous substances and the damages resulting therefrom were caused solely by (1) an act of God; (2) an act of war; (3) an act or omission of a third party not in a contractual relationship with the defendant where the defendant exercised due care with respect to the hazardous substance and took precautions against foreseeable acts or omissions of the third party; or (4) any combination of the above. ¹⁸²

In addition to liability for the cost of a cleanup, any party who willfully violates or refuses to comply with a cleanup order may be further subject to civil fines¹⁸³ and punitive damages.¹⁸⁴ Additionally, civil penalties may be assessed for violation of the provisions relating to notice, destruction of records, financial responsibility, settlement agreements, and violations of administrative orders, consent decrees or agreements.¹⁸⁵

¹⁷⁹ The term "hazardous substance" is defined as:

⁽A) [a]ny substance designated pursuant to § 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution or substance designated pursuant to § 9602 of this Title, [authorizing the Administrator to designate additional substances as hazardous], (C) any hazardous waste having the characteristics identified under or listed pursuant to § 3001 of the Solid Waste Disposal Act [42 U.S.C.A. § 6921] . . . (D) any toxic pollutant listed under § 1317(a) of Title 33, (E) any hazardous air pollutant listed under § 112 of the Clean Air Act [42 U.S.C.A. § 7412], and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to § 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquified natural gas or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

⁴² U.S.C. § 9601(14) (Supp. 1989).

^{180 42} U.S.C. § 9601(14) (Supp. 1989).

¹⁸¹ United States v. Northernaire Plating Co., 670 F. Supp. 742, 746 (W.D. Mich. 1987); United States v. Bliss, 667 F. Supp. 1298, 1304 (E.D. Mo. 1987).

^{183 42} U.S.C. § 9607(b) (1982).

¹⁸³ Id. § 9607(c)(1) (Supp. 1987).

¹⁸⁴ Id. § 9607(c)(3) (Supp. 1987).

¹⁸⁸ Id. § 9609 (Supp. 1987).

5. Air and Water Pollution

The regulation and control of air and water pollution is primarily the responsibility of the individual states. With the enactment of the Clean Air Act Amendments of 1970, 187 however, the federal government took on a significant role in regulating air quality. Under the Act, the EPA established national ambient air quality standards, standards for pollutant emissions from new and modified stationary sources, hazardous air pollutants standards, and standards for motor vehicle emission. 189

On the state level, Mississippi has enacted the Mississippi Air and Water Pollution Control Law¹⁹⁰ and empowered the Mississippi Commission on Natural Resources to administer and enforce its provisions.¹⁹¹ The Commission is also empowered to set ambient standards for both air and water quality in the state.¹⁹² Violation of any provision of the Pollution Control Law can result in a civil penalty of up to \$25,000 per violation, with each day on which a violation occurs being deemed a separate and additional violation.¹⁹³ In addition to civil penalties, the Commission is empowered to obtain mandatory or prohibitory injunctive relief and may recover the costs of restocking waters, replenishing wildlife, and/or instituting remedial or cleanup action made necessary by the violation of pollution control laws.¹⁹⁴

Wild and Scenic Rivers

In 1986, the United States Congress enacted the Wild and Scenic Rivers Act. 198 Finding that certain rivers and their imme-

¹⁸⁶ See supra notes 68-89 and accompanying text (federal water pollution regulations and best management practices).

¹⁸⁷ 42 U.S.C. § 1857 (1982) (current version at 42 U.S.C. § 7401 (Supp. 1987)).

 $^{^{188}}$ F.F. Skillern, Environmental Protection: The Legal Framework \S 3.03 (1981).

¹⁸⁹ Id. §§ 3.03 -.09.

¹⁹⁰ Miss. Code Ann. §§ 49-17-1 to -43 (1972 & Supp. 1989).

¹⁰¹ Id. §§ 49-17-1, -43.

¹⁹² Id. § 49-17-19.

¹⁹⁸ Id. § 49-17-43(a).

¹⁸⁴ Id. § 49-17-43(b)-(d).

^{186 16} U.S.C. §§ 1271-1287 (1982) (amended 1988). The idea of giving special consideration to the preservation of streams existing in a natural state may have originated in a Natural Park Service response to inquiries from the Senate Select Committee on Natural

diate environments possessed outstanding scenic, recreational, geologic, wildlife, historic, and cultural value, Congress declared that the policy of the United States was to preserve those rivers in a free-flowing condition and to protect them for the benefit of present and future generations.¹⁹⁶

The National Wild and Scenic River System comprises rivers that have been included by act of Congress¹⁹⁷ or rivers designated by an act of a state legislature to be administered as wild, scenic or recreational rivers if their inclusion in the river system has been approved by the Secretary of Interior.¹⁹⁸ In order for a river to be eligible for inclusion in the system, it must be a free-flowing stream and possess one or more of the values incorporated in the declaration of Congress.¹⁹⁹

When any federal lands are included within the National Wild and Scenic River Systems, the federal department or agency with jurisdiction over those lands must follow such management policies as are necessary to protect the rivers. Such agencies are specifically directed to pay particular attention to scheduled timber harvesting, road construction and other activities that might be contrary to the purposes of the Act. In Mississippi, the segment of Black Creek from Fairley Bridge landing upstream to Moody's Landing is included in the Wild and Scenic River System. Because this section of Black Creek also lies partially in DeSoto National Forest, timber harvesting along Black Creek on federal lands may be restricted or prohibited. 203

Resources. 1968 U.S. Code Cong. & Admin. News 3801, 3802.

^{196 16} U.S.C. § 1271 (1982) (amended 1988).

¹⁹⁷ Id. § 1274 (Supp. 1989).

¹⁹⁸ Id. § 1273 (1982); see Fairfax, Andrews & Buchsbaum, Federalism and the Wild and Scenic Rivers Act: Now You See It, Now You Don't, 59 Wash. L. Rev. 417, 425-30 (1984) (noting that this provision holds possibility of creating administrative conflict between state and federal governments as well as competing federal agencies).

^{100 16} U.S.C. § 1273 (1988).

²⁰⁰ Id.

²⁰¹ Id. § 1283.

²⁰² Id. § 1274(a)(59) (Supp. 1989).

The restrictions upon timber harvesting on federal lands along wild and scenic rivers that may be imposed pursuant to 16 U.S.C. § 1283 are in addition to the general restrictions on timber harvesting in national forests. The forestry service generally prohibits cutting timber unless authorized by timber sale contract, federal law or regulation. 36 C.F.R. § 261.6 (1989). Management plans concerning the disposal of timber must be

7. Endangered Species

Over fifty years ago, Aldo Leopold considered the reasons why species became rare and extinct. He concluded that the cause was "shrinkage in the particular environments which their particular adaptations enable them to inhabit."²⁰⁴ In advocating a "conservation ethic," he suggested that shrinkage be controlled by modifying the environment with agricultural and forestry tools.²⁰⁵ Today, the Society of American Foresters continues to review the philosophy of Leopold in determining whether it should include a statement about land ethics in its code of ethics.²⁰⁶

The United States Congress resolved any question concerning the policy of this country to protect endangered species of fish, wildlife and plants with the adoption of the Endangered Species Act in 1973.²⁰⁷ That Act was adopted as a means of preserving the ecosystems upon which endangered²⁰⁸ or threatened²⁰⁹ species depend.²¹⁰ The Act empowers the Secretary of the Interior to promulgate regulations that determine whether species are endangered or threatened and to designate critical habitats for such species.²¹¹ A list of endangered and threatened wildlife, which is published in the Federal Register,

prepared for each national forest. 36 C.F.R. § 221.3 (1989). Persons conveying lands to the forest service who reserve timber rights must cut and remove their timber according to specific rules and regulations. 36 C.F.R. § 251.14 (1989). Other federal statutes regulating forestry practices on forests, ranges and lands include the Forest and Rangeland Renewable Resources Planning Act of 1974. 16 U.S.C. §§ 1600-1687 (1988) and the Multiple-Use Sustained-Yield Act of 1960, 16 U.S.C. §§ 528-531 (1988).

²⁰⁴ Leopold, Conservation Ethic, 87 J. Forestry 26, 44 (June 1989).

²⁰⁰ Id.

²⁰⁸ Coufal, The Land Ethic Question, 87 J. Forestry 22 (June 1989).

²⁰⁷ 16 U.S.C. §§ 1531-1544 (1988). This Act was not the first federal statute dealing with endangered species. Earlier legislation included the Endangered Species Preservation Act of Oct. 15, 1966, Pub. Law No. 89-669, 80 Stat. 926 and the Endangered Species Conservation Act of 1969, Pub. Law No. 91-135, 83 Stat. 275. 1973 U.S. CODE CONG. & ADMIN. News 2990.

²⁰⁸ Endangered species are defined as species in danger of extinction throughout all or a significant portion of their range. 16 U.S.C. § 1532(6) (1988).

²⁰⁹ Threatened species are defined as any species likely to become an endangered species in the foreseeable future throughout all or a significant portion of their range. 16 U.S.C. § 1532(20) (1988).

²¹⁰ Id. § 1531(b).

²¹¹ Id. § 1533. Those regulations are codified at 50 C.F.R. § 424.01-424.21 (1989).

provides information regarding the species' common name, scientific name, historical range, population, status as endangered or threatened, critical habitat, and special rules.²¹² The Act also requires federal agencies to ensure that their actions do not jeopardize the existence of endangered or threatened species.²¹³ This provision has been the basis of attempts by various conservation or wildlife groups to stop certain types of federal activities. In Mississippi, this provision served as the basis for a suit challenging the construction of Interstate Highway 10 because of the impact upon the sandhill crane.²¹⁴ Although the effect of the highway construction was the subject of the suit, the case also addressed the destructive impact of past timber management practices on the habitat of the crane.

Recent attention has been focused in other regions of the country upon the plight of the northern spotted owl and other endangered or threatened species located on United States Forest Service lands where timber harvesting might occur within the critical habitat of the species.²¹⁵ Southern states, including Mississippi, will soon see similar issues raised as the United States Forest Service authorizes harvesting of its timber in the South.²¹⁶

²¹² 50 C.F.R. § 17.11 (1989).

^{218 16} U.S.C. § 1536 (1976).

National Wildlife Fed'n v. Coleman, 529 F.2d 359 (5th Cir. 1976). The trial testimony of expert witnesses indicated that in recent years paper companies had acted in consultation with the Fish and Wildlife Service to safeguard the habitat of the crane. *Id.* at 374 n.20.

²¹⁶ Rage Over Trees (Turner Broadcasting Sept. 1989). A portion of the program was devoted to the northern spotted owl, with arguments made by environmentalists that the harvesting of timber from ancient forests in the Willamette National Forest near Opal Creek, Oregon, would adversely impact the northern spotted owl and the ecosystem as a whole. *Id.*

²¹⁶ Land Swap Questions: Can Hunters, Soldiers Co-Exist? The Clarion Ledger, Jan. 7, 1990, at 1A, Col. 1. Walter Sellers, manager of the Leaf River Wildlife Management Area, had tried to persuade the U.S. Forest Service not to clearcut old-growth forests along Whiskey Creek in South Mississippi. Id. Sellers was also concerned with a potential land swap involving 16,000 acres of Colorado grass land owned by the Department of the Army and 32,000 acres of the DeSoto National Forest, including a majority of the Leaf River Preserve that is owned by the United States Forest Service. Id. The land acquired by the Department of the Army would be used for tank maneuvers by Mississippi National Guardsmen. Id. Sellers questioned the impact of such a trade upon the wildlife, including endangered and threatened species such as the black bear, red-

Any person who knowingly violates the Endangered Species Act may be assessed civil fines of up to \$25,000 for each violation.²¹⁷ The Act also provides for the imposition of criminal penalties of up to one year in prison and/or a \$50,000 fine.²¹⁸ Persons reporting violators may receive rewards for their efforts in aiding enforcement of the Act.²¹⁹

In 1974, Mississippi enacted the Nongame and Endangered Species Conservation Act,²²⁰ which was predicated upon a legislative determination that endangered species of wildlife indigenous to the state should be protected.²²¹ Pursuant to the statute, the State Game and Fish Commission compiles a list of endangered species that is reviewed every two years.²²² There are presently forty-five species and sub-species of animals on the Mississippi list.²²³ That list is divided into groups of mussels, fish, amphibians, reptiles, birds, and mammals, and it identifies the species by common and scientific name as well as indicating whether those species are subject to federal protection.²²⁴ Any

cockaded woodpecker, gopher tortoise and black pine and indigo snakes. Id.

The red-cockaded woodpecker will likely be to southern pine what the northern spotted oil has become for douglas fir: a symbol and rallying cry for the preservation of old growth. It is generally acknowledged that the red-cockaded woodpecker has become an endangered species because its habitat is mature pine forest with an open understory. That habitat is uncommon today due to forestry practices emphasizing the harvesting of pine before the tree reaches the maturity preferred by the red-cockaded woodpecker. Recommendations from the Mississippi Department of Wildlife Conservation for survival of this species include calls for publicly owned forestland to "be managed to produce old-growth timber." See "Red-Cockaded Woodpecker" in Miss. Dept. of Wildlife, Fisheries & Parks, Museum of Natural Science, Portfolio: Endangered Species of Mississippi (1988) [hereinafter Endangered Species]

²¹⁷ 16 U.S.C. § 1540(a) (1988).

²¹⁸ Id. § 1540(b).

²¹⁹ Id. § 1540(d).

²²⁰ Miss. Code Ann. § 49-5-101 to -119 (Supp. 1989).

²²¹ Id. § 49-5-103(b).

²²² Id. § 49-5-109.

²²³ Endangered Species, supra note 216.

eagle, red-cockaded woodpecker and black bear on the list but could be surprised with the listing of less well known species such as the southern pink pigtoe (mussel), frecklebellied madtom (fish), yellow-blotched sawback (reptile), or West Indian manatee (mammal). An informative packet of information entitled "Endangered Species of Mississippi" is available upon request from the Mississippi Department of Wildlife, Fisheries, and Parks, Museum of Natural Science, 111 North Jefferson Street, Jackson, Mississippi 39201-2897. See Endangered Species, supra note 216.

person violating the Nongame and Endangered Species Conservation Act may be subject to penalties of up to \$1,000 and imprisonment of up to one year. Additionally, the Act empowers law enforcement officers to seize equipment and merchandise used in connection with any violation of the Act and provides that such equipment and merchandise may be forfeited to the state upon conviction of the violator. 226

G. Impact of the Occupational Safety and Health Act

The Occupational Safety and Health Act of 1970 (OSHA)²²⁷ was enacted by Congress to improve safety in the work place. Three new government agencies were created to aid in developing and enforcing the directives of OSHA. The National Institute for Occupational Safety and Health (NIOSH) is contained within the Department of Health and Human Services and conducts scientific research necessitated by OSHA.²²⁸ The Occupational Safety and Health Administration within the Department of Labor is responsible for enforcement and promulgation of OSHA regulations.²²⁹ Finally, the Occupational Safety and Health Review Committee is charged with adjudicating administrative cases arising under OSHA.²³⁰

Several sections of OSHA are applicable to the timber industry. Standards promulgated for agriculture establish general safety requirements for tractors and other machines with moving parts and also prescribe field sanitation standards for drinking water and restroom facilities.²³¹ Other OSHA regulations pertain directly to pulpwood logging. These regulations apply to the preparation and moving of pulpwood timber from the stump to the point of delivery, but do not apply to logging operations relating to sawlogs, vernier bolts, poles, piling, and other forest products.²³² The regulations prescribe standards for protective

^{335 § 49-5-101(}b).

^{228 § 49-5-115.}

^{227 29} U.S.C. §§ 651-678 (1982).

^{228 29} C.F.R. § 1928 (1989).

³³⁸ Id. § 1910.266.

²⁸⁰ ROTHSTEIN, EMPLOYMENT LAW 512-13 (1987).

²³¹ 29 C.F.R. § 1928 (1989).

²³² Id.

gear and apparel, environmental conditions, work areas, operation of chain saws, stationary and mobile equipment operations, road conditions and explosives.²⁸³ The regulations also prescribe minimum road standards and regulate the harvesting and transportation of trees.

OSHA covers every "employer" in a business affecting commerce who has one or more employees.²³⁴ Status as an "employer" or "employee" under OSHA has been a frequently litigated issue. Rather than utilizing narrow common-law definitions, courts have looked to the purpose of OSHA in deciding this issue.²³⁶ Because OSHA has the broad remedial purpose of protecting the worker from industrial injury, "employer" and "employee" have been defined more expansively under OSHA than for wage or tort purposes.²³⁶

Violations of OSHA can result in the imposition of both civil and criminal penalties. Civil penalties of up to \$1,000 per violation are assessable for both "serious"²³⁷ and "non-serious"²³⁸ violations, while willful or repeated violations may result in penalties of up to \$10,000 for each such violation.²³⁹ Criminal penalties may be imposed against an employer for willful violations which result in the death of an employee,²⁴⁰ against any

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²³⁴ 29 U.S.C. § 652(5) (1982); OCCUPATIONAL SAFETY AND HEALTH ADMINSTRATION, UNITED STATES DEPARTMENT OF LABOR, ALL ABOUT OSHA 3 (1982). Whether or not the worker is an employee or independent contractor is frequently at issue in OSHA proceedings. See Van Buren—Madawaska Corp., Employment Safety and Health Guide (CCH) 1989 OSHA, para. 28,504 at 37,779 (May 9, 1989) (noting reversal of summary judgment in favor of timber developer where several elements of "economic realities" test used to determine status as employer or independent contractor were in factual dispute).

²³⁵ See Clarkson Constr. Co. v. Occupational Safety & Health Review Comm'n, 531 F.2d 451 (10th Cir. 1976); Frohlick Crane Serv., Inc. v. Occupational Safety & Health Review Comm'n, 521 F.2d 628 (10th Cir. 1975).

²⁸⁶ Clarkson, 531 F.2d at 458.

²⁸⁷ A "serious" violation is one in which there is a substantial probability that death or serious physical harm could result and the employer knew or should have known of such probability. 29 U.S.C. § 666(k) (1982).

²³⁸ A "non-serious" violation is one which directly relates to job safety and health, but which probably would not cause death-or serious physical injury. 29 U.S.C. § 666(k) (1982).

²³⁹ Id. § 666(a)-(c).

²⁴⁰ Id. § 666(e).

person who gives advance notice of an inspection by OSHA personnel,²⁴¹ and against any person who knowingly makes any false statement, representation or certification in any document filed or required to be maintained by OSHA regulations.²⁴²

H. Land Use Regulations

The timber industry's dependence on fee ownership or leasehold interests in land renders any zoning restrictions and land use regulations potentially devastating to a timber company's viability. A land use regulation which a governmental body has concluded will promote the health, safety, morals or general welfare will generally be upheld despite the adverse effects on recognized property interests. In determining whether the government must compensate an injured landowner, the courts will consider the regulation's economic impact on the landowner and the extent to which it has interfered with "distinct investment-backed expectations." A governmental land use regulation can amount to a "taking" where the ordinance "does not substantially advance legitimate state interests . . . or denies an owner economically viable use of his land." 1245

One example of land use regulations in Mississippi is the restriction placed on the use of lands adjoining airports. Mississippi statutes provide that every political subdivision having an airport hazard²⁴⁶ within its limits may adopt and enforce regulations specifying permitted land uses and restricting the height to which trees may grow.²⁴⁷ Permits or variances must be obtained for trees to grow higher or become a greater hazard to air navigation than when the regulations were adopted.²⁴⁸

²⁴¹ Id. § 666(f).

²⁴² Id. § 666(g).

²⁴³ Penn Cent. Transp. Co. v. New York City, 438 U.S. 104, 125 (1978). The Supreme Court has upheld the constitutionality of zoning ordinances for over 60 years. See Village of Euclid v. Ambler Realty Co., 272 U.S. 365 (1926).

²⁴⁴ Penn Central, 438 U.S. at 124.

²⁴⁶ United States v. Riverside Bayview Homes, 474 U.S. 121, 126 (1985) (quoting Agins v. Tiburon, 447 U.S. 255, 260 (1980)).

²⁴⁶ An airport hazard includes any tree that obstructs airspace or is otherwise hazardous to the landing or taking off of aircraft. Miss. Code Ann. § 61-7-3(2) (1972).

²⁴⁷ Id. § 61-7-7(1).

²⁴⁸ Id. § 61-7-17.

Zoning restrictions are not generally classified as a "taking" and therefore do not require compensation to an injured party.²⁴⁹ Determining whether a particular zoning regulation is valid requires balancing the public interest against the rights of individual owners.²⁵⁰ Zoning regulations carry a presumption of reasonableness in favor of their validity.²⁵¹

The rezoning of an area from one classification to another could significantly affect a business located therein. For that reason, reclassification of property from one category to another requires proof that there was a mistake in the original zoning or that the character of the affected area has changed to such an extent that rezoning is justified in the public interest.²⁵²

As a general rule, a use existing at the time a zoning ordinance goes into effect cannot be restricted by that ordinance unless the use was illegal, a nuisance or harmful to the public.²⁵³ Typically, nonconforming uses are "grandfathered" into a new or revised ordinance.²⁵⁴ However, nonconforming uses are frequently subject to some regulation. For example, although one may preserve a nonconforming use by repair and restoration, prohibitions often exist against substantial changes in structures or the area associated with the use. Additionally, abandonment of the nonconforming use terminates the owner's right to utilize his property in a manner that does not conform with present zoning regulations.²⁵⁵

²⁴⁹ See City of Jackson v. Bridges, 139 So. 2d 660, 663 (Miss. 1972) (constitutionality of zoning as valid exercise of police power).

²⁵⁰ Id. Mississippi zoning regulations and zoning changes are governed by Miss. CODE ANN. §§17-1-15, -17, respectively.

²⁸¹ City of Clinton v. Conerly, 509 So. 2d 877, 883 (Miss. 1987) (citing Holcomb v. City of Clarksdale, 217 Miss. 892, 65 So. 2d 281 (1953)). See generally Gladden, The Change or Mistake Rule: A Question of Flexibility, 50 Miss. L.J. 375 (1979) (presumption of validity).

²⁸² Conerly, 509 So. 2d at 883.

²⁵⁹ 8A E. McQuillin, Municipal Corporations 11 (3d ed. 1986).

²⁶⁴ Id. at 7; see, e.g., Miss. Code Ann. § 61-7-15 (Supp. 1989) (airport zoning regulations may not require removal or alteration of nonconforming trees that existed when regulations were adopted or amended).

²⁶⁵ 8A E. McQuillin, supra note 253, at 18-19. See generally, Annotation, Change in Area or Location of Nonconforming Use as Violation of Zoning Ordinance, 56 A.L.R.4th 769 (1987); Annotation, Zoning: Right to Resume Nonconforming Use of Premises After Involuntary Break in the Continuity of Nonconforming Use Caused by Difficulties Unrelated to Governmental Activity, 56 A.L.R.3d 14 (1974).

I. Tax Issues

1. Federal Taxes

For federal income tax purposes, "timber" includes both standing trees suitable for the production of lumber, pulpwood, or other wood products²⁵⁶ and evergreen trees more than six years old if severed from their roots and sold for ornamental purposes.²⁵⁷ Also, under federal regulations, a taxpayer must "own" an economic interest in standing timber for income tax purposes.²⁵⁸ The most common forms of economic interest in standing timber are royalty interests,²⁵⁹ contractual cutting contract rights²⁶⁰ and ownership. Only those taxpayers meeting the statutory definition of ownership²⁶¹ may elect to consider an intracompany transaction as a sale or exchange of timber,²⁶² or retain an economic interest in a transaction for the disposal of timber.²⁶³

An owner of timber may elect to avoid income tax on 100% of the income derived from cutting and selling timber if the tax-payer owned the timber or a contract right to cut the timber for more than one year prior to date the timber is cut.²⁶⁴ However, the timber must be cut for sale or use in the taxpayer's trade or business under this exception.²⁶⁵ The taxpayer is treated as if he sold the cut timber to himself, and his gain or loss is determined

²⁶⁶ DEPARTMENT OF AGRIC., HANDBOOK No. 596, A GUIDE TO FEDERAL INCOME TAX FOR TIMBER OWNERS 20 (1982).

²⁸⁷ 26 U.S.C. § 631(a) (1986).

²⁵⁸ See Treas. Reg. § 1.611-1(b)(1) (1983).

²⁵⁹ A royalty interest in timber is the interest retained by the owner after granting a contract right to cut to another party and may exist for the life of the property or a term of years. See Pankratz v. Commissioner, 22 T.C. 1298 (1954); Rev. Rul. 80-73, 1980-1 C.B. 128; Rev. Rul. 77-400, 1977-2 C.B. 206; Rev. Rule. 69-352, 1969-1 C.B. 34.

²⁶⁰ A contract right to cut must include the right to sell the cut timber or to use the cut timber in trade or business. Contracts which merely arrange for the performance of cutting services are regarded as service contracts and do not create a royalty interest in the timber. Rev. Rul. 58-295, 1958-1 C.B. 249.

²⁸¹ Owners include "Any person who owns an interest in such timber, including a sub-lessor and a holder of a contract to cut timber." 26 U.S.C. § 631(b); Rev. Rul 77-247, 1977-2 C.B. 211.

²⁶² 26 U.S.C. § 631(a) (1986).

²⁶³ Id. § 631(b).

²⁶⁴ Id. § 631(a).

²⁶⁵ Id.

by the difference between the fair market value of the cut timber and its fair market value as standing timber.²⁶⁶ Any resulting gain or loss is then aggregated with other gains or losses allowed under the Internal Revenue Code provisions.²⁶⁷

Section 631(b) determines the gain or loss resulting from an owner's disposition of timber when he retains an economic interest in the timber.²⁶⁸ These provisions require that the disposal transaction be governed by a contract.²⁶⁹ The gain or loss resulting from such a transaction is figured as the difference between the amount realized from the disposal and the adjusted basis for depletion.²⁷⁰ Adjusted depletion basis is the basis to the tax-payer at acquisition plus capitalized expenses and less certain losses and allowable depletion.²⁷¹

Although there are no specific provisions in the Code addressing the tax treatment of certain unique practices inherent in the timber industry, some tax regulations and revenue rulings have been promulgated that deal with other aspects of the industry. For example, planting and reforestation costs are capitalized and recovered through depletion allowances,²⁷² and cost incurred for building logging roads is also capitalized.²⁷³ Also Christmas tree operations can deduct costs incurred for pruning and shearing that preserve and maintain the value of the trees.²⁷⁴

State Taxes

Mississippi assesses a privilege tax on persons engaged in

²⁶⁶ Treas. Reg. § 1.631-1(a)(1). The fair market value is determined by such factors as the character and the quality of timber, the quantity of timber per acre, accessibility of the timber, and freight rates. Treas. Reg. § 1.611-3(f).

²⁶⁷ 26 U.S.C. § 1231(b)(2) (1986).

²⁶⁸ Id. § 631(b) (1986).

²⁸⁹ Treas. Reg. § 1.631.2(a)(1) (1980). This language has been literally interpreted to include binding oral contracts. Rev. Rul. 83-160, 1983-2 C.B. 99.

²⁷⁰ Treas. Reg. § 1.631-2(a)(1) (1980).

²⁷¹ See 26 U.S.C. § 1016(a); Treas. Reg. § 1.611-1(c) (1973), 1.611-3(b) (1960).

²⁷² Treas. Reg. § 1.611-3(a) (1960); Rev. Rul. 75-467, 1975-2 C.B. 93; Rev. Rul. 76-290, 1976-2 C.B. 188.

²⁷³ Tax treatment is different for primary, secondary, and spur roads. Rev. Rul. 68-193, 1968-1 C.B. 79.

²⁷⁴ Rev. Rul. 71-228, 1971-1 C.B. 53.

the business of "growing, felling, cutting, severing and producing" logs or timber products.²⁷⁵ The severed timber is assessed by its quantity and value,²⁷⁶ with valuation computed at the date of severance.²⁷⁷ Standing timber and severed timber remaining in the log state are exempt from all ad valorem taxes.²⁷⁸ Pulpwood measured by volume under the Mississippi Uniform Pulpwood Scaling Practices Act is subject to a \$.08 per cord fee that must be submitted to the State Tax Commission.²⁷⁹

County boards of supervisors and municipal authorities have a discretionary power to grant ten-year exemptions from non-state ad valorem taxation to certain new enterprises.²⁸⁰ Timber-related enterprises which may be exempted under this provision include wood veneering plants, pulp plants, paper plants, and sawmills.²⁸¹

J. Secured Transactions: Timber Interests as Realty and Personalty

Mississippi courts traditionally held that the sale of standing timber constituted a conveyance of an interest in real property.²⁸² In 1977, however, the sale of standing timber was statutorily reclassified as a contract for the sale of personalty.²⁸³

²⁷⁸ Miss. Code Ann. § 27-25-1(1) (Supp. 1989).

²⁷⁶ Id. § 27-25-1(a)-(h).

²⁷⁷ Id. § 27-25-5.

²⁷⁸ Id. § 27-25-27.

²⁷⁰ Id. § 75-79-33 (Supp. 1989).

²⁸⁰ Id. § 28-31-101 (Supp. 1989).

²⁸¹ Id. § 27-31-101 (Supp. 1989).

²⁸² See Butterfield Lumber Co. v. Guy, 92 Miss. 361, 373, 46 So. 78, 79 (1908) (rejecting personalty theory for timber sales); Harrell v. Miller, 35 Miss. 700, 702 (1858) (noting that term "land" includes produce grown upon it).

²⁸³ Miss. Code Ann. § 75-2-107(2) (Supp. 1989). The 1977 modification of this statute was related to the 1972 proposed amendment to the model Uniform Commercial Code. The official reason stated as a basis for the change in the model code was that "[s]everal timber growing states have changed the . . . Code to make timber to be cut under a contract of severance goods, regardless of the question of who is to sever them. The section is revised to adopt this change. Financing of the transaction is facilitated if the timber is treated as goods instead of real estate. A similar change is made in the definition of 'goods' in section 9-105. To protect persons dealing with timberlands, filing on timber to be cut is required in part 4 of Article 9 to be made in real estate records in a manner comparable to fixture filing." 1 U.L.A. 235 (1989). Only two Mississippi cases have cited the revised statute, neither of them addressing the statute from a secured

Under present Mississippi statutes, a contract conveying an interest in timber to be cut should be treated as a "good" under the Uniform Commercial Code.²⁸⁴ Because the contract pertains to realty, a party perfecting a secured interest in the transaction would be well advised to follow the requirements of the Uniform Commercial Code²⁸⁵ pertaining to fixture filings²⁸⁶ and file in both the land records and in the U.C.C. records.²⁸⁷

K. Encroachments

An encroachment is defined as "an intrusion or invasion on an adjoining property without benefit of an appurtenant easement."²⁸⁸ Typically, encroachments are physical objects such as fences, walls, trees, and foundations that extend beyond the property line of one landowner onto, into, over, or under the property line of an adjoining landowner.²⁸⁹ An encroachment is most often remedied when the owner of the land encroached

- 284 Miss. Code Ann. § 75-9-105(h) (1972).
- ²⁸⁵ See Miss. Code Ann. § 75-9-401(1)(b) (Supp. 1989) (filing should be made in office where a mortgage would be filed when collateral is timber to be cut).
- ²⁸⁶ Miss. Code Ann. § 75-9-313 (1972). This statute concerns the priority of secured interests in fixture filings. Miss. Code Ann. § 75-9-402 (1972) provides the formal requisites of a financing statement and specifies that, where the statement is one "covering timber to be cut," it must be filed for record in the real estate records, contain a sufficient description of the real estate, and provide the name of the record owner or lessee if different from the debtor. *Id.*
- ³⁸⁷ See Miss. Code Ann. § 75-9-401(1)(c) (Supp. 1989) (providing for dual filing in office of chancery clerk of appropriate county and office of secretary of state).
 - 288 2 C.J.S. Adjoining Landowners § 41 (1965).
- ²⁸⁹ See Trotter v. Gaddis & McLaurin, Inc., 452 So. 2d 453, 455 (Miss. 1984) (fence); Eady v. Eady, 362 So. 2d 830, 831 (Miss. 1978) (fence); Allen v. Thomas, 215 So. 2d 882, 883 (Miss. 1968) (fence); Berry v. Houston, 195 So. 2d 515, 516 (Miss. 1967) (blacksmith shop and timber-bordered garden); Mason v. Gaddis Farm, Inc., 230 Miss. 666, 93 So. 2d 629, 631-32 (Miss. 1957) (barbed-wire fence); Snowden & McSweeny v. Hanley, 195 Miss. 682, 16 So. 2d 24, 25 (1943) (hedgerow).

transaction point of view. See Bay Springs Forest Prods., Inc. v. Wade, 435 So. 2d 690, 694 (Miss. 1983) (discussing applicability of revised statute to transferor of timber in action to recover damages for wrongfully converted timber); Bell v. Hill Bros. Constr. Co., 419 So. 2d 575, 578 n.1 (Miss. 1982) (citing statute in discussion of whether statute of frauds applied to revocable license). This amendment was consistent with the amendment on the same date to Miss. Code Ann. § 75-9-105(h) (1972) defining "goods" as including "standing timber which is to be cut and removed under conveyance or contract for sale."

upon files an action to clear title.290

The duty to prevent the encroachment is not on the victim, but rather on the encroacher.²⁹¹ Nevertheless, the victim who passively observes the construction of an encroachment may be estopped from later exercising his legal rights against his encroaching neighbor.²⁹² When such a landowner is estopped from exercising his right to protect his property, the adjoining landowner does not necessarily gain title to the land upon which the encroachment rests.²⁹³ When the original entry was not adverse to the rights of the legal owner, no title passes because of the encroachment.²⁹⁴

Encroachments often ripen into adverse possession.²⁹⁵ Mississippi courts place the burden of proving adverse possession on the non-record title holder²⁹⁶ The adverse claimant must prove that the property was held openly, notoriously, visibly, exclusively, and for a continuous and uninterrupted period of ten years.²⁹⁷

In applying the elements of adverse possession, a court will

²⁸⁰ See, e.g., Trotter, 452 So. 2d at 454; Ford v. Rhymes, 233 Miss. 651, 103 So. 2d 363, 364 (1958).

²⁹¹ 2 C.J.S., supra note 288, § 42.

²⁹² Bright v. Michel, 137 So. 2d 155, 159 (Miss. 1962).

²⁸³ See Johnson v. Black, 469 So. 2d 88, 91 (Miss. 1985) (possession with permission of record title holder is never sufficient in and of itself to establish adverse possession and ripen into title in adverse possessor, no matter how long it continues).

²⁰⁴ See St. Regis Pulp & Paper Corp. v. Floyd, 238 So. 2d 740, 743 (Miss. 1970) (adverse possession claim cannot be based upon possession alone); Moore v. Crosby Chemicals, Inc., 227 Miss. 786, 86 So. 2d 869, 870 (1956) (original permissive entry continues until hostile act); Williams v. Patterson, 198 Miss. 120, 21 So. 2d 477, 480 (1945) (positive assertion of hostile right necessary for adverse possession claim).

³⁰⁰ Trotter, 452 So. 2d at 455. Adverse possession does not require an enclosure of or an improvement on the land. Occupancy or use is sufficient to establish adverse possession, but enclosures or improvements are more persuasive evidence. V. GRIFFITH, OUTLINES OF THE LAW 165 (1948).

²⁹⁶ See Roy v. Kaiser, 501 So. 2d 1110, 1111 (Miss. 1987); Gadd v. Stone, 459 So. 2d 773, 774 (Miss. 1984); Georgia Pac. Corp. v. Blalock, 389 So. 2d 498, 502 (Miss. 1980); Eady v. Eady, 362 So. 2d 830, 832 (Miss. 1978).

²⁹⁷ See McNeely v. Jacks, 526 So. 2d 541, 544 (Miss. 1988) (elements of adverse possession); Roy v. Kayser, 501 So. 2d 1110, 1111 (Miss. 1987) (noting burden carried by adverse possession claimant under Mississippi law); Miss. Code Ann. § 15-1-13 (1972) (10 years adverse possession gives full and complete title except against persons under disability who lose title 10 years from date of removal of their disability or 31 years from date of adverse possession, whichever first occurs).

look to the specific facts of each case, particularly the character of the land involved, in order to ensure that a title holder will not be disseised of property without his knowledge. Courts are also careful to ensure that the statute of limitations will not run against an owner who had no reason to believe that seisin had been interrupted.298 When timberland is the subject of an adverse possession suit, courts have looked to a number of factors in determining whether occupancy by a party is sufficient to establish acts of ownership. These factors include: (1) surveying the land;299 (2) identifying the boundaries by painting trees, blazing trees, or staking corners;300 (3) posting the property;301 (4) fencing the property; 302 (5) using the land for farming or cattle purposes;303 (6) hunting on the property, granting hunting leases, reserving hunting rights or evicting hunters, and arresting poachers;304 (7) paying taxes;305 (8) establishing pre-suppression fire lanes or fire guards; 306 (9) planting or transplanting trees; 307 (10) cutting trees or utilizing wood products;308 and (11) placing mortgages on the property, offering it for sale, or granting oil

²⁹⁶ McMahon v. Yazoo Delta Lumber Co., 92 Miss. 459, 464-65, 43 So. 957, 958 (1907).

²⁸⁹ Grantham v. Masonite, 218 Miss. 745, 749, 67 So. 2d 727, 728 (1953) (cited with approval in Moffett v. International Paper Co., 243 Miss. 562, 564, 139 So. 2d 655, 656 (1962)).

³⁰⁶ Houston v. United States Gypsum Co., 652 F.2d 467, 471 (5th Cir. 1981); Grantham, 67 So. 2d at 728.

³⁰¹ Houston, 652 F.2d at 471; Grantham, 67 So. 2d at 728.

³⁰² Houston, 652 F.2d at 471; Anderson Tully Co. v. Walls, 226 F. Supp. 804, 811 (N.D. Miss. 1967); Mathieu v. Crosby Lumber & Mfg. Co., 210 Miss. 484, 492, 40 So. 2d 894, 896 (1962).

³⁰³ Houston, 652 F.2d at 471; Anderson Tully Co., 226 F. Supp. at 811; Mathieu, 40 So. 2d at 896.

³⁰⁴ Houston, 652 F.2d at 471; Anderson Tully Co., 226 F. Supp. at 811.

³⁰⁶ Broadus v. Hickman, 210 Miss. 885, 886-87, 50 So. 2d 717, 718 (1951); Native Lumber Co. v. Elmer, 117 Miss. 720, 733, 78 So. 703, 705 (1918); Southern Pine Co. v. Pigott, 93 Miss. 281, 286, 47 So. 381, 382 (1908); A.W. Stevens Lumber Co. v. Hughes, 88 Miss. 884, 38 So. 769, 770 (1905); McCaughn v. Young, 85 Miss. 277, 292-93, 37 So. 839, 842 (1905).

³⁰⁸ Broadus, 50 So. 2d at 719.

³⁰⁷ Houston, 652 F.2d at 471; Broadus, 50 So. 2d at 719.

³⁰⁸ Broadus, 50 So. 2d at 719; Mathieu, 40 So. 2d at 896; Native Lumber Co., 78 So. at 705; Dedeaux v. Bayou Delisle Lumber Co., 112 Miss. 325, 329, 73 So. 53, 54 (1916); A.W. Stevens Lumber Co., 38 So. at 770; McCaughn, 37 So. at 842.

and gas leases.309

Adverse possession runs only against the possessory interest,³¹⁰ which, in the case of leased property, is held by the tenant.³¹¹ Thus any encroachment ripening into adverse possession against a tenant does not injure the reversionary interest of the landlord³¹² unless the landlord had unequivocal notice of the adverse possession.³¹³

L. Weights and Measures

In Mississippi, pulpwood can be sold by volume measured in cords³¹⁴ or by weight measured in tons.³¹⁵ In converting volume to weight, the factors to be used under state law are 5,200 pounds per pine cord, 5,400 pounds per soft hardwood cord, 5,600 pounds per mixed hardwood cord and 5,800 pounds per hard hardwood cord.³¹⁶ According to the Mississippi statute, sawlogs and square timber are required to be measured by the table known as "Scribner's Lumber and Log-book by Doyle's Rule." The use of the international log rule³¹⁸ or any other

³⁰⁸ Houston, 652 F.2d at 471; McCaughn, 37 So. at 842.

³¹⁰ See Breeden v. Tucker, 533 So. 2d 1108, 1110 (Miss. 1988) (adverse possession does not begin to run against owner of reversionary interest until death of owner of life estate who was in sole possession of property).

³¹¹ See Standard Fruit & S.S. Co. v. Putnam, 290 So. 2d 612, 615 (Miss. 1974) (no right of possession or use remaining in lessor); Collins v. Wheeless, 171 Miss. 263, 267, 157 So. 82, 83 (Miss. 1934) (possession interest in leasehold belongs to tenant).

³¹² See Foster v. Jefferson County, 202 Miss. 629, 639, 32 So. 2d 126 (1947) (lease would have precluded running of statute of limitations for adverse possession); Weiler v. Monroe County, 76 Miss. 492, 495, 25 So. 352, 353 (Miss. 1899) (statute of limitations for adverse possession does not run against reversion).

³¹³ Monaghan v. Wagner, 487 So. 2d 815, 819 (Miss. 1986). The adverse possession must put the true owner on notice that the land is being held against his ownership. Snowden & McSweeny Co. v. Hanley, 16 So. 2d 24, 25 (1943).

³¹⁴ See Miss. Code Ann. § 75-27-7 (1972) (defines term "cord" as amount contained in space of 128 cubic feet when ranked and well stowed).

³¹⁶ Id. A ton is a unit of measurement of 2,000 pounds avoirdupois weight. Id.

³¹⁶ Miss. Code Ann. § 75-27-39 (Supp. 1989).

³¹⁷ Miss. Code Ann. § 75-27-113 (1972); see T.E. Avery, Natural Resources Measurements 130-40 (2d ed. 1975). Around 1846 N.J. Scribner developed the Scribner log rule. Id. It was derived from a diagram of one-inch boards drawn to scale within various size cylinders. Id. A presumption was allowed for a one-quarter inch saw kerf. Id. The minimum board width appears to have been four inches. Id. No taper allowance was included. Id. Scribner rule has been considered to be "intermediate in accuracy." Id. It normally underscales logs unless the maximum scaling length is 16 feet. Id. It does not

measurement is unlawful if that rule gives a smaller number of feet in a given log than that provided under the Scribner's Lumber and Log-book by Doyle's Rule.³¹⁹ Persons using other rules of measurement can be convicted of a misdemeanor and/or subject to liability to the injured party for triple damages.³²⁰

The Mississippi Uniform Pulpwood Scaling and Practices Act was adopted in 1982 to ensure that acceptable standards of scaling pulpwood were applied uniformly throughout the state.³²¹ The Act authorized the Commission of Agriculture and Commerce to license operators of pulpwood receiving facilities,³²² establish standard procedures and regulations for measuring pulpwood by weight and volume,³²³ conduct periodic inspections,³²⁴ and handle complaints concerning violations of the Act.³²⁵ Criminal penalties³²⁶ are provided for persons who oper-

provide board foot volumes that are consistent with changing log diameters. *Id.* The Scribner decimal C log rule rounds Scribner volumes to the nearest 10 board feet and drops the last zero. *Id.* That rule is the official rule of the U.S. Forest Service in the Western United States. *Id.*

About 1825, Edward Doyle devised the Doyle log rule. *Id.* at 140. That rule has been a predominant unit of measurement in the Southern and Eastern United States. *Id.* The rule is based on a slabbing allowance of four inches and a five-sixteenth inch saw kerf. *Id.* The mathematical formula upon which the rule is based is algebraically incorrect. *Id.* The application of the Doyle log rule results in greatly underscaling small logs and overscaling large logs. *Id.*

318 T.E. AVERY, supra note 317, at 140-41. About 1906, Judson Clark developed the international log rule. Id. It is the only log rule in common use that makes an allowance for the reduction in the diameter of a tree or log from the base to the top. Id. The original international log rule assumed a one-eighth inch saw kerf and a one-sixteenth inch allowance for board shrinkage. Id. The international one-quarter inch rule provides for a one-quarter inch saw kerf plus one-sixteenth inch for shrinkage. Id. 212 inch thick and log diameter width slaps are deduced in the form of an imaginary plant. Id. The one-eighth inch international rule has been modified for saw mills employing a one-quarter inch kerf by a reduction by the converting factor of .905. Id. The international rule has been generally observed as the most consistent, has been officially adopted by several states, and is widely used in the U.S. forest survey. Id.

³¹⁹ Miss. Code Ann. § 75-27-113 (1972).

³²⁰ Id.

³²¹ Id. § 75-79-3 (Supp. 1989).

³²² See id. § 75-79-5(e) (Supp. 1989) (any woodyard, pulp mill or other place of business at which pulpwood is received from pulpwood cutter-haulers in regular course of business).

³²³ Id. § 75-79-7.

³²⁴ Id.

³²⁵ Id.

³²⁶ See id. § 75-79-19 (Supp. 1989) (up to \$1,000 for first conviction and up to \$5,000

ate pulpwood receiving facilities without a license; and an administrative procedure is established by the Act to deny, revoke or suspend a license for cause.³²⁷

The State of Mississippi has enacted legislation governing the size, weight, and load of vehicles on its highways. Boards of county supervisors may impose more restrictive limitations on county roads than those provided for state roads.³²⁸ Under state law generally, the width of vehicles is limited to eight and one-half feet,³²⁹ and the height of vehicles is limited to thirteen feet, six inches.³³⁰ The allowable length of vehicles varies, depending upon the type of vehicle. Forest products transported on a vehicle may not project more than twenty-eight feet beyond the rear axle unless the contents of the vehicle are special products, such as tall poles, and a permit has been obtained before transporting the products.³³¹ Also, any vehicle transporting a load that projects from the rear axle may operate only during daylight hours.³³² Vehicles transporting forestry products must be secured by chains or wire ropes positioned behind the front bolster

for subsequent convictions).

³²⁷ Id. § 75-79-21.

³²⁸ See Miss. Code Ann. § 63-5-27(5) (Supp. 1989) (limitations may be imposed by appropriate resolution by board of supervisors of any county or governing authorities of any municipality); id. § 65-7-43 (Supp. 1989) (board of supervisors shall have power to protect their roads and bridges from any unusual or uncommon use that is likely to injure or impair their usefulness as public highways and may recover damages for injuries); id § 65-7-45 (board of supervisors may regulate maximum load of vehicles, section of length of public road or particular bridge used by vehicles by an order spread on its minutes that is effective after publication for three consecutive weeks in newspaper published in county); see also Waste Control, Inc. v. Tart, 506 So. 2d 286, 287-89 (Miss. 1987) (board of supervisors' resolution restricting weight to 30,000 pounds was within its police power to regulate weight limits to protect and promote public health, safety, morality and welfare, was not oppressive, arbitrary, or discriminatory, and was appropriately enforced by lower court).

³²⁹ Miss. Code Ann. § 63-5-13 (Supp. 1989).

sso See id. § 63-5-17 (1972) (although maximum height is established at thirteen feet six inches, no person, firm, corporation, or municipality is required to raise, alter, construct or reconstruct any underpass, wire, pole, trestle or other structure to permit passage of vehicle whose height exceeds twelve feet six inches).

³³¹ See id. § 63-5-51 (1972) (permits for excess size and weight can be issued by State Highway Commission or local authorities upon written application and upon showing of good cause).

³⁸² Id. § 63-5-19(5) (Supp. 1989).

and in front of the back bolster. 333

The weight limitations placed upon vehicles vary according to the wheel and axle loads of the vehicle. There are maximum loads established by state law, based upon the distance between the extreme of any group of axles and the total combined weight of the vehicle and the load, which vary according to the number of axles and the distance between the extreme group of axles.³³⁴ Police officers, highway patrolmen, or other authorized enforcement officers of the State Tax Commission have authority to require a driver to stop his vehicle and submit it to weighing if the officer has reason to believe the weight of the vehicle and load is unlawful.³³⁶ Failure to stop and submit to weighing could subject the driver to a misdemeanor charge punishable by a \$1,000 fine.³³⁶ This penalty is in addition to statutory penalties for exceeding the gross weight allowed under Mississippi law.³³⁷

- M. The Potential for Litigation over "Good Forestry Practice" Provisions in Timber Documents
 - 1. The Use of the Term "Good Forestry Practice"

"Good forestry practice" is a term found in many industrial forestry leases. Fifty percent of the companies responding to the industrial forestry questionnaire require adherence to good forestry practice in their form leases, and ninety-five percent of the companies utilize such provisions in form timber contracts and deeds. Other forestry companies may use this term to fit the circumstances of particular leases, deeds, or cutting contracts. "Good forestry practice" is not a term of art among professional foresters; the genesis of the term is unknown. The interpretation of good forestry practice should be undertaken in light of

³³³ Id. § 63-5-19 (Supp. 1989).

³⁸⁴ Id. §§ 63-5-27, -29, -33 (Supp. 1989).

³³⁵ Id. § 63-5-49 (Supp. 1989).

³³⁶ Id.

³³⁷ Id. § 27-19-89 (Supp. 1989) (\$10 minimum penalty for one pound overweight with graduated scale of up to 11 cents per pound penalty for exceeding legal weight limits).

⁸³⁸ See Society of American Foresters, supra note 17 ("good forest practice" not defined in glossary of technical terms used in publications of Society of American Foresters).

the contract itself, as well as applicable statutory and case law.

The meaning of the term "good forestry practice" can be affected by the geographic location of the lands that are subject to the contract. In the West, the term could refer to specific forest practices statutes. Such statutes traditionally create forest practices regulation and establish minimum standards for forest practices. Some statutes classify practices according to their direct potential for damaging a public resource and require the submission of applications, plans, or detailed statements outlining forest activity. These statutes, their constitutionality, and the changing requirements for receiving a permit have been the subject of litigation in Western states for almost 40 years.

Because such forestry practices acts are foreign to timber industries having holdings only in Mississippi, the term "good forest practice" may have an entirely different meaning to industrial forestry companies in this state. Mississippi statutes provide few restrictions on a forest owner's right to harvest, regenerate, or manage lands and timber.

Although Mississippi adopted the Forest Harvesting Act³⁴³ in 1944, the Act largely served to provide minimum protective measures pertaining to forest regeneration³⁴⁴ and to intensify

³³⁹ See, e.g. Forest Practices Act of the State of Washington, Wash. Rev. Code § 76.09.010-.935 (Supp. 1989).

³⁴⁰ See, e.g., id. § 76.09.040.

⁸⁴¹ See, e.g., id. § 76.09.050.

³⁴² See, e.g., West Norman Timber, Inc. v. State, 224 P.2d 635 (Wash. 1950) (effect of changing requirements upon activities planned prior to change); State v. Dexter, 32 Wash. 2d 551, 202 P.2d 906 (1949) (constitutionality upheld). See generally Annotation, Constitutionality of Reforestation or Forest Conservation Legislation, 13 ALR.2d 1081 (1950).

³⁴³ 1944 Miss. Laws § 2, ch. 240 (codified at Miss. Code Ann. § 49-19-51 to -71 (1972)). The Forest Harvesting Act has never been cited in any reported decision. It was amended only once, in 1974, for the clerical purpose of substituting the words "conservation officer" for "game warden" and to make specific reference to the statutes subject to violation. *Id.* § 49-19-73 (Supp. 1989).

³⁴⁴ Miss. Code Ann. § 49-19-53 (1972). If trees less than 10" DBH were harvested from a 40-acre tract, the statutes imposed a requirement of leaving 100 or more well distributed pine trees 4" in diameter or 4 pine seed trees of 10" or more in diameter on each acre containing pine trees, 100 or more well distributed hardwood trees of 4" or more DHB or at least 6 hardwood species of 10" or more in diameter on acres containing hardwoods or 4 pine seed trees of 10" or more in diameter along with at least 2 hardwood seed trees of 10" or more in diameter. *Id.* §§ 49-19-57 to -61. The same chapter contains

public education of landowners regarding forestry.³⁴⁵ The Forest Harvesting Act contains provisions for enforcement by injunction³⁴⁶ and provides criminal penalties that include fines of not less than \$25 and not more than \$50 for each separate offense.³⁴⁷ Enforcement of the statute rests with the Mississippi Forestry Commission.³⁴⁸ The Commission may work in cooperation with sheriffs, constables, conservation officers, district attorneys and county prosecuting attorneys who are to report violations to the Forestry Commission.³⁴⁹ Violations may also be investigated by the grand juries of each county.³⁵⁰

Another Mississippi statute utilizes the term "approved practice." Because that act is is expressly limited to non-industrial landowners, 352 the term does not shed any light on the meaning of good forestry practice among industrial forestry companies.

Mississippi case law does not serve as a basis for defining the term "good forestry practice." Although at least one Mis-

a requirement of leaving 100 or more well distributed trees 4" or more in diameter or 4 seed trees of 10" or more in diameter if trees are to be cut for new faces for naval store purposes. *Id.* § 49-19-55. Seed trees are defined under the statute as "thrifty trees" of desirable species with well formed crowns, uninjured from tapping, cutting or logging operations and as well distributed over the acres as is possible. *Id.* § 49-19-63.

³⁴⁶ NATIONAL ASSOC. OF STATE FORESTERS, supra note 9, at 476; see also Miss. Code Ann. § 49-19-53 (1972) (stated legislative policy of Act recognized that only small portion of private forest land was managed in accordance with "sound forestry practices," thus creating waste, inefficiency and destruction of forest lands and resulting in serious economic and social loss).

³⁴⁶ Miss. Code Ann. § 49-19-71 (1972).

³⁴⁷ Id. § 49-19-75.

³⁴⁸ Id.

³⁴⁹ Id. § 49-19-73 (Supp. 1989).

³⁵⁰ Id

ss Id. §§ 49-19-201 to -207 (Supp. 1989). "Approved practice" is a term utilized in the Forest Resource Development Law of 1974. Id. That law declares that the development of forest resources is a public policy of the state. Id. § 49-19-203. It provides for assistance for private non-industrial landowners for developing forest resources and receiving cost/share expense assistance for an "approved practice." Id.; see, e.g., id. §§ 49-19-213, -215(2), -217, 219(a), -219(b), -219(c), -219(e), -221(1), -223(2), -225.

³⁵² Id. § 49-19-205(c).

³⁸³ While no reported Mississippi decision has directly tackled the meaning of a good forestry practice in a contract, decisions in other jurisdictions have analyzed long-term leases containing that phrase both in the context of the tax implications and forest practice implications.

sissippi case involved a contract that utilized the term "good forestry practice," that term was not defined in the case, nor did it involve the court's decision.³⁶⁴ Another Mississippi case utilized the term "good forestry practices,"³⁶⁵ but the term again had no significance to the outcome of the suit.

In Treatt v. Rushing,³⁵⁶ the defendant raised the issue of good forestry practice and argued that his right to cut timber from property owned by co-tenants was based upon the theory that cutting mature timber was "good husbandry" and not a waste on the land.³⁵⁷ In rejecting the argument, the court focused upon whether cutting was detrimental to the chief estate or inheritance of the other co-tenants rather than upon the specific forestry practice of thinning.³⁵⁶ The holder of the life estate had claimed that the timber needed to be thinned in order to avoid a loss of profits and had utilized "thinning" to cut out mature trees and leave a stand that could reseed.³⁵⁹ Neither the question of whether the life estate tenant was "thinning" or conducting a select cut nor the effects of either type of harvest upon the remaining forest were discussed by the court.

The term "good reforestation" was used in *Broadus v. Hick-man*,³⁶⁰ a civil suit to quiet title that addressed issues of adverse possession.³⁶¹ In that case, the party asserting title by adverse possession claimed to have bought property from the state for the purposes of reforesting the property and testified regarding activities that could establish ownership, including transplanting young trees and making preparation on the land "as was required by good reforestation." Although this testimony was

³⁶⁴ Patridge v. McAtee, 225 Miss. 141, 151-52, 82 So. 2d 711, 714 (1955) (action for reformation of contract for purchase and sale of timber and for damages turned upon whether parties had made mutual mistake or there was misrepresentation as to amount, quality or quantity of marked trees to be sold under contract).

³⁸⁵ Barlow v. Rutland, 252 Miss. 400, 174 So. 2d 361, 364 (1965) (party contended that timber had to be cut from land subject to partition suit to conform to "good forestry practice" in preparing land for permanent pasture).

^{368 361} So. 2d 329 (Miss. 1978).

³⁶⁷ Treatt, 361 So. 2d at 331.

³⁶⁸ Id.

³⁸⁹ Id. at 330.

³⁶⁰ 210 Miss. 885, 891, 50 So. 2d 717 (1951).

³⁶¹ Broadus, 210 Miss. at 891, 50 So. 2d at 719.

³⁶⁹ Id.

instrumental in the court's decision that adverse possession had been established, the case did not analyze what constituted good forestry practice or good reforestation.

Thus, Mississippi courts have not imposed specific duties upon landowners by defining the term "good forestry practice." The courts have, however, recognized that the creation of contractual relationships, including those arising out of timber deeds, imposes a duty upon those exercising cutting and removal rights to utilize "due and reasonable care" not to injure the property of landowners unnecessarily. The owner of land and the owner of timber hold their interests in severalty, and their relationship does not rise to the status of a tenancy in common. 364

Although no reported Mississippi decision has directly tackled the meaning of a good forestry practice phrase in a contract, decisions outside this state have analyzed long-term leases containing that phrase in the context of their tax implications for both parties and specific and general forest practice obligations. The tax cases turn upon whether the contract leases allow the taxpayers to retain an economic interest in the annual growth of timber and to qualify thus for capital gain treatment as a sale.³⁶⁵

³⁶⁸ See D.L. Fair Lumber Co. v. Weems, 196 Miss. 201, 1 So. 2d 770, 772 (1944) (lumber company owning timber on land leased by owners using land as pasture has duty to use reasonable care not to unnecessarily injure improvements on lands).

³⁶⁴ See Day v. Hogans, 130 Miss. 128, 93 So. 578, 579 (1922) (noting that relationship between owner of land and owner of timber was not that of tenants in common); Annotation, Rights and Duties As Between Owner of Land and Owner of Timber or of Minerals in Place as Regards Liens Covering Both Interests, 26 A.L.R. 1031 (1923). Under Mississippi law, tenants in common have a fiduciary relationship creating a presumption that "the acts of a co-tenant in possession are for the benefit of, and not contrary to, the interests of the other co-tenants." Bayless v. Alexander, 245 So. 2d 17, 20 (Miss. 1971).

see Dyal v. United States, 342 F.2d 248, 254 (5th Cir. 1965) (taxpayer is entitled to capital gain treatment for payments of fair market value of timber in existence at time of execution of contract but not for timber that came into existence during time in which cutting was prohibited by terms of contract). These cases generally involve application of Revenue Ruling 62-81, 1962-1 C.B. 153 and Revenue Ruling 62-82, 1962-1 C.B. 155. Dyal involved a contract between Union Bag-Camp Paper Corporation and an owner of a timberland. Union Camp obligated itself to pay for timber at a fixed rate, per cord, per year, or estimated annual growth, to manage and operate the land with good forestry practices, to insure that average growth would not be less than the amount of timber cut and removed, to pay ad valorem taxes and to take other action which granted it full

Other tax cases consider whether expenses incurred by timber companies under long-term leases, including annual payments, payment of taxes, and other expenses, are ordinary, necessary expenses to be deducted or are part of the cost of timber which should be capitalized and offset against income realized when timber is cut.³⁶⁶

Relatively few cases have actually analyzed the use of the term "good forestry practice" and the rights of the parties under agreements utilizing that term. In Dyal v. Union Bag-Camp Paper Corp., 367 the court reversed the grant of a summary judgment in favor of Union Bag-Camp against trustees for the timber owners.368 The lease required Union Camp to pay taxes and to contribute annually to a forest management fund for the maintenance of fire lands, fire warden service, and sound forestry practices. 369 After entering the agreement, the trustees denied Union Camp's claim that sound forestry practices would require the removal of 100,000 cords of beetle-infested timber by clearcutting. 870 Although Union Camp's duty to remove the trees was undisputed, the parties differed on the question of whether Union Camp's removal of the trees was required by proper forestry practices. 371 Because the forestry practices utilized in harvesting timber infested with pine beetle could affect the accounting for "annual cutting" based upon prior growth and "extras" for damaged trees and fuel wood, the landowners had a direct interest in the issue of good forestry practice; and sum-

beneficial possession of the surface to an extent not detrimental to timber growth. Based upon these facts, the service ruled the landowner did not possess a retained economic interest in the timber. Dyal, 342 F.2d at 249-50. Where the payments were lump sum payments, the service determined that the taxpayer was entitled to capital gains only for the portion of the payment for the fair market value of existing timber with the remainder of the lump sum payment being in the nature of consideration for the use of land over a period of time and therefore ordinary income. Id. at 253.

³⁶⁶ See Union Bag-Camp Corp. v. United States, 325 F.2d 730, 743-44 (Ct. Cl. 1963) (amounts paid by forestry company for taxes and forest management and to lessor constituted rentals and were deductible from lessee's gross income in their entirety).

^{367 263} F.2d 387 (5th Cir. 1959).

³⁶⁸ Dyal, 263 F.2d at 393-94.

³⁶⁹ Id.

³⁷⁰ Id.

³⁷¹ Id. at 394.

mary judgment was therefore held to be improper.372

The issue of good forestry practice may extend beyond the common-law duty of a lessee with cutting rights to balance his rights with the rights of the landowner. In those cases where the landowner had surface rights for cattle grazing, deer and wildlife habitat, or other surface purposes, some courts have imposed restrictions on the rights of the timber companies in order to protect the surface rights of the landowner.³⁷³

"Good forest practice" or similar terms have also appeared in various reported decisions involving Indian reservation lands and the resource management plans developed for such lands under various federal acts such as the "Forest and Rangeland Renewable Resources Planning Act of 1974" and the "Multiple-Use Sustained-Yield Act of 1960." However, the cases interpreting these statutes do not aid in the analysis of good forest practice provisions in leases among private landowners and industrial forestry companies.

2. Rules of Construction in Interpreting a Contract

The first rule of contract interpretation is to give effect to the intent of the parties to the contract.³⁷⁶ In determining the intention of the parties, courts look at the words utilized by the parties, since the words actually employed in the contract are the best resource for determining the intent and assigning a fair and accurate meaning to the agreement.³⁷⁷ Thus a court will interpret an agreement solely according to its terms unless a careful reading of the instrument reveals it to be ambiguous, in

³⁷² Id. at 391 n.8, 394.

³⁷³ Baca Land & Cattle Co. v. Savage, 440 F.2d 867, 872, 873 (10th Cir. 1971) (citing D.L. Fair Lumber Co. v. Weems, 196 Miss. 201, 16 So. 2d 770 (1944)) (ownership of forest growth entitled timber owner to cut and remove timber even though removal involves certain amount of injury to land, but those rights must be balanced against land-owner's rights to use land for cattle purposes, to have timber company minimize erosion and preserve roads for later use and to arrange slash and debris in manner on ground in which it will deteriorate).

³⁷⁴ 16 U.S.C. §§ 1600-1687 (1983).

⁸⁷⁵ 16 U.S.C. §§ 528-531 (1983).

³⁷⁶ Estate of Hensley v. Estate of Hensley, 524 So. 2d 325, 327 (Miss. 1988).

³⁷⁷ UHS-Qualicare, Inc. v. Gulf Coast Community Hosp., 525 So. 2d 746, 754, reh'g dismissed, 525 So. 2d 758, 759 (Miss. 1987).

which case the court may resort to extrinsic evidence to determine intent.³⁷⁸

General rules of construction utilized by a court in contract interpretation include the following principles:

- (1) Vague or ambiguous contracts are always construed more strongly against the party preparing them;³⁷⁹
- (2) If two clauses conflict, the dominant clause should be enforced; 380
 - (3) Written portions prevail over printed material;381
- (4) Laws in force at the time a contract is made are incorporated into the contract as if expressly included in the contract language;³⁸²
- (5) The construction which the parties place on a contract and the acts they consistently perform under the contract are evidence of the requirements of the contract;³⁸³
 - (6) Words of a contract are given their ordinary meaning;384
- (7) A contract will be construed to give effect to all the provisions and produce fair and reasonable results;³⁸⁵
- (8) If two clauses of a contract cannot be reasonably construed together, the first will prevail;³⁸⁶ and
 - (9) Specific provisions prevail over general provisions.³⁸⁷

The construction of contracts utilizing the term "good forestry practice" or other similar terms will be subject to these general rules of construction. Practical difficulties may arise, however, where attempts to construe the contract occur years after its creation. Since long-term timber leases are frequently effective for up to ninety-nine years, all or some of the parties to

³⁷⁶ Barnett v. Getty Oil Co., 266 So. 2d 581, 586 (Miss. 1972).

³⁷⁸ Stampley v. Gilbert, 332 So. 2d 61, 63 (Miss. 1976).

³⁶⁰ Nicholas Acoustics & Specialty Co. v. H.M. Constr. Co., 695 F.2d 839, 843 (5th Cir. 1983).

⁸⁸¹ Dale v. Case, 217 Miss. 298, 310, 64 So. 2d 344, 349 (1953).

³⁸² Mississippi Valley Gas Co. v. Boydstun, 230 Miss. 11, 31, 92 So. 2d 334, 340 (1957)

³⁸³ Delta Wildlife & Forestry, Inc. v. Bear Kelso Plantation, Inc., 281 So. 2d 683, 686 (Miss. 1973).

³⁸⁴ Owen v. Gerity, 422 So. 2d 284, 288 (Miss. 1982).

³⁸⁵ Glantz Contracting Co. v. General Elec. Co., 379 So. 2d 912, 917 (Miss. 1980).

³⁸⁶ Martin v. Adams, 216 Miss. 270, 276, 62 So. 2d 328, 329 (1953).

⁸⁸⁷ Garrett v. Hart, 250 Miss. 822, 834-35, 168 So. 2d 497, 502 (1964).

the original agreement may have died by the time questions arise concerning interpretation. In such instances, evidence of the actions of the parties over the years of the agreement provides the strongest extrinsic proof of intent.

Agreements utilizing "good forestry practice" or similar terms can also raise pragmatic problems of proof concerning what constitutes good forestry practice. A threshold question concerns the effect that passage of time may have on interpreting the good forestry practice provision of the contract. The court must decide this factual issue by determining the intent of the parties as to the subject matter of the contract at the time the contract was made. With the significant evolution of forestry practice, the resolution of this question could profoundly affect the court's decision as to what constitutes a specific forestry practice.

3. Crosby and the Potential for Litigation

During the summer of 1980, what could have been Mississippi's first case to interpret the phrase "good forestry practice" was filed in the United States District Court for the Southern District of Mississippi, Southern Division. That case, St. Regis Paper Co. v. Crosby, 390 was a consolidated action in which St. Regis sued and was sued by the landowner over alleged lease and contractual violations. 391 The term "good forest practice"

see Some contracts containing good forest practice language specify that management and operations of lands and utilization of the timber is to be "in accordance with good forestry practices from time to time prevailing." See, e.g., St. Regis Paper Co. v. Aultman, 280 F. Supp. 500 (M.D. Ga. 1967), aff'd per curiam, 390 F.2d 878 (5th Cir. 1968).

⁻³⁸⁶ See McCain v. Giersch, 112 F.2d 70, 72 (5th Cir. 1940) (in determining intent of parties, court places itself in position of parties at time contract was executed and does not consider events occurring thereafter); Hunt v. Gardner, 147 Miss. 374, 382-83, 112 So. 7, 8 (1927).

³⁹⁰ That cause was pending as consolidated civil action number S80-0496(R).

The agreements between the parties included a lease dated July, 1960, covering 110,000 acres of property in Hancock, Pearl River, Harrison, Lamar, Forrest, Walthall, and Marion Counties ("Lease"). Consideration for the lease was rental payment equal to ad valorem taxes, the obligation to manage and operate the lands "in accordance with good forest and conservation practices from time to time prevailing with respect to timber, soil and water." A second agreement consummated a sale of all timber growing and to be grown on the property with payments to be made at a rate adjusted with changes

was defined in the lease as "practices currently applied in privately owned timber producing projects... with respect to land having comparable terrain and climatic conditions... together with such new commercial forest practices as from time to time prevail and ... [are] generally accepted in privately operated timber producing and growing projects." Issues raised in the suit included alleged misutilization of timber, waste, failure to reforest, failure to salvage, failure to properly estimate the backlog, failure to make payments and failure to fulfill management duties. Relief sought by the landowner included damages, an accounting, injunctive relief, and cancellation of the lease and agreement. Ultimately, the case was settled, with all claims against St. Regis dismissed and the lease and contract cancelled. Set

As is true in all complex civil litigation, the practical effect of having an industrial timber company's forestry practices on trial can be painful to all parties. The landowner must have the financial wherewithal to pay counsel and experts as they participate in theoretical, technological and applied aspects of silvicultural civil litigation. Industrial forestry companies must devote time, resources and manpower to defend a lawsuit rather than to make profits for their shareholders.

The detailed analysis of forestry practices implicit in an analysis of "good forestry practice" could lead to a plaintiff's discovery request for hundreds of thousands of pages of information pertaining to forest practices, all of which would require analysis by experts. The trial could present counsel with the

in the wholesale price index for all commodities. Under that contact, St. Regis obligated itself to perform growth tabulation in 1964 and every five years thereafter and could cut that amount "in the exercise of good forest practices." St. Regis was to furnish books and records to Crosby reflecting the cutting and specific management plans and to fulfill other duties.

³⁹² Lease, at 5.

³⁹³ Id.

³⁹⁴ Id.

³⁹⁶ Both sides claimed a victory in the settlement. The Crosbys claimed vindication through the release of their lands from long-term agreements. St. Regis claimed its forest practices were recognized as good by the dismissal of the suit. Because Crosby had an economic interest in the trees requiring St. Regis to pay for the value of the product, St. Regis claimed it could acquire fiber from outside sources at the same cost resulting in a savings of ad valorem tax payments and management costs.

challenge of comprehending complex forestry matters and communicating them in a manner that a jury could understand. Such a trial could potentially last for weeks, and the cost to all parties would be staggering. See In a complex forestry case, there may be no clear winner regardless of the terms of the settlement or the decision by a court or jury.

Crosby illustrates the potential for litigation concerning "good forestry practice" provisions. Such litigation will be shaped in part by whether or not that term explicitly defines or requires specific duties of the parties.

In the interpretation of an undefined "good forestry practice" phrase in a timber contract, the initial inquiry should focus on the specific ownership interests in the land, timber and forest products and the rights concerning use of the premises. This approach may serve to keep any "good forest practice" obligation in perspective with the legal relationship of the parties and the agreement as a whole. A landowner retaining an economic interest in the trees and rights to use of the land will be more affected by timber operations than one who sells the trees, receives a lump sum payment and retains only a reversionary interest under a long-term lease.

The specific obligations and rights of the parties under the instrument should also be analyzed. Enumerated restrictions on the timber company's right to harvest, obligations to reforest and other specific limitations upon forestry practice can shed light upon the meaning of good forestry practice provisions.

Use of undefined "good forestry practice" terminology in leases and contracts should be carefully considered by industrial forestry companies. The potential for litigation connected with the use of such vague terms must be recognized at all times, and any agreement should be carefully reviewed by all attorneys concerned to ensure that such provisions reflect a balancing of the parties' interests.

³⁹⁶ United States District Court Judge Donald E. Walther of the Western District of Louisiana recently referred to complex civil litigation as the "20th century version of trial by ordeal." "Deposition, Techniques, Tactics, Preparation and Ethics," *Judges Speak Out . . . and Listen!*, Tulane Continuing Legal Education, Grand Hotel, Point Clear, Alabama (May 31, 1989).

IV. Conclusion

The importance of the forestry industry to the State of Mississippi cannot be overstated. Continued investment in land, plants, and equipment promises that the timber industry will maintain its prominent position in the future economic growth of our state. Yet that prominence comes at a price, and the explosion of civil litigation currently felt by the business community as a whole has spread to the forest industry. The complexity of forestry-related issues and the practical difficulties in litigating such cases require that attorneys representing forestry companies, as well as attorneys representing individuals dealing with them, recognize the breadth of legal issues raised by timber transactions and practices. It is hoped that an understanding of issues currently confronting the timber industry will result in legal developments that enable industry and landowners to make the most productive use of this important natural resource.

APPENDIX

TIMBER LITIGATION QUESTIONNAIRE NATURAL RESOURCES SECTION OF THE MISSISSIPPI STATE BAR

Administrative Informa	ition:				
Company name:					
Company address:					
• •	completing the questionn	aire:			
Date of completion:					
Geographic Information:	Number of acres controlled	d, by state:			
Alabama	fee	lease			
Arkansas	fee	lease			
Florida	fee	lease			
Georgia	fee	lease			
Louisiana	fee fee	lease			
	fee				
	fee				
	fee				
Texas	fee	lease			
Litigation Issues (please (frequent), S (seldom) or	rate these issues in timber N (never).	r litigation as F			
 Disease or Pest (uncontrolled spread) Disputes (employee/independent contractor liability) Encroachments (boundary disputes excluding wrongful timber cutting) 					
Environmental (chemical use, smoke from burning, waste disposal, wetlands restrictions, Clean Water Act)					
Fire (wildfire or uncontrolled spread of control burn)					
Independent Contractor					
Land Use Restriction Regulation (zoning, taxing, etc.)					
Management obligations (utilization of good forestry practices, requirements of standards of workmanlike manner,					
practices)	ound forestry practices or b	best management			
Migrant and Seasonal	Worker Protection Act				
OSHA	worker Frotection Act				
	ne and massurement)				
	Pricing (scaling, volume and measurement)				
 Regeneration requirements (planting, seeding & natural) Soil disturbance (rutting, compaction) 					

- Trespass to timber (wrongful cutting of timber)
 Utilization (product separation, waste)
 Wildlife (hunting, fishing, recreation & other leases or uses)

TOTAL ALL STATE ACRES (LEASE & FEE)		17,699,708
ALL STATES LEASE	2,089,713	
ALL STATES FEE	15,571,995	
MISSISSIPPI LEASE	154,515	
MISSISSIPPI FEE	873,196	
TOTAL MISSISSIPPI ACRES	927,711	
QUESTIONNAIRES SENT	157	
29.3% response RESPONSES RECEIVED	46	

TOPICS	ALL STATE	ALL STATES BY # OF RESPONSES	ESPONSES	ALL STATE	ALL STATES WEIGHTED AVERAGE BY ACRES	AVERAGE	ALL STATE BY	ALL STATES WEIGHTED AVERAGE BY PERCENTAGE	AVERAGE 3
	TOTAL F	TOTAL S	TOTAL N	F ACRES	S ACRES	N ACRES	% ₽	%S	N%
DISEASE OR PEST	0	2	32	0	625000	17074708	0	3.5	96.5
DISPUTES	4	21	6	5205300	9630308	2327100	29.4	54.4	13.1
ENCROACHMENTS	2	22	10	5757500	11010608	931600	32.5	62.2	5.3
ENVIRONMENTAL	3	81	13	4709000	10033974	2956734	26.6	56.7	16.7
FIRE	2	22	10	983000	8540441	8176267	5.5	48.2	46.2
INDEPENDENT CONTRACTOR	1	61	14	996300	8846000	7857408	5.6	20	44.4
LAND USE RESTRICTION REGULATION	1	14	19	858000	9897263	6944445	4.8	55.9	39.2
MANAGEMENT OBLIGATIONS	1	14	19	200000	9406087	7793621	2.8	53.1	44
MIGRANT AND SEASONAL WORKER PROTECTION ACT	0	9	28	0	6130867	11568841	0	34.6	65.4
OSHA	2	80	24	3888000	3988129	9823579	22	22.5	55.5
PRICING	1	6	24	36000	7455480	10508228	0.2	42.1	59.4
REGENERATION REQUIREMENTS	0	12	22	0	5045480	12654228	0	28.5	71.5
SOIL DISTURBANCE	0	11	22	0	4913587	12741121	0	27.8	72
TRESPASS TO TIMBER	80	24	2	2806800	10989408	903500	32.8	62.1	51.
UTILIZATION	0	6	25	0	6270500	11429208	0	35.4	64.6
WILDLIFE	4	14	16	4983000	6024238	6692470	28.1	34	37.8

TOPICS										• `
	MISSISSIP! TOTAL F	MISSISSIPPI BY # OF RESPONSES OTAL F TOTAL S TOTAL	SPONSES TOTAL N	MS WEIGH ACRES F	MS WEIGHTED AVERAGE, ACRES CRES F ACRES	E, ACRES ACRES N	MS WEI(%F	MS WEIGHTED AVERAGE, % 6F %S %S	1GE, % %N	, ,
DISEASE OR PEST	0	0.	7	0	0	927711	0	0	100	
DISPUTES	2	4	П	244000	671711	12000	26.3	72.4	1.3	
ENCROACHMENTS	893	*	0	256000	671711	0	27.6	72.4	0	
ENVIRONMENTAL	-	9	0	41000	886711	0	4.4	85.6	0	
FIRE	0	7	0	0	927711	0	0	100	0	***
INDEPENDENT CONTRACTOR	0	2	2	0	781826	145885	0	84.3	15.7	
LAND USE RESTRICTION REGULATION	0	3	4	0	621000	306711	0	6.99	33.1	~~
MANAGEMENT OBLIGATIONS	0	4	3	0	524885	402826	0	9:99	43.4	
MIGRANT AND SEASONAL WORKER PROTECTION ACT	0	3	4	0	593826	333885	0	64	36	
OSHA	2	2	က	244000	522334	161377	26.3	56.3	17.4	,
PRICING	0	3	4	0	391000	536711	0	42.1	57.9	•
REGENERATION REQUIREMENTS	0	2	2	0	159000	768711	0	17.1	82.9	~ ~
SOIL DISTURBANCE	0	2	2	0	280885	646826	0	30.3	69.7	
TRESPASS TO TIMBER	3	4	0	256000	671711	0	27.6	72.4	0	
UTILIZATION	0	2	2	0	188000	739711	0	20.3	79.7	
WILDLIFE	2	3	2	244000	172826	510885	26.3	18.6	55.1	

TOPI

TIMBER DEEDS — 29 RESPONSES

		ALL	STATES
(5 MISS. RESPONSES)	MS ACRES	MS %	BY RESPONSE
DEED REQUIRES SOUND FORESTRY PRACTICE	244000	31.2	19
DEED DOES NOT REQUIRE SOUND FORESTRY PRACTICE	537826	68.8	10
DEED REQUIRES GOOD FORESTRY PRACTICE	391000	50.01	21
DEED DOES NOT REQUIRE GOOD FORESTRY PRACTICE	390826	49.99	8
${\color{red}{\bf TIMBERLAND~AGREEMENTS-16~RESPONSES}}$			
(3 MISS. RESPONSES)			
TIMBERLAND MANAGEMENT AGREEMENT REQUIRES SOUND FORESTRY PRACTICE	203000	78.7	12
TIMBERLAND MANAGEMENT AGREEMENT DOES NOT REQUIRE SOUND FORESTRY PRACTICE	54826	21.3	4
TIMBERLAND MANAGMENT AGREEMENT REQUIRES GOOD FORESTRY PRACTICE	244000	94.6	13
TIMBERLAND MANAGEMENT AGREEMENT DOES NOT REQUIRE GOOD FORESTRY	13826	5.4	1