An Overview of Logging Safety Programs in the USA.

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Abstract:

A strong interest has developed throughout the USA to reduce logging accidents and assist loggers with safety programs. Driven by accident costs, liability issues, a desire to improve public image and the threat of additional environmental regulations, the forest products industry has developed a pro-active role in assisting loggers with the education they need to reduce accidents while improving the quality of their work. While the goals of logging safety are the same throughout the country, the methodology to achieve those goals varies. Attitudes vary from voluntary programs sponsored entirely by industry to stricter regulation by government.

Most of the states with a significant amount of forest industry have some sort of logging safety program. Many states (particularly in the southeast) have programs operated by non-profit organizations to educate loggers. Some states make greater use of government regulation and government agencies to do the job, an idea that is generally untenable in the minds of loggers and many other people, especially in rural areas.

Although there is a lack of uniformity in the methodology for tackling the logger safety issues, this is generally seen as good. The situation and social culture in each state is a little different, so each state has seized the opportunity to solve the problem in their own way. Loggers and related forestry associations in all of the states are hoping that their initiatives will be recognized by lawmakers and prevent unnecessary new laws and regulations.

In this paper, some typical logging safety programs are described, particularly in the states of Louisiana, Arkansas, Texas, West Virginia and Maine.

Introduction

The forest products industry is plagued with high worker accident rates. The problem is worldwide, and the United States is no exception. Nationwide, about 140 loggers die on the job annually (BLS 1999). Logging is one of the most dangerous of all occupations, with death rates similar to policemen and helicopter pilots, and with accident rates similar to miners and construction workers (BLS 1995).

The federal Occupational Safety and Health Act became law in 1970 and went a long way toward improving worker safety conditions generally. The US Department of Labor's Occupational Safety & Health Administration (OSHA) was charged enforcement of the regulations. In 1971, the act was amended to include regulations specific to pulpwood logging. However, the regulations were somewhat ineffectual on logging operations for several reasons. First of all, the term "pulpwood logging" did not cover all logging operations. Secondly, leg protection, which had only recently been developed, was not required for chainsaw operators. Most importantly, OSHA, like any other agency, had finite resources, which it concentrated where the greatest number of workers were. Small, mobile logging jobs are not easily targeted by inspectors.

Workers' compensation insurance is mandatory in every state for any company that has one or more employee. It is typically provided by private insurance companies at employer cost. Larger corporations are often self-insured, so it was in their own self-interest to provide good safety programs for their company-employed loggers and other workers. However, independent logging contractors seldom received training in logging safety. It was up to them to seek assistance from organizations such as the American Pulpwood Association (APA, now called the Forest Resources Association, FRA) for education in safety programs.

By the late 1980's, most company logging operations in the US and Canada had been replaced with contract logging operations for economic reasons. By the same time, workers' compensation insurance premiums had risen to unbearable levels. Base rates in some states had risen to about $45 per $100 of payroll by the early 1990's. In the state of Louisiana, the base rate for logging operations with manual felling (chainsaws) was over $80 per $100 of payroll, although that rate was complicated with severe problems in the workers' compensation insurance industry itself.

The high cost of insurance prompted the generation of logger safety programs in many of the timbered states in the early 1990's. Commonly, the initiative was taken by the state forestry associations (e.g., the Virginia Forestry Association, Mississippi Forestry Association, Louisiana Forestry Association) to gather loggers into workshops and teach them safety program principles. The APA/FRA played a key role in many states by educating workshop facilitators and providing literature.

At the same time, some logging operations in Virginia were inspected by regulators and fined for violations. This action awakened the logging community nationwide and made them realize that they were vulnerable to OSHA inspections.

Louisiana

In Louisiana, the state-wide logging safety program was initiated by the Logging Committee of the Louisiana Forestry Association in 1992. Its initial workshop in April 1993 was modeled after a similar workshop in the neighboring state of Mississippi, and a manual was developed modeled after one developed by the Virginia Forestry Association and the APA/FRA (de Hoop and Todd 1997).

From June 1993 through March 1995, a similar workshop was held each month in different locations in the state as described by de Hoop et al. (1994). The labor for these workshops was volunteer. The logging contractors, foremen and their spouses were invited to a dinner on a Friday evening, and the entire logging crews were invited to a Saturday workshop. Over 2,000 individuals attended these workshops. Since March 1995, these workshops, somewhat modified, have been conducted three or four times per year, with a total attendance of another 2,000 individuals from 1995 to date, including loggers and foresters (Todd 2000).

According to the Louisiana Department of Labor statistics, there are between 3,000 and 4,000 loggers in the state, but many individuals with good knowledge of the industry believe that number should be about 8,000.

In 1995, the forest industry in Louisiana and many other states responded to the Sustainable Forestry Initiatives (SFI) program initiated by the American Forest & Paper Association (AF&PA), a non-profit organization with membership consistiing of forest products companies. The SFI program was designed to motivate forest products companies to be proactive in implementing environmentally sound practices. One of the problems recognized was that the foresters and other managers may have been properly trained in their formal education, but the persons actually implementing the foresters' instuctions on the ground needed some basic education so that they could understand the instructions better.

In Louisiana, a State Implementation Committee was formed of local representatives of AF&PA member companies to oversee a training program for loggers, forest regeneration contractors and others that were directly involved with implementing silvicultural activities. With logistical support from the Louisiana Forestry Association, a series of workshops was designed: Best Management Practices & Timber Harvest Planning (BMP - focuses on maintaining water quality during and after operations), Erosion Control, Timber Harvesting & Transportation Safety, OSHA Regulations, and Business Management. It was felt that logger professionalism was an important part of motivating workers to plan and execute their activities in an environmentally responsible manner. Later, other workshops were added, such as Media Relations, Aesthetics, and Trucking Safety (defensive driving).

At about the same time, the Louisiana Logging Council was formed, closely affiliated with the Lousiana Forestry Association, so that loggers could have a platform to dicuss common problems independently from foresters. This allowed them to have a united voice before local and state government, too, something that had been rare because of the independent nature of the businesses and personalities of loggers. The workshops developed under the SFI program and coordinated and organized by an employee of the Louisiana Logging Council.

The two workshops pertaining to safety were redesigned into a time frame of four hours each, and are always taught on the same day. The major difference here is that the workshops are designed for supervisors, whereas the earlier workshops were designed for all logging workers. It was felt that the earlier workshops provided a boost to the industry by immersing all workers at least once in a day of logging safety training. Now that it has been done, it should be

the responsibility of logging contractors and foremen to take further safety training to their crews. The safety and OSHA workshops have been taught about three times per year since 1995. Various volunteer instructors are used, including a presentation on accident analyses by the author, a manufacturer of protective footwear, and Operation Lifesaver instructors from the railroad industry (rail crossing safety).

The entire training program is called the Master Logger Program. In order for a logger to obtain Master Logger status, he must complete 30 hours of training, including the BMP, safety, OSHA, business management and Erosion Control workshops. In order to maintain this status, he must complete at least 6 hours of formal training annually. The annual training can come from workshops beyond those taught by the Louisiana Logging Council. Only a logger is permitted to obtain the Master Logger status. Foresters and all others who go through the training receive a certificate simply stating that they have completed all of the workshop requirements under the SFI Master Logger program.

Most of the major timber companies will accept logs only from logging firms whose owners or managers maintain their Master Logger status (or its equivalent in other states).

In January 2000, there were about 700 Master Loggers in Louisiana (Smith 2000). Total estimated expenses for the progarm for 2000 is $144,000, not including in-kind services or volunteer labor. Part of these expenses are paid by registration fees (typically $20 per person per workshop), but the bulk of these expenses are paid by a self-assessment from industry of 0.67 cents per ton (US$0.0067/ton), to be raised to one penny per ton ($0.01/ton) in 2001.

Arkansas, Texas

The programs in neighboring Arkansas, Texas, and many other states in the mid-southern US are similar to the one in Louisiana. There is a reciprocity agreement between the programs in the three states wherein a logger can take two of the required courses in one of the other two states. Some of the courses have different titles, but the content is closely similar. Both Arkansas and Texas refer to them as the “Pro-Logger Program.” In Arkansas, the program is administered by the Arkansas Timber Producers Association and has won a first and second place annual awards with the K.S. Ralston Logger Education Award. By 19 July 2000, 134 safety workshops had been held in Arkansas with a total attendance of 7,798 individuals. The number of individuals who have completed Pro-Logger training is 2,705, including both logging contractors and foresters (Lease 2000).

In Texas, the program is administered by the Texas Logging Council, which is closely affiliated with the Texas Forestry Association. By May 2000, 680 individuals had attended the safety/OSHA workshop. By the end of 1999, 270 Pro-Loggers were “accredited” (including foresters). Continuing education is required within two years. A continuing education program is planned beginning in 2000 (Currie 2000). The status of individual Pro-Loggers can be monitored on the internet (www.texasforestry.org). This way, a landowner contemplating a timber sale can quickly verify the status of the logger(s) with whom he proposes to work.

One of the issues coming before the various state SFI committees is inconsistent practices, or enforcement of bad actors. Since the entire system is based on voluntary compliance with SFI principles, government intervention cannot be relied on (in fact, is avoided by design). The problem is two-fold: dealing with member companies and certified loggers who violate the SFI principles; and dealing with non-member companies and their log suppliers

that flagrantly violate the principles to the point of creating a bad reputation for the entire industry. A reporting mechanism for these violations is a related issue. For example, what does one do about a Master Logger who logs a tract of timber without following Best Management Practices? Simply cancelling his master logger status does not fully solve the problem. These issues are being discussed in earnest, but have yet to be fully resolved. Their resolution will be crucial to the overall success of the SFI program. There is talk of including county-level landowner associations in the solution. County landowner associations are, for the most part, relatively new and rapidly expanding.

Another issue that has yet to mature is the issuance of Pro-Logger (or Master Logger) certification to logging contractors, not just individuals.

West Virginia

In 1998, workers' compensation premiums in West Virginia had risen to an unprecedented $47.90 per $100 of payroll. This sparked an interest in a pilot program by the West Virginia Forestry Association with six logging contractors of intensive logger training and inspection. However, when the board of the state Workers' Compensation Division learned about it, they reacted with some financial incentives. The pilot program idea was quickly expanded to include all interested loggers in the state and called the Loggers Safety Initiative (Carruth 2000).

The Loggers Safety Initiative has three major elements: training, accountability and direct financial incentives. The training element consists of both workshop-style sessions led by volunteer discussion leaders and professionally taught skills training. The accountability element consists of inspections on the job sites. The financial incentive includes a 15% reduction in workers' compensation premiums (West Virginia uses a state fund for workers' compensation as opposed to commercial insurance companies).

For full-time chainsaw operators, the Game of Logging training is used, levels I through IV. There is a timetable in which the levels must be completed, including annual continuing training.

Participating logging contractors must commit themselves to compliance with OSHA regulations. There is a baseline inspection before training. There are two inspections after training, in which the contractors must score at least 80%.

If the participating contractor's experience modifier is less than 1.2, he receives a 15% reduction in workers' compensation insurance premiums. Contractors with higher experience modifiers do not receive this reduction, but they will not receive a scheduled increase in premiums.

The costs are being shared by many parties. Most of the cash costs are being shared by logging contractors and wood consuming mills. The West Virginia Workers' Compensation Administration provided a grant of $125,000. One of the issues still being discussed is whether the bulk of the cost should be borne by the loggers or the mills (or both). The loggers benefit directly from this program. The mills benefit in the long-term.

Maine

Maine has had a Certified Logging Professional Program since 1991. When SFI came about three years later, it was recognized as meeting the needs of SFI training. Certification requires 24 hours of classroom instruction and 8 hours of Game of Logging (chainsaw) training.

This is normally done in a four day time block. Most loggers that participate take this course during April or May, when logging slows down due to sloppy ground conditions. The classroom instruction includes ethics, safety, OSHA regulations, insurance, marketing, first aid, silviculture, conserving fish & wildlife, Best Management Practices, water quality laws, yarding layout, hazardous materials, and testing (St. Peter 2000).

Loggers must also submit themselves to on-site evaluations. These evaluations cover virtually all aspects of the logging job, including safety, use of personal protective equipment, BMP's, skidder trail layout, log specifications, utilization, trash disposal, and forest management. The evaluations typically take two to three hours to conduct. Some loggers see the evaluation as an intrusion, but others take it as an opportunity for self-evaluation and improvement.

There are five classes of certification: Conventional (skidder & chainsaw operators), Mechanical (for harvesting equipment operators), Supervisor, Associate (for non-loggers) and Apprentice. Re-certification, involving an 8 hour class and field inspection, is required within one year and every two years thereafter. Conventional Certification candidates must also complete Levels II and III Game of Logging.

The Certified Logging Professional Program is conducted by an independent group under the auspices of the Maine TREE Foundation. All of the instructors in the program are (or have been) loggers and have additional formal education or training in the specialties that they teach. Instructors are generally paid, as opposed to the volunteer instructors used in many other states. As of August 2000, 413 logging contractors, 2405 conventional logging employees, 737 mechanical employees and 321 associates have been trained.

Industry (mills) was involved in startup costs, but most of the costs are borne by the loggers. Certification requires a tuition of $500, and re-certification requires $100. The Maine Forest Service sometimes provides scholarships that pay one-half of the tuition.

More information can be found at www.moosehead.net/clp.

OSHA Partnership

A recent development at the federal Occupational Safety and Health Administration is a program they term "OSHA Partnership." In each state, OSHA is targeting an industry that is particularly troublesome from a safety point-of-view and offering a "Partnership Agreement." It is hoped that these agreements will result in more efficient utilization of resources for both industry and OSHA. In Louisiana, this offer was made to the Louisiana Logging Council. The agreement was signed 17 May 2000, and could easily be the first such agreement made in the country.

OSHA plans to randomly select at least 5% of the logging companies in Louisiana and conduct compliance inspections. Under the terms of the OSHA Partnership agreements, logging companies can voluntarily sign up with the program. These companies will submit all of their accident reports to the Louisiana Logging Council for summary evaluation by the author and OSHA. Based on the findings of these accident analyses, the Louisiana Logging Council will formulate and conduct training sessions that target the problem areas. When OSHA conducts its random inspections of the logging industry, it will perform only a "targeted" inspection if the logging company happens to be a member of this Partnership Agreement. The targeted inspection will focus only on those aspects of the safety program covered in the training. If the logging company did not sign on with the Partnership agreement, it will receive a complete

inspection from OSHA, presumably resulting in more violations found.

By August 2000, approximately 200 logging companies had signed up. Approximately 60 of these submitted accident reports for 1998 and 1999 (de Hoop and Lefort 2000).

Summary and Outlook

The forest products companies like to have an "arms distance" relationship with logging contractors to avoid legal and tax problems with the issue of contractor versus employee relationships. However, the expenses associated with logging accidents have become so severe that it has become obvious that a cooperative venture by all interested parties is needed to propagate a solution. At the same time, the companies and landowners are realizing that a greater level of professionalism is needed with all workers performing silvicultural activities. It is hoped that a proactive stance will lead to a better public image and prevent/delay additional environmental regulations.

Logging safety education is considered an integral part of improving the quality of logging operations and is being conducted in many timbered states on a voluntary basis. Many mills, including most of the largest timber companies, require that their log suppliers obtain this training as a condition of doing business together. At the same time, the Occupational Safety & Health Administration has taken a greater interest in enforcing safety regulations in the logging industry.

Most of the safety training to date has been basic. Future training in logging safety is likely to be more in-depth on areas that are particularly troublesome. The industry will need to be monitored more closely to detect whether the training is producing the desired results. This will require better accident reporting mechanisms than are in place today.

The issue of green certification for timber products is still not mature (nor dead), but is already required in some markets. It is possible that safety will be a component in green certification. If this does happen, it is possible that this movement toward logger certification might provide a mechanism to incorporate safety certification with green certification.

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