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**IDAPA 17
TITLE 04
Chapter 04**

17.04.04 - IDAHO MINIMUM SAFETY STANDARDS AND PRACTICES FOR LOGGING

000. LEGAL AUTHORITY.

Pursuant to the provisions of Section 72-508, Idaho Code, the Industrial Commission has the authority to promulgate and adopt reasonable rules for effecting the purposes of the Workers' Compensation Act. (7-1-93)

001. TITLE AND SCOPE.

These rules shall be cited as IDAPA 17, Title 04, Chapter 04, "Idaho Minimum Safety Standards and Practices for Logging," and shall be applicable to the logging industry in the state of Idaho. (7-1-93)

002. WRITTEN INTERPRETATIONS.

There are no written statements which pertain to the interpretation of these rules. (7-1-93)

003. ADMINISTRATIVE APPEALS.

There are no provisions for administrative appeal of these rules. (7-1-93)

004. (RESERVED).

005. INCLUSIVE GENDER.

For all sections and subsections of these rules, the terms and references used in the masculine include the feminine and vice versa, as appropriate. (7-1-93)

006. SEVERABILITY.

The sections and subsections of these rules are severable. If any rule, or part thereof, or the application of such rule, or the application of such rule to any person or circumstance is declared invalid, that invalidity does not affect the validity of any remaining portion. (7-1-93)

007. -- 009. (RESERVED).

010. DEFINITIONS.

01. A-Frame. A structure made of the independent columns (of wood or steel) fastened together at the top and separated a reasonable width at the bottom to stabilize the unit from tipping sideways. (9-7-92)

02. Arch. A piece of equipment attached to rear of vehicle, used for raising one end of logs to facilitate skidding. (9-7-92)

03. Back Cut. The final falling cut. (9-7-92)

04. Barber Chair. Slab portion of tree remaining on the stump above the back cut due to improper falling. (9-7-92)

05. Bell or Cup Hook With Spike. A hook consisting of a cylindrical cup from whose center there projects a spike. (9-7-92)

06. Bight. The loop of a line, the ends being fast elsewhere, or the angle formed by a line running through a block. (9-7-92)

07. Binder. Chain, cable or steel strap used for binding loads of logs. (9-7-92)

08. Blasting Cap. A metal shell containing a detonating compound. (9-7-92)

09. Brailing. One section of flat log raft enclosed by boom sticks. To place logs end to end in a long flat raft or boom. (9-7-92)

10. Brow Log. A log placed parallel to any roadway at a landing or dump to protect vehicles while loading or unloading. (9-7-92)
11. Bullbuck. The supervisor over cutting crew. (9-7-92)
12. Buckle Guy Line. Line used to stiffen or support a tree, pole or structure between the top guys and the base. (9-7-92)
13. Bunk. The cross support for logs on a logging car or truck. (9-7-92)
14. Butt Hook. Hook at end of haul-in line for attaching chokers to line. (9-7-92)
15. Butt Rigging. Arrangement at end of main line for attaching chokers. (9-7-92)
16. Capped Fuse. A piece of fuse to which a blasting cap has been crimped. (9-7-92)
17. Carriage Logging. A type of high lead logging using gravity, haulback, or remote control carriages to yard logs. (Bullet carriage is one type). (9-7-92)
18. Cat Road. A tractor road. (9-7-92)
19. Chaser. The member of the yarding crew who unhooks the logs at the landing or fights hang-ups on skid road. (9-7-92)
20. Chipper. A machine which cuts materials into chips. (9-7-92)
21. Chock (Bunk Block-Cheese Block). A wedge that prevents logs from rolling off the bunks. (9-7-92)
22. Cheater. Extension to bunk stakes. (9-7-92)
23. Choker. A wire rope with special attachments put around log near the end for hauling or lifting. (9-7-92)
24. Cold Deck. Any pile of logs which is yarded and left for future removal. (9-7-92)
25. Cold Shut. A link for joining two chains: the link being closed cold with a hammer, not a weld. (9-7-92)
26. Connecting Wires. Means those wires that connect the leg wire of one electric blasting cap or with the leading wires, when blasting in series. (9-7-92)
27. Crotch Line. Two short lines attached to hoisting line by means of a ring or shackle, the lower ends being attached to loading hooks and used for loading or unloading. (9-7-92)
28. Cutter. A term used to designate faller or buckler. (9-7-92)
29. D or Strap Socket. A socket with a closed loop and arranged to be attached to the end of a line. It is used in place of a spliced eye. (9-7-92)
30. Dead Man. Buried log or other object used as an anchor. (9-7-92)
31. Detonator. Means blasting cap, electric blasting cap or delay electric blasting cap. (9-7-92)
32. Dog Line. Any line used to tie logs together. (9-7-92)

33. Donkey. (Short for "Donkey Engine") - Power equipment equipped with drum and cable for moving or transporting logs as in loading or yarding. (9-7-92)
34. Drag-Turn. Any log or group of logs attached by some means to power and moved from a point of rest. (9-7-92)
35. Explosive. Any chemical compound or mechanical mixture that is commonly used that contains any oxidizing and combustible units, or other ingredients, in such proportions, quantities or packing that an ignition by fire, friction concussion, percussion, or detonator, of any part of the compound or mixture may cause such a sudden generation of highly heated gases that the resultant gaseous pressures are capable of producing destructive effects on contiguous objects or destroying life or limb. (9-7-92)
36. Fair Lead. A combination of a pair of sheaves or roller set transversely or vertically in a unit in front of another pair of sheaves to guide a line coming from any direction and leading it properly to a drum. (9-7-92)
37. Gin Pole. A raised pole properly guyed and used to support lines and blocks. (9-7-92)
38. Grapple. A device attached to hoisting line for mechanically handling logs. (9-7-92)
39. Gut Wrapper. Intermediate binder for an individual tier of logs. (9-7-92)
40. Guy Lines. The lines used to stay or support spar trees, booms, etc. (9-7-92)
41. Haul Back. A small wire line traveling between the power skidder and a pulley set near the logs. Used to return the main cable with tongs, chokers or hooks to the next log. (9-7-92)
42. Heel Block. The block heel of boom. (9-7-92)
43. Heel Boom. A type of loading boom where one end of the log is pulled up against the boom. (9-7-92)
44. Hook Tender, Hooker. The workman who supervises the method of moving the logs from the woods to the place of loading. (9-7-92)
45. Hazard. Any condition or circumstance which may cause an accident or injury. (9-7-92)
46. Jaggers. Any projecting broken strand of cable. (9-7-92)
47. Jammer. A machine used for handling logs. (9-7-92)
48. Jill Poke. A projecting object out of its normal position. (9-7-92)
49. Knob. A metal ferrule arranged to be attached to the end of a line, used in place of a spliced eye. (9-7-92)
50. Landing, Rollway. Any place where logs are placed after being yarded, awaiting loading or unloading. (9-7-92)
51. Lang Lay Rope. A wire rope, in which the wires in the strands of the rope are laid in the same direction. (9-7-92)
52. Leading Wires. Those wires between a portable generating devise or an approved type blasting battery in series blasting, and the "connecting wires" or "leg wires". (9-7-92)
53. Leaners. A live or dead leaning tree. (9-7-92)
54. Loading Boom. Any structure projecting from a pivot point to guide a log when lifted. (9-7-92)

55. Log Stacker. A machine with lift forks used to handle logs. (9-7-92)
56. Magazine. Any building or other structure used exclusively for the storage of explosives. (9-7-92)
57. Operation (Show Woods Layout). Any place where logging is being done. (9-7-92)
58. Mainline. A cable which pulls logs or trees to loading. (9-7-92)
59. Pan (Skidding Pan). A solid piece of metal placed behind a tractor on which one end of logs rest. (9-7-92)
60. Peeling Bar or Spud. A tool for removing bark from trees or logs. (9-7-92)
61. Pike, Pole. A long pole whose end is shod with a sharp pointed steel spike, point, and/or hook. (9-7-92)
62. Portable Spar or Tower. An engineered structure designed to be used in a manner similar to which a wooden spar tree would be used. (9-7-92)
63. Powder. Any explosive other than the detonating agent. (9-7-92)
64. Primer. A cartridge of explosive with a detonator inserted there in. (9-7-92)
65. Reach. An adjustable beam between trailer and motorized logging vehicle. (9-7-92)
66. Receding Line. The line on which a skidder or slackline comparable to the haulback line on a yarder. (9-7-92)
67. Reload. Any area where logs are dumped and reloaded. (9-7-92)
68. Running Line. Any line which moves. (9-7-92)
69. Sail Guy. A guy which holds the outer end of a boom. (9-7-92)
70. Sail Block. A block hung inverted on the sail guy to hold the tong block in proper position. (9-7-92)
71. Schoolmarm. A crotched tree consisting chiefly of two (2) trunks. (9-7-92)
72. Skids. Any group of timbers spaced a short distance apart on which the logs are placed. (9-7-92)
73. Side, Show, Chance. That unit of a logging operation, including men and equipment that is sufficient to fall, buck and load a given area ready for transportation of the logs to the mill. (9-7-92)
74. Side Winders. A piece of log, brush or limb thrown up or sidewise during skidding operation. A tree knocked down by another in falling. (9-7-92)
75. Signalman, Whistle Punk. The authorized workman who transfers signals from a given location to the operator. (9-7-92)
76. Skidding. Movement of logs on the ground. (9-7-92)
77. Skyline. The supporting line on various types of logging systems on which carriage, block bullet travels. (9-7-92)
78. Slack Line. A form of skyline where skyline is spooled on drum and can be raised or lowered.

- (9-7-92)
79. Slack Puller. Any device used to increase the movement of a line when its own weight is inadequate. (9-7-92)
80. Snags. Any dead standing trees. (9-7-92)
81. Snubbing. A method of retarding or controlling the movement of logs or machine by means of looping the line around a stationary object. (9-7-92)
82. Spring Board. A board with an iron tip used by fallers to stand on when they must stand above the ground level. (9-7-92)
83. Strap. Any short piece of line with an eye or "D" in each end. (9-7-92)
84. Strawline. A small line used for miscellaneous purposes. (9-7-92)
85. Strip. A definite location of timber allocated to a cutting crew. (9-7-92)
86. Sweeper. Unexpected and controlled lateral movement of log, tree, etc. during skidding operations. (9-7-92)
87. Swamp. The falling or clearing of limbs and brush around or along a specific place. (9-7-92)
88. Tag Line. A line used to control movement during loading, unloading or skidding operations. (9-7-92)
89. Tail Hold. Any anchor used for making fast any line. (9-7-92)
90. Tell Tale. A devise used to serve as a warning for overhead hazards. (9-7-92)
91. Tight Line. When power is exerted on both mainline and haulback at the same time. (9-7-92)
92. Tongs. A hooking device used to lift or skid logs. (9-7-92)
93. Transfer. Changing of a load of logs in a unit from one means of transportation to another. (9-7-92)
94. Tree Plates. Steel protectors spiked around a tree to prevent the lines from cutting into the trees. (9-7-92)
95. Undercut. A notch cut in the tree to guide and control the tree in falling. (9-7-92)
96. Windfall. A tree felled by the wind or other natural causes. (9-7-92)
97. Widowmaker. A loose limb, top, or piece of bark which may fall on a logger working beneath it. (9-7-92)
98. Yarding. Movement of logs or trees from the place they are felled (bucked) to a central loading or shipping point. (9-7-92)

011. RECOMMENDED SAFETY PROGRAM.

01. Introduction. (9-7-92)
- a. This code is a part of the accident prevention program of the state of Idaho. This book is dedicated to the safety and well-being of all workers in Idaho's logging industry. It has been prepared and adopted according to the processes prescribed by law. We make this book available to all persons concerned with the maintenance of safe

working conditions in the logging industry. (9-7-92)

b. This publication is the primary safety code for the logging industry. However, other Idaho Safety Codes promulgated and adopted by the Industrial Commission shall be applicable to this industry where not inconsistent with the provisions herein, or where any particular activity which is being carried on is not specifically covered or regulated herein. (9-7-92)

c. The enforcement of the code becomes the responsibility of the Industrial Commission and the Department of Labor and Industrial Services. This code will not serve its entire purpose if its requirements are considered anything but a minimum for safe operation. So much variation exists in the logging industry that each operation should be judged, not by its compliance to the letter of this code, but according to a higher standard -- that of absolute safety under all conditions. (9-7-92)

d. Accident prevention is a problem of organization and education. It does not rest upon involved theory or detailed safety codes but consists largely of the desire to institute a common sense safety program and determination to carry out the program effectively. Effective accident prevention embodies the following five principles: management leadership; employee cooperation; effective organization; thorough training; and good supervision. (9-7-92)

02. Fire and safety policy. The basic elements or management responsibility for fire and safety policy are as follows: (9-7-92)

a. Management leadership. The declaration of the safety policy should be made clear to all levels of supervision, purchasing, engineering, industrial and construction; and to all employees that top management has approved the operation's safety program. (9-7-92)

b. Planning an effective safety program. The program should be based on the following: accounting record of safety cost, accident recording system, accident investigation recommendations, operation inspection recommended corrections, employee suggestions, and job analysis to determine the work hazards. The hazard appraisal can be summarized as follows: mechanical and physical hazards; environmental hazards; and work procedure and practices. (9-7-92)

c. If management is to discharge its duty in proper directing of the fire and safety program, it must organized a definite planned program of continuous supervision and leadership by all facets of the management organization. The very fact that safety must be woven into all operations and activities will not require extra managerial time beyond the ordinary to operate a business successfully, i.e., if the entire management team will assume their safety responsibility. The first problem of management is to determine the operation hazards. Once these are ascertained and appraised, suitable corrective action can be initiated. If the working unit is operating, the following specific activities should be carried out to find the hazards. These are: job inspection; job analysis; accident investigation (near accident, non-disabling injuries) to determine necessary remedial action to prevent reoccurrence of the accident. (9-7-92)

d. Hazard Appraisal. the partial list of terms covered by appraisals are summarized briefly as follows: mechanical and physical hazards; adequacy of mechanical guarding of machines and equipment; preventing the use of inferior manufactured and unsafe supplies, equipment, chain, cables, sheaves, tires, power saws, tractor canopy guards, approved head protection, fire extinguishers, solvents, mill saws, etc.; and physical exhaustion such as excessive work hours by truck drivers and mill maintenance employees. (9-7-92)

e. Environmental hazards hazards inherent to the operation: (9-7-92)

i. Personal protection devices (approved head protection, ear plugs, knee pads, proper eye protection, respirators, etc.) (9-7-92)

ii. Storage and use of flammable liquids and gases (gasoline, diesel, acetone, acetylene, acids, etc.) (9-7-92)

iii. All employees should be familiar with proper work signals (falling, blasting, high lead signals,

- loading, mill signals, operation fire signal, etc.) (9-7-92)
- iv. Noise and fatigue hazards that are inherent to the industry (planers, cutoff saws, jack hammers, etc.) (9-7-92)
 - f. Work Procedures and Practices. Hazards directly related to work practices should be carefully observed and evaluated. A few of the important work practices which should be investigated are: (9-7-92)
 - i. Use, care and maintenance of hand and portable power tools; (9-7-92)
 - ii. Degree of supervision given the worker; (9-7-92)
 - iii. The extent of job training provided; (9-7-92)
 - iv. The safety indoctrination and training of new or transferred employees; (9-7-92)
 - v. The proper use of fire extinguishers; (9-7-92)
 - vi. The use of personal protective devices - approved head protection, shoes, etc; (9-7-92)
 - vii. The repair and maintenance of equipment with respect to machines, mechanical handling equipment, log loaders, yarding equipment, tractors, fork lifts, overhead cranes, headrigs, etc; (9-7-92)
 - g. The employer shall instruct all employees to report all job injuries before the shift ends, to the supervisor at the time injuries occur. The employer is responsible for reporting all industrial lost time injuries to the Industrial Commission within forty-eight (48) hours, and immediately care for the injured employee as required by the Idaho Workmen's Compensation Law. (9-7-92)
 - h. All work fatalities and permanent total disability injuries should be immediately reported to the Industrial Commission and County Sheriff within four hours and/or coroner. (9-7-92)
 - i. Management of personnel. (9-7-92)
 - i. The recruiting and placing of new worker on the job is a major responsibility of the management organization. Every effort should be made to match the qualification of the man with the demands of the job. (9-7-92)
 - ii. The furnishing of first aid services, treatment of injuries, and inspection of working conditions is the employer's responsibility. (9-7-92)
 - j. Assignment of responsibilities. (9-7-92)
 - i. Supervisors, purchasing agents, engineering, safety directors, personnel directors, and employees have certain definite responsibilities in the fire and safety objectives in every operation. (9-7-92)
 - ii. Management must accept the normal obligation for preventing accidents. In many operations it is a practice to delegate the actual administration of the safety program to a person who can devote full time to it. In the smaller operations, safety administration may be a collateral duty carried on in conjunction with some other duties. The safety administrator or safety man should function in a staff capacity. Because the safety director operates in a consultant capacity, ultimate responsibility for accident prevention rests with the workers' supervisor, the foreman and line production organization. There is no doubt that the foreman is the key man in every safety program. Safety is not something separate and apart from production. If the job is done right, it is done safety. (9-7-92)
 - iii. Safety is an integral and important part of production, just as is quality and quantity, or meeting production schedules. (9-7-92)
 - iv. All these duties are foreman or project superintendent duties, and the most important part of the

line production organization. This obligation cannot be delegated. As the person in charge of production, the foreman is responsible for the safety of his men. This fact must be made clear and should be included in the statement on policy. (9-7-92)

- k. Safety director (part-time or full-time). (9-7-92)
- i. Makes periodic inspections of the operations and suggests corrective measures to eliminate hazards. (9-7-92)
- ii. He should assist in investigation of all types of accidents to determine the cause, so as to prevent like accidents in the future. (9-7-92)
- iii. He aids foremen in developing safe work procedures and practices and assists the foremen in training the workers. (9-7-92)
- iv. Keeps accident records and makes periodic reports to the proper official on the progress being made. Reports and records: report of accident; accident investigation report; inspection report; performance report (injury frequency and severity); Accident cost report; safety committee reports; report on degree of corrective action taken on different recommendations. (9-7-92)
- v. Conducts or initiates safety training courses - First Aid and fire fighting, where appropriate and any other course inherent to the job (truck driver courses, power saw courses, welding, grinder, fork lift truck operator, etc.) (9-7-92)
- vi. Establishment of safety committee. (9-7-92)
- vii. He shall see that recommendations are promptly and properly corrected. (9-7-92)
- viii. He shall check specifications for new machines, processes and equipment for compliance with existing safety standards, laws and safety requirements, and shall have such equipment fully inspected before it is placed in used. (9-7-92)
- ix. He shall assist the safety committee in developing agendas for their meetings. (9-7-92)
- l. No theorem is more thoroughly proven and widely accepted than: the foreman is the key man in attaining proper work habits in any operation. It is the obligation of management to give the most careful attention to the selection, education, and training of foremen and train him in the proper way to train employees in correct and safe work methods to attain the best production in the safest way. (9-7-92)
- m. It shall be the responsibility of management to arrange to have as many employees as possible take a full course in First Aid training. It is a must that supervisory personnel shall take an approved First Aid Course, and have a current First Aid card. (9-7-92)
- n. It is suggested that log truck drivers take the required Red Cross, ten (10) hour First Aid Course or the Standard Bureau of Mines Aid course, or an approved First Aid Course and hold current card. (9-7-92)
- o. The establishment, in the office of the employer, of an accident record and reporting system which will definitely tie into nationally uniform reporting, record, and statistical requirements (Z 16. 1). (9-7-92)
- p. Injury frequency rates, shall be calculated annually on a calendar basis commencing the first of January each year. These rates shall be kept on file in the office of the employer for at least four years after the date of entry thereof, and shall be made available to the Industrial Commission and/or Department of Labor, upon request. (9-7-92)
- q. The injury frequency rate shall be the number of lost time injuries to all employees per one million (1,000,000) man hours of exposure. The frequency rate is computed by multiplying the number of lost time injuries by one million (the standard of measurement) and dividing the product by the total number of man hours worked

during the period. The formula is expressed as follows: Frequency equals the number of lost time injuries times one million (1,000,000) total man hours of exposure. (9-7-92)

r. A lost time injury shall be the term applied to any injury, arising out of, and in the course of employment which makes it impossible for the injured person to return to an established regular job at the beginning of the next regular shift following the shift during which the injury occurred, or some future shift. (9-7-92)

s. Man hours of exposure shall be the total number of man hours actually worked by all personnel in the industrial unit during the period for which the rate is being computed. (9-7-92)

t. Translating the number of injuries in a plant or organization, into frequency rates serves as a standard measure which enables anyone to compare the industrial injury record of the plant with that of other industrial organizations or with national and state frequency rates for the same industry. The standards that shall be used are the United States American Standard Method of Recording and Measuring Work Injury Experiences (Z 16.1). (9-7-92)

u. Training and Education. (9-7-92)

i. Establishment of effective job training methods and safety education. (9-7-92)

ii. First Aid courses, proper work signals and job hazard warnings. (9-7-92)

iii. Pamphlets, bulletin boards, safety meetings, posters, etc. (9-7-92)

iv. The employer shall establish an adequate job training and safety education program. The relationship of safety to job quality and modern quantity production methods should be clearly understood. Good work production is governed by careful planning and accurate control of all phases of the operation. Accidents are the result of inadequate planning of faulty operation. (9-7-92)

v. Safety must be made an essential and integral part of every operation and integrated into the activity if the most successful quantity production is to be attained. The soundness of this statement has been proven many times by comparing the accident cost with the day by day curve of production. (9-7-92)

vi. It is the responsibility of management to train employees in all phases of the work he is assigned. The worker training should begin at the time of his employment with a careful presentation of the general safety information he must have to work on and in logging and lumbering or wood working operations. When the worker is placed on the job he must be given detailed training on proper work methods for accomplishment of the job. The correct way is the safe way. Telling is not training. (9-7-92)

vii. People learn to do things primarily through doing. The employee's job training should be given by the five step job training method: Tell him; show him; have him do it; correct him until he does it right; supervise him to see that he keeps doing it right. (9-7-92)

viii. Education and promotion are a supplemental means of reducing injuries. This device employes any number of methods to accomplish results. A good program may use but will not overemphasize emotional appeal to the workers using such devices as scholarships, stamps, posters, safety meetings, contests, and awards. It's management's responsibility to integrate education and training program and balance its effectiveness to employee training. Unsafe acts or unsafe work practices are the result of failure to train workers in safe work procedures. In establishing or operating a safe and quality work program, an appraisal of unsafe work procedures and poor quality of work is called for, and job training methods initiated to correct these practices. (9-7-92)

v. Employee, labor and labor representative cooperation. (9-7-92)

i. The workers have a responsibility to obey the units safety rules, smoking rules, report unsafe conditions, to serve on the different safety committees, perform his work in a safe way, and to help his fellow workers by showing him how to do his job safely. (9-7-92)

ii. Many safety programs fail because the worker has not been made to feel that it is his program; that he can contribute as well as benefit from the program. It failed because it lacks employee participation and interest. The fact that employees are given the opportunity to participate and to contribute to the program not only opens a reservoir of valuable information on practical experience in accident prevention, it also gives the employee a feeling of being a part of the organization. (9-7-92)

iii. The committee on safety should be made up of personnel selected from management and workers. Management members are supervisors and worker members may be selected by the union or by the employees. (9-7-92)

iv. The labor unions should help develop a safe behavior among the workers. (9-7-92)

w. Maintenance of Safe Working Conditions. (9-7-92)

i. The employer shall provide a safe and healthy work area to work, including purchasing of safe equipment and tools and provide proper maintenance of such equipment. (9-7-92)

ii. Since a safe and healthful place to work is the very foundation of the safety program, the mechanical, physical, and environmental conditions will be given first consideration. (9-7-92)

iii. For almost every accident there are two contributing causes - an unsafe condition and an unsafe act. A safe and healthful place to work will diminish or eliminate the first cause, the unsafe condition; but unless the unsafe act is corrected; accidents will continue to occur. Unsafe acts may stem from a number of factors, such as improper selection of the worker for the job, lack of job training, physical or mental limitations or inadequate supervision. When a safety program is first established or a new project with a new crew is started, this may necessitate a thorough periodic survey of the entire operation to determine hazards. (9-7-92)

x. First aid and personal protection equipment. Management is responsible for the complying with First Aid requirements and furnishing equipment in accordance with Idaho Minimum Safety Standards and Practices. Management is responsible to make available and train employees in use of special personal protective equipment in accordance with Idaho Minimum Safety Standards (face shields, goggles, ear plugs, helmets, respirators, etc.) (9-7-92)

y. Remedial measures of corrective action. (9-7-92)

i. The employees shall support and correct the findings of Job analysis, inspections, accident investigations, employee suggestion systems, etc. (9-7-92)

ii. The assumption of responsibility for fire and accident prevention by management carries with it the continuing responsibility to assess the progress being made on the program, and where progress is unsatisfactory to take what steps are necessary to bring about improvement. Inspection alone is primarily a means of finding and eliminating fire and physical hazards, particularly in connection with enforcement. All educational and promotional activities should be integrated with inspection activities, and should be based on the specific needs of the establishment or operation. Inspection and educational and promotional programs are sometimes looked upon as entirely unrelated activities rather than a single integrated program. (9-7-92)

iii. None of the foregoing activities are of value unless followed by effective corrective action. The responsible executive of top management must establish specific procedures to effect proper and complete corrective action in each area for problems that occur. In well managed establishments the areas of responsibility are clearly defined. The activities are well coordinated, supervision is good, employees safety behavior is excellent, and policies are well defined to permit smooth organization. This is not difficult; the corrective measures are applied as part of the day by day operating procedure. (9-7-92)

012. -- 019. (RESERVED).

020. GENERAL PROVISIONS.

01. Standard 1, Definitions. Terms used in these standards shall be interpreted in the most commonly accepted sense, excepting only those specifically defined. (9-7-92)

a. Approved. The term approved shall mean approved by the Industrial Commission and/or Department of Labor and Industrial Services. (9-7-92)

b. Commission. The word "Commission" whenever used, unless the context shows otherwise, shall be taken to mean the Industrial Commission. (9-7-92)

c. Department. The word "Department" whenever used, unless the context shows otherwise, shall be taken to mean the Department of Labor. (9-7-92)

d. Shall, must, will. When shall, must or will are used they shall mean the standard, rule or regulation referred to is compulsory or mandatory. (9-7-92)

e. Equipment. The term as used shall mean and include all machines, machinery, tools, devices, safeguard, and protective facilities used in connection with the operation and maintenance of an establishment regardless of ownership. (9-7-92)

f. Guarded. Guarded shall mean, covered, shielded or railed so as to remove the liability of dangerous contact or approach by employees or objects. It shall further mean construction of guards to ensure protection from flying objects where applicable. (9-7-92)

g. Hazard. Hazard as used in these standards shall mean any condition or circumstance which may cause injury to an employee. (9-7-92)

h. Safety factor or factor of safety. This term as used is the ratio of the ultimate breaking strength of a member or piece of material to the actual working stress or to the maximum permissible (safe load) stress. Example: When a safety factor of six (6) is required, the structure, lines, hoists, or other equipment referred to shall be such as to provide a strength sufficient to support a load equal to six (6) times the total weight or stress to be imposed on it. (9-7-92)

i. Standard safeguard. Shall mean a device designed and constructed with the object of removing the hazard of accident incidental to the machine, appliance, tool, building or equipment to which it is attached. (9-7-92)

j. Substantial. Shall mean constructed of such strength, of such material, and of such workmanship, that the object referred to will withstand normal wear, shock and usage. (9-7-92)

k. Exposed to contact. Shall mean the location of a hazardous object is so accessible that a workman may, in the course of his employment, come into contact with the object. (9-7-92)

l. It is recommended, or should. When these terms are used they shall indicate provisions which are not mandatory. (9-7-92)

m. Log or logs. When the word log or logs is used, it includes poles, piling, pulpwood, skids, etc. (9-7-92)

02. Standard 2, Interpretation and Application of the Code. Pursuant to Section 72-720 and 72-721, Idaho Code. This code is designated as the Idaho Safety Code for Logging. The Rules herein contained are adopted as reasonable minimum safety standards of logging. For brevity, these Standards will hereinafter be referred to as the "Code". (9-7-92)

a. This Code is a part of the state of Idaho industrial accident prevention program and has the full force and effect of law. (9-7-92)

b. In accordance with the laws of the state of Idaho, every employer and every employee working in the state of Idaho shall conform with the rules and regulations of this Code. (9-7-92)

c. The enforcement of all rules and regulations of this Code and the right of inspection and examination, at any time, shall rest with the Commission and/or Department. (9-7-92)

d. Where Specific standards in this Code fail to provide a rule or Standard applicable to the operation in question, and other state of Idaho Codes or Standards are applicable, those Codes or Standards shall apply. (9-7-92)

e. Should any controversy develop as to the intent or application of any Standard or rule as set forth in this Code, or the interpretation of any Standard or rule set forth in this Code, such controversy shall be called to the direct attention of the Director of the Department of Labor of the state of Idaho who will render a decision as the applicability of such rule or Standard. Any appeal from this decision shall be directed to the Commission. (9-7-92)

f. Shall, must, will shall mean the standard, rule, or regulation referred to is compulsory or mandatory. (9-7-92)

g. It is recognized that a definite, positive safety code cannot anticipate all contingencies. The Commission and/or Department, after due notice and opportunity to be heard, may require additional standards and practices to insure adequate safety at any place of any employment, and on its own motion, or upon application of any employer, employee, group or organization, may modify any provision of this Code. (9-7-92)

h. In exceptional cases where the rigid application or compliance with a requirement can only be accomplished to the detriment and serious disadvantage of an operation, method or process, exception to the requirement will be considered upon written application to the Commission and Department. After thorough investigation, the Commission or Department may grant an exception or may apply or devise another applicable rule, if human life and physical well being will not be endangered by such exception. (9-7-92)

i. Nothing contained in this Safety Code for Logging shall prevent the use of existing buildings, structures, and equipment during their lifetime when maintained in good safe condition, and properly safeguarded, and conform to the applicable safety standards required by Idaho Safety Codes effective prior to the effective date of this Code, and provided that replacements and alterations shall conform with all provisions of this Code. (9-7-92)

03. Standard 3, Employer's Responsibility. (9-7-92)

a. Every employer shall furnish employment and maintain places of employment which are safe according to the standards as set forth herein. (9-7-92)

b. Every employer shall adopt and use practices, means, methods, operations and processes which are adequate to render such employment and place of employment safe. Every employer shall do every other thing necessary within the framework of this Code to protect the life and safety of employees. (9-7-92)

c. No employer shall require any employee to go or be in any place of employment which does not meet the minimum safety requirement of this Code, except for the purpose of meeting such requirements. (9-7-92)

d. No employer shall fail or neglect: (9-7-92)

i. To make available and use safety devices and safeguards as are indicated. (9-7-92)

ii. To adopt and use methods and processes adequate to render the employment and place of employment safe. (9-7-92)

iii. To do every other thing necessary within the framework of this Code to protect the life and safety of employees. (9-7-92)

e. No employer, owner or lessee of any real property shall construct or cause to be constructed any place of employment which does not meet the minimum safety requirements of this code. (9-7-92)

- f. No person, employer, employee, other than an authorized person, shall do any of the following: (9-7-92)
- i. Remove, displace, damage, destroy or carry off any safeguard, first aid material, notice or warning, furnished for use in any employment or place of employment, or interfere in any way with the use thereof by any other person. (9-7-92)
- ii. Interfere with the use of any method or process adopted for the protection of any employee, including himself, in such employment or place of employment. (9-7-92)
- g. No person shall fail or neglect to do everything necessary within the requirements of this Code to protect the life and safety of employees. (9-7-92)
- h. The use of intoxicants while on duty is prohibited. Persons reporting for duty while under the influence of or affected by liquor shall not work until completely recovered. (9-7-92)
- i. A definite procedure for checking the welfare of all workmen during working hours shall be instituted and all workmen so advised. The employer shall assume responsibility of work assignments so that no worker shall be required to work in a position or location so isolated or hazardous that he is not within usual or audible signal contact with another person who can render assistance in case of emergency. In any operation where cutting, yarding, loading, or a combination of these duties are carried on there shall be a minimum crew of two (2) persons who shall work as a team, and shall be in visual or audible signal contact with one another. This does not apply to operators or motorized equipment, watchmen, or certain other jobs which, by their nature are singular workmen assignments. There shall be some method of checking the men in at the end of the shift. Each immediate supervisor shall be responsible for his crew being accounted for. This standard also includes operators of moveable equipment. (9-7-92)
- j. Employees shall not indulge in horseplay, scuffling, practical jokes or any activity which creates or constitutes a hazard while on the employer's property or at any time when being transported from or to work in facilities furnished by the employer. (9-7-92)
- k. Employees who are assigned to, or engaged in the operation of any machinery or equipment, shall see that all guards, hoods, safety devices, etc., that are provided by the employer, are in proper place and properly adjusted. (9-7-92)
- l. It is the employer's responsibility to see that the foregoing provisions are complied with. (9-7-92)
- m. Every employer shall keep a record of all cases of injuries his employees receive at their work. This record shall be kept in such manner as to enable representatives of the Commission and/or Department to determine by examining the record, the injury rate of the employee force for the period covered by the report. (9-7-92)
- n. Every employer shall investigate or cause to be investigated every accident resulting in a disabling injury that his employees suffer in connection with their employment. He shall promptly take any action thus found to be advisable. Employees shall assist in the investigation by giving any information and facts they have concerning the accident. (9-7-92)
- o. Management Responsibility. (9-7-92)
- i. Top management must take an active and interested part in the development and guidance of the operation's safety program, including fire safety. (9-7-92)
- ii. Management must apply a basic workable safety plan on the same priority as it does to any other work facet of the operation where elimination of all injuries is to be achieved in all phases of the operation. It is the duty of top management to assume full and definite responsibility. To attain these safety objectives, management must have the full cooperation of employers, Commission and Department. (9-7-92)
- iii. Every employer shall furnish employment which shall be safe for the employees therein and shall

furnish such devices and safeguards and shall adopt and use such practices, means, methods, operation and processes as are adequate to render such employment and places of employment safe to protect the life and safety of employees. The employer shall make available necessary personal protective safety equipment. (9-7-92)

iv. Regular safety inspection of all rigging, logging, machinery, rolling stock, bridges, and other equipment shall be made as often as the character of the equipment requires. Defective equipment or unsafe conditions found shall be replaced, repaired or remedied. (9-7-92)

v. All places of employment shall be inspected by a qualified person or persons as often as the type of operation or the character of the equipment requires. Defective equipment or unsafe conditions found by these inspections shall be replaced or repaired or remedied promptly. (9-7-92)

04. Standard 4, Employee's Responsibility. (9-7-92)

a. Each employee shall make it his individual responsibility to keep himself, his coworkers and his machine or equipment free from accidents to the best of his ability. (9-7-92)

b. So that each workman may be better qualified to cooperate (with his fellow workmen in preventing accidents, he shall study and observe these and any other safety standards governing his work. (9-7-92)

c. The responsibilities of an employee insofar as industrial safety is concerned shall be as follows: (9-7-92)

i. He shall report immediately, preferably in writing, to his foreman or safety committee member in his department of the plant, all known unsafe conditions and practices. (9-7-92)

ii. He shall ascertain from the foreman where medical help may be obtained if it is needed. (9-7-92)

iii. He shall not participate in practical jokes or horseplay. (9-7-92)

iv. He shall make a prompt report to the foreman, first aid attendant, or person in charge, of every accident regardless of severity. (Such reports are required and are necessary for his protection in order that there may be a record of his injuries.) (9-7-92)

v. He shall at all times apply the principles of accident prevention in his daily work and shall use proper safety devices and protective equipment. No employee shall remove, displace, damage, destroy, or carry off any safety device or safeguard furnished and provided for use in any employment or interfere in any way with the use thereof by any other person or interfere with the use of any method or process adopted for the protection of any employee in such employment or fail or neglect to do every other thing reasonably necessary to protect the life and safety of himself and fellow employees, and by observing safe practice rules shall set a good example for his fellow workmen. (9-7-92)

vi. He shall not report to the job under the influence of intoxicants and shall not use intoxicants while on the job. The employer shall prohibit any employee from working on or being in the vicinity of any job while under the influence of or affected by intoxicants. Employers shall be responsible for the actions of any employee known to be in an intoxicated condition while on the job. (Workmen are reminded that intoxication on the job may result in forfeiture of compensation for injury to say nothing of the hazard created to fellow workers.) (9-7-92)

vii. He shall not be permitted to work while under the influence of hallucinatory drugs or chemicals or other drugs covered by the Federal Narcotics Act, unless such drugs or chemicals are prescribed by a licensed Medical Doctor, provided the employee does not create a hazard to himself or his fellow workers. (9-7-92)

viii. He shall wear, use and properly care for personal protective safety equipment issued to him. These items shall be returned to the employer on termination of employment. (9-7-92)

ix. Workmen exposed to head hazards shall wear approved head protection. (9-7-92)

- x. Proper eye protection shall be worn while doing work where a known eye hazard exists. (9-7-92)
- d. He should consider the benefits of accident prevention to himself and to his job. (Safety-consciousness is the ability to anticipate accidents and a desire to prevent them.) (9-7-92)
- e. He should make an effort to understand his job. (An efficient workman understands his job, and studies everything pertaining to it.) (9-7-92)
- f. He should anticipate every way in which a man might be injured on the job, and conduct his own work to avoid accidents. (9-7-92)
- g. He should be on the alert constantly for any unsafe condition or practice. (An employee's own knowledge and interest in his work makes him the best possible safety inspector.) (9-7-92)
- h. He should learn first aid to be applied on the job, in the home, or anywhere else. (9-7-92)
- i. He should keep physically fit, and obtain sufficient rest. (9-7-92)
- j. He should be certain, after he has received instructions, that he understands them completely before he starts his work. (9-7-92)
- k. He should actively participate in safety programs. (9-7-92)
- l. He should study the safety educational material posted on the bulletin boards and distributed by the employer of safety committee. (9-7-92)
- m. He should advise inexperienced fellow-employees of safe ways to do their work and warn them of dangers to be guarded against. (9-7-92)

021. -- 029. (RESERVED).

030. HEALTH, SAFETY AND SANITATION.

- 01. Standard 5, First Aid. (9-7-92)
 - a. Suitable means of transportation shall be established and maintained at the site of all operations to be used in the event any employee is seriously injured. (9-7-92)
 - i. Transportation shall be of a nature to render reasonable comfort to an injured employee. (9-7-92)
 - ii. In the event that the only transportation available shall be a crew bus, or similar vehicle, construction shall be such that a loaded stretcher may be freely passed into the vehicle. Arrangements shall also be made for devices to fasten and/or secure the stretcher in a horizontal position after it is loaded into such vehicle. (9-7-92)
 - iii. Each crew bus, or similar vehicle, shall be equipped with at least one ten-unit first aid kit. (9-7-92)
 - b. Every employer shall arrange suitable telephone or radio communication at the nearest reasonable point, and shall work out a definite plan of action to be taken in the event of serious injury to any employee. Instructions covering this plan of action shall be made available to all work crews. (9-7-92)
 - c. When practical, a poster shall be fastened and maintained either on, or in the cover of each first aid cabinet and at or near all phones, plainly stating the phone numbers of applicable emergency services. The use of the Boise Communication Center is recommended. The number is 1-800-632-8000. (9-7-92)
 - d. Seriously injured employees shall, at all times, be attended by the most qualified available person to care for the injured employees. (9-7-92)

- i. Seriously injured employees shall be carefully handled and removed to a hospital, or given medical attention as soon as possible. (9-7-92)
- ii. Caution shall be used in removing a helpless, or unconscious, person from the scene of an accident to prevent further injury. (9-7-92)
- e. Men in charge of workmen shall be required to have completed an approved course in first aid and have a current card. (9-7-92)
- f. A stretcher or spine board (designed for and/or adaptable to the work location and terrain) and two blankets kept in sanitary and serviceable condition shall be available where such conditions are a factor in the proper transportation of, and first aid to, an injured workman. (9-7-92)
- g. Ten unit field first aid kits shall be made available when working away from headquarters. (9-7-92)
- h. Each ten-unit first aid kit should contain the following minimum assortment, or approved equivalent. If there is any question as to the suitability of some of these items in relation to injuries which are common to a specific occupation, the employer should seek the advise of a physician for recommended substitutes or additions. (9-7-92)
 - i. A list of suggested contents: one (1) unit antiseptic applicators. ten (10) per package; two (2) units one inch (1") adhesive compresses. sixteen (16) per package; one (1) unit two inch (2") bandage compresses. four (4) per package; one (1) unit four inch (4") bandage compresses. one (1) per package; one (1) unit three by three inch (3" x 3") plain gauze pads. four (4) per package; one (1) unit two by six inch (2" x 6") yard gauze roller bandage. two (2) per package; one (1) unit triangular bandage, forth inch (40"). one (1) per package; tweezers or forceps. one (1) each per pkg; emergency first aid instructions in convenient form. (9-7-92)
 - i. This assortment should be duplicated for each additional twenty (20) employees working in the same location by adding ten-unit kits, or by larger kits containing approximately a duplicate quantity of supplies required. (9-7-92)
 - ii. Special kits, or the equivalent, shall be provided and approved, for special hazards peculiar to any given work location. (9-7-92)
 - iii. These kits shall be readily available and kept supplied. (9-7-92)
 - iv. For work crews of fewer than five (5) employees working away from work headquarters, a smaller assortment which is suitable for the hazards of the work performed may be acceptable. (9-7-92)
 - j. First aid kits shall be in metal, or other sanitary containers. Such containers shall be designed and constructed so as to be impervious to conditions of weather, dust, dirt, or other foreign matter. (9-7-92)
 - k. Contents shall be sterile, and drugs shall be labeled with their common name and the use for which they are intended. First aid kits should be on every machine for prompt first aid attention in the event of any injury. (9-7-92)
 - l. The Commission and Department may require the installation of a First Aid Room or First Aid Station at operations where a study of the various factors involved indicates the need. Factors to be considered are the number of workmen employed, location and nature of the work being performed, and availability of established medical facilities. When, in the judgment of the Commission and the Department, such an installation is necessary, the employer, or employers concerned, shall provide adequate quarters and facilities. (9-7-92)
 - m. First Aid Rooms and First Aid Stations shall be well lighted, ventilated and kept clean and orderly. (9-7-92)
 - n. First Aid Stations shall be equipped with hot and cold running water, or a means to heat water, and

with a cot, blankets and pillows. If both men and women are employed, a means shall be provided to furnish privacy for each sex. (9-7-92)

- 02. Standard 6, Safety Equipment and Personal Protective Equipment. (9-7-92)
 - a. General. (9-7-92)
 - i. Special protective equipment or apparel required for safe employment, other than clothing or equipment customarily supplied by employees, shall be furnished by the employer where necessary for the safety of employees. (9-7-92)
 - ii. Employees are required to utilize all prescribed safety equipment and special protective equipment or apparel, and they shall exercise due care in maintaining it in safe, efficient and sanitary conditions. (9-7-92)
 - iii. Defective safety equipment shall not be used. Where the need for their use is indicated, protective covering, ointments, gloves or other effective protection shall be provided for and used by persons exposed to materials which are irritating to the skin. (9-7-92)
 - b. Inspection, Maintenance and Sanitizing. (9-7-92)
 - i. Each employer shall maintain a regular system of inspection and maintenance of personal protective equipment furnished to workmen. Air line equipment shall have necessary regulator and shall be inspected before each use. (9-7-92)
 - ii. Workmen shall check their equipment at the beginning of each shift. (9-7-92)
 - c. Eye Protection. (9-7-92)
 - i. Where workmen are subject to eye hazards (flying particles, dusts, hazardous liquids, gases, mists or vapors, or injurious light rays) they shall be furnished with and shall wear eye protection suitable for the hazards involved. Such eye protection shall conform to the United States of America Standard Institute Code for Head, Eyes and Respiratory Protection. (9-7-92)
 - ii. Face shields may be used in lieu of other forms of eye protection where the nature of the operation is such that they will furnish equivalent protection. (9-7-92)
 - iii. Clean water in ample quantities shall be immediately available where materials are handled that are caustic or corrosive to the eyes. (9-7-92)
 - d. Foot Protection. (9-7-92)
 - i. Employees shall wear footwear suitable for the work conditions. Employees shall wear sharp caulk-soled boots or other footwear which will afford maximum protection from slipping. (9-7-92)
 - ii. The use of safety toe shoes is recommended for all workmen subject to foot injuries. Safety shoes, when used, shall meet the United States of America Standard Institute specifications. (9-7-92)
 - iii. Special types or designs of shoes, or foot guards, may be required to be worn where conditions exist that make their use necessary for the safety of the workmen. (9-7-92)
 - iv. Leggings or high boots of leather, rubber or other suitable material should be worn by climbers, persons exposed to hot substances or caustic solutions, etc., or where poisonous snakes may be encountered. (9-7-92)
 - v. Employees whose normal duties require them to operate a chain saw, shall wear ballistic nylon or equivalent protection covering each leg from upper thigh to boot top, except when working as a climber or working from a bucket truck. (9-7-92)

- e. Hand Protection. (9-7-92)
 - i. Hand protection suitable for the required usage should be worn wherever the nature of the work requires extra protection for the hands. (9-7-92)
 - ii. Gloves shall not be worn where their use would create a hazard. (9-7-92)
- f. Head Protection. (9-7-92)
 - i. Persons required to work where falling or flying objects, overhead structures exposed electrical conductors, equipment or material create a hazard shall wear approved safety hard hats or caps at all times while exposed to such hazards. (9-7-92)
 - ii. Employees working in locations which present a haircatching or fire hazard shall wear caps or other head covering which completely covers the hair. (9-7-92)
- g. Life Jackets, Vests and Life Rings. Employees shall be provided with, and shall wear, approved buoyant protective equipment at all times while working on or over water, as follows: (9-7-92)
 - i. On floating pontoons, rafts and floating stages. (9-7-92)
 - ii. On open decks of floating plants (such as dredges, piledrivers, cranes, pond saws, and similar types of equipment) which are not equipped with bulwarks, guardrails or life lines. (9-7-92)
 - iii. During the construction, alteration or repair of structures extending over or adjacent to water, except when guardrails, safety nets, or safety belts and life lines are provided and used. (9-7-92)
 - iv. Working alone at night where there are potential drowning hazards regardless of other safeguards provided. (9-7-92)
 - v. On floating logs, boom sticks or unguarded walkways. (9-7-92)
 - vi. NOTE: Where buoyant protective equipment is provided, it shall be of a design and shall be worn in a manner that will tend to maintain the wearer's face above water. It shall be capable of floating a sixteen pound weight for three hours in fresh water. Such equipment shall not be dependent upon manual or mechanical manipulation or chemical action to secure the buoyant effect. (9-7-92)
 - vii. Life rings with sufficient line attached to meet conditions shall be located at convenient points along exposed sides of work areas adjacent to water. Such rings, if used at night where a person might be beyond illuminated areas, should be provided with a means of rendering them visible. NOTE: Consult U.S. Coast Guard requirements for operations in navigable waters. (9-7-92)
- h. Life Lines - Safety Belts. (9-7-92)
 - i. Each life line and safety belt shall be of sufficient strength to support, without breaking, a weight of two thousand five hundred (2,500) pounds. (9-7-92)
 - ii. All life lines and safety belts shall be periodically inspected by the supervisor in charge. Employees shall inspect their belts and lines daily. Any defective belts or life lines shall be discarded or repaired before use. (9-7-92)
 - iii. Life lines shall be safely secured to strong stable supports and maintained with minimum slack. (9-7-92)
- i. Work Clothing: (9-7-92)
 - i. Clothing shall be worn which is appropriate to work performed and conditions encountered. Loose

- sleeves, cuffs or other loose or ragged clothing shall not be worn near moving machinery. (9-7-92)
- ii. Clothing saturated or impregnated with flammable liquids, corrosive substances, irritants or oxidizing agents shall be removed immediately and not worn again until properly cleaned. (9-7-92)
 - iii. When it is necessary for workers to wear aprons or similar clothing near moving machines or hazardous materials, such clothing shall be so arranged that it can be instantly removed. (9-7-92)
 - iv. Clothing with exposed metal buttons, metal visors or other conductive materials shall not be worn around exposed electrical conductors. (9-7-92)
 - j. Respiratory Equipment. (9-7-92)
 - i. When filter or cartridge-type respirators are required to be used regularly, each employee shall have one such respirator for his own exclusive use. (9-7-92)
 - ii. Employers and employees shall familiarize themselves with the use, sanitary care and limitations of such respiratory equipment as they may have occasion to use. (9-7-92)
 - iii. Whenever practical, harmful dusts, fumes, mists, vapors and gases shall be suppressed by water, oil or other means which will minimize harmful exposure and permit employees to work without the use of respiratory equipment. (9-7-92)
 - iv. Whenever compressed air from an oil-lubricated compressor is used to supply respiratory equipment, a filter shall be inserted in the supply line to remove any oil, sediment or condensation that it may contain. Such filter shall be maintained in efficient working condition. (9-7-92)
 - v. When self-contained respiratory equipment is used in hazardous locations, a standby unit shall be maintained for rescue purposes. (9-7-92)
 - k. Additional information and requirements for the use of safety equipment and personal protective equipment may be found in the Idaho Minimum General Safety Standards and Practices, Safety Code 1. (9-7-92)
03. Standard 7, Fire Prevention, Protection and Suppression. (9-7-92)
- a. General. (9-7-92)
 - i. Additional Standards pertinent to the storage, distribution, and use of liquefied petroleum gases and other flammables or combustibles may be obtained by reference to regulations of Idaho Department of Law Enforcement and the National Fire Protective Association pamphlets. (9-7-92)
 - ii. Fire fighting equipment, suitable for the hazards involved, shall be provided for the protection of workmen. Such equipment shall be readily accessible, and shall be plainly labeled as to its character and method of operation. Locations of such equipment shall be conspicuously posted. (9-7-92)
 - iii. All equipment and apparatus for fire protection and fire fighting shall be regularly inspected and be maintained in good and serviceable condition at all times. A record of the date of the latest inspection shall be kept with each portable fire extinguisher. This includes all automatic sprinkler systems and hose lines. (9-7-92)
 - iv. Fire extinguishers, whether portable or automatic, shall comply with appropriate current standards as published by the National Fire Protection Association. (9-7-92)
 - v. Electrical lights, apparatus, and wiring used in locations where flammable or explosive gases, vapors, mists, or dusts are present shall be of the type accepted by the State Electrical Code. (9-7-92)
 - vi. Smoking while refueling equipment is prohibited. (9-7-92)

- vii. All fuel storage tanks, service tanks, etc. shall be bonded for ground for fueling purposes. (9-7-92)
- viii. When lights are used in enclosed rooms, vaults, manholes, tanks or other containers which may contain flammable or explosive vapors, mists, gases, or dusts, such lights shall be of the approved vapor proof types. (9-7-92)
- ix. No torch, flame, arc, spark, or other source of ignition shall be applied to any tank or container that has contained or does contain flammable or explosive vapors or materials until such container has been inerted or otherwise purged of flammable or explosive vapors or materials, except that "hot tapping" on tanks may be done providing (1) that there shall be at least four feet of liquid above the point of the "hot tap," and (2) that the work shall be carried out under the direction of a supervisor experienced in this type of work. (9-7-92)
- x. NOTE: A test for flammability or explosiveness of the interior of such vessels shall be made using a device which will determine the concentration of flammable vapors for this purpose. Unless the percentage of flammable vapors is found to be less than twenty (20) percent of its lower explosive limit, no source of ignition shall be permitted. (9-7-92)
- xi. Frequent testing for determining the concentration of flammable and explosive vapors shall be made, and if the concentration is found to exceed twenty (20) percent of its lower explosive limit, sources of ignition shall be extinguished or removed immediately. Fire extinguishing equipment adequate to cope with possible hazards shall be maintained close at hand. (9-7-92)
- xii. Smoking, the use of open flames, tools which are not approved for such areas, and other sources of ignition are prohibited in locations where flammable or explosive gases, vapors, mists, or dusts are present. Warning signs shall be conspicuously posted in such areas. (9-7-92)
- xiii. Where salamanders and other fuel-burning heating devices are used, they shall be provided with adequate means for preventing the emission of sparks or other sources of ignition. They shall be insulated or placed a sufficient distance from combustible structures and materials to prevent causing fires. Adequate ventilation shall be provided. (9-7-92)
- xiv. When welding or cutting is done special precautionary measures should be exercised before, during and after the job is finished to eliminate any possibility of serious or delayed fires. (9-7-92)
- b. Flammable Liquids. (9-7-92)
- i. For the purpose of this Section of the Code, "Flammable Liquids" shall mean any liquid having a flash point below one hundred and forty (140) degrees Fahrenheit and having a vapor pressure not exceeding forty (40) pounds per square inch (absolute) at one hundred (100) degrees Fahrenheit. (9-7-92)
- ii. All flammable liquids shall be stored in approved containers suitable for their particular contents, and such approved containers shall be stored in areas removed from any direct source of ignition. (9-7-92)
- iii. Flammable liquids shall be kept in approved covered containers when not in actual use. (9-7-92)
- iv. The name of the flammable liquid contained therein shall be placed on all stock containers, and whenever such liquids are taken from the stock containers and put into other approved containers for use in the plant, it shall be the responsibility of the employer to see that these containers (except small containers of flammable liquids which are scheduled for immediate use and disposal) also bear the name of the flammable liquid contained therein. (9-7-92)
- v. Flammable liquids shall not be used indoors to clean or wash floors, walls, any part of the building structure, furniture, equipment, machines or machine parts, unless sufficient ventilation is provided to bring and maintain the concentration of explosive vapors in the atmosphere below twenty (20) percent of its lower explosive limit. NOTE: The use of flammable liquids may create toxic contaminants in the atmosphere above permissible threshold limit values. (9-7-92)

c. Transferring Flammable Liquids and Powdered Materials. In transferring flammable liquids or finely divided flammable or explosive materials from one metal container to another, the containers shall be in firm contact with each other or be continuously bonded throughout the transfer so as to prevent the accumulation of static charges. Where portable tanks, mixers, or processing vessels are used for flammable liquids or flammable or explosive compounds, they shall be bonded and grounded while being filled or emptied. (9-7-92)

d. Transportation of Flammable Liquids. (9-7-92)

i. When transporting gasoline or other flammable liquids in six and one-half gallon quantities or less, approved containers shall be used. (9-7-92)

ii. If tank truck service is not available or used, gasoline and other flammable liquids in quantities exceeding six and one-half gallons shall be transported in approved containers. Bungs shall be tight and containers shall be secured to prevent movement. (9-7-92)

iii. It may be permissible to transport gasoline or other flammable liquids on passenger vehicles if in approved, closed safety containers of not more than six and one-half gallon capacity, provided such containers are carried in a suitable and safe location outside the passenger compartment. (9-7-92)

04. Standard 8, designated logging camps. A camp used in a logging operation shall comply with the following requirements: (9-7-92)

a. Trees and snags which may constitute a hazard to persons in the camp area shall be felled. (9-7-92)

b. The Idaho Department of Health and Environmental Quality rules of sanitation must be observed as to water, toilets, washrooms, refuse, etc. (9-7-92)

031. -- 039. (RESERVED).

040. EXPLOSIVES AND BLASTING.

01. Standard 9, Explosives and Blasting. (9-7-92)

a. The transportation, handling and storage of explosives including blasting agents, shall be performed only by or under the supervision of a person or persons of proven experience and ability in blasting operations and of dependable character. All operations with explosives shall be conducted in accordance with the requirements of applicable Local, State and Federal Laws. (9-7-92)

b. Manufacturer's recommendations in the handling and use of the explosives or powders should be followed. (9-7-92)

c. Explosives or blasting powders shall not be stored together with detonators. (9-7-92)

d. Handling and use of explosives shall be restricted to as few employees as practical. (9-7-92)

e. All drill holes shall be of greater diameter than the diameter of cartridges of explosives used. (9-7-92)

f. All holes which have been "Sprung" shall not be loaded until sufficient time has been allowed for the hole to cool. (9-7-92)

g. All hand tamping shall be done with wooden tamper. (9-7-92)

h. Primers shall have caps firmly seated in cartridges. (9-7-92)

i. Where fused detonators (caps) are used, standard crimpers shall be provided and used. NOTE: Crimping with the teeth is expressly prohibited. (9-7-92)

- j. Primers shall not be forced into prepared blasting holes. (9-7-92)
- k. Fuse selection for each shot or series of shots shall be of ample length to allow adequate escape time. (9-7-92)
- l. No blasting or preparation for blasting shall be done during the approach or progress of an electrical storm. (9-7-92)
- m. Before firing shots, clear personnel from area, post a guard at all access routes and the warning "FIRE-IN-THE-HOLE" shall be given. (9-7-92)
- n. Approved methods of electrical firing shall be used with electric detonators. (9-7-92)
- o. The number of charges to be fired shall be counted to be certain that no misfires are left before work in the area is resumed. (9-7-92)
- p. Misfires shall be handled only by an experienced and competent powder man in accordance with procedure recognized by the Institute of Makers of Explosives, U.S. Bureau of Mines or other recognized agencies. (9-7-92)
- q. Workmen handling explosives shall not carry loose caps or primers in their pockets, or smoke while in the vicinity of explosives, powder or caps. (9-7-92)
- r. Explosives, primers or caps shall not be carried on any vehicle used when transporting employees other than those using the explosives. (9-7-92)
- s. All detonators, detonating fuses, and explosives left over at the end of the day shall be promptly returned to their proper magazines. (9-7-92)

041. -- 049. (RESERVED).

050. GARAGES, MACHINE SHOPS AND RELATED WORK AREAS.

- 01. Standard 10, Garages and Machine Shops and Related Areas. (9-7-92)
 - a. Machine shops and other structures where workmen are employed shall be constructed, ventilated, lighted and maintained in a safe working condition. (9-7-92)
 - b. Engines, pulleys, belts, gears, sprockets, collars and other moving parts of machinery shall be properly guarded. (9-7-92)
 - c. Grinding wheels shall have proper and adequate eye guards or hoods. Goggles shall be worn by employees while grinding. (9-7-92)
 - d. Machines shall be in good repair and good housekeeping shall be maintained. (9-7-92)
 - e. Proper goggles or hoods shall be made available and used in grinding and cutting, acetylene welding, electric arc and other types of welding. (9-7-92)
 - f. Tools shall be kept in good condition and care shall be taken in handling, storing of all tools and materials so as to minimize chances for injury. (9-7-92)
 - g. An approved screen shall be provided, and used, to protect other workmen from welding flashes. (9-7-92)

051. -- 059. (RESERVED).

060. SIGNALS AND SIGNAL SYSTEMS.

- a. Rigging. Rigging shall be moved by established signals and procedures only. Signals shall be thoroughly understood by the crew. (9-7-92)
 - b. Daily Test Required. Each electric or radio signal system shall be tested daily before operations begin. (9-7-92)
 - c. Men in Clear Before Moving Logs or Turns. Operators or yarding equipment shall not move logs or turns until all men are in the clear and a signal has been given. They shall be alert to signals at all times. (9-7-92)
 - d. One Workman to Give Signals. Only one workman in any crew shall give signals at the point where chokers are being set. Any person is authorized to give a stop signal when a workman is in danger or other emergency condition is apparent. (9-7-92)
 - e. Signal Must be Clear and Distinct. Machine operators shall not move any line unless the signal received is clear and distinct. If in doubt the operator shall repeat the signal as understood and wait for confirmation. (9-7-92)
 - f. Hand Signal Use Restricted. Hand signals are permitted only when in plain sight of the operator. Hand signals may be used at any time as an emergency stop signal. (9-7-92)
 - g. Persons in Clear Before Signal Given. All persons shall be in the clear before a signal is given to move logs or turns. (9-7-92)
 - h. Throwing Material Prohibited. Throwing of any type of material as a signal is prohibited. (9-7-92)
 - i. Use of Jerk Wire Prohibited. The use of jerk wire whistle system for any type of yarding operations is prohibited. (9-7-92)
 - j. Audible Signaling to be Installed and Used. A whistle, horn or other audible signaling device, clearly audible to all persons in the affected area, shall be installed and used on all machines operating as yarders or swings. (9-7-92)
 - k. Audible Signaling Device at the Machine to be Activated. When radio or other means of signal transmission is used, an audible signal must be activated at the machine. (9-7-92)
02. Standard 12, Electric Signal Systems. (9-7-92)
- a. Weatherproof Wire and Attachments to be Used. Where an electrical signal system is used, all wire and attachments shall be of the weather proof type. (9-7-92)
 - b. Electric Signal Systems to be Properly Installed and Adjusted. Electric signal systems shall be properly installed and adjusted again. They shall be protected against accidental signaling, and shall be maintained in good operating condition at all times. (9-7-92)
 - c. All Connections to be Weatherproof. All connections in insulated signal wire shall be weatherproof. (9-7-92)
03. Standard 13, Radio Signaling Systems. (9-7-92)
- a. Use of Conventional Space Transmission of Radio Signals. When conventional space transmission of radio signals is used under and in accordance with an authorization granted by the Federal Communications Commissions to initiate any whistle, horn, bell or other audible signaling device, or such transmission of radio signals is used to activate or control any equipment the following specific rules will apply. NOTE: This rule shall apply only

to devices operating on radio frequencies authorized pursuant to the rules and regulations of the Federal Communications Commission. (9-7-92)

i. Any employer using or desiring to use radio tone signaling units for the control and/or activation of any signal, machine or equipment shall obtain a permit from the Industrial Commission, for the use of the specific tone-signal coding used to activate the device within a specified area. This permit must be prominently displayed and attached to the receiver for which it is issued before the unit is placed in operation. Any unit not displaying this permit shall be taken out of service until the permit is obtained and attached to the unit. (9-7-92)

ii. Applications for permits shall submit the following information concerning the equipment to the Industrial Commission: The assigned radio frequency; the manufacturer of the unit; the serial number of the receiver; the tone frequency(s) upon which the unit operates; the intended use or function of the unit; the county in which the equipment will be used; a brief description of the location at which the equipment will be used (section, township and range). (9-7-92)

iii. All permits will be processed and licenses issued within fifteen (15) days after the Commission receives the request. (9-7-92)

iv. Before moving any unit from one assigned area to another, a new permit shall be secured from the Industrial Commission. The provisions of Sections i. and ii. shall also apply in moving a radio signaling unit from one assigned area to another. (9-7-92)

v. The Industrial Commission will assign the pulse-tone frequency for which the user makes application, or assign another pulse-tone frequency which is compatible with existing units in the area in which it will be used. (9-7-92)

vi. No individual or company may reserve tone frequencies within an area for more than thirty (30) days before the frequencies will be put to use. Users shall notify the Industrial Commission within thirty (30) days after the radio-signaling device is: Permanently retired (in what manner); Sold (to whom); Removed from state (to which state); Stolen. (9-7-92)

b. Spares to be Certified. Additional systems may be certified in advance as "spares" providing they are used only as replacements for malfunctioning systems during the time required to repair the original equipment. (9-7-92)

c. Description on Outside of Case. Each radio transmitter and receiver shall have its tone frequency(s) in hertz (CPS), the manufacturer's serial number, and the assigned radio frequency clearly and permanently indicated on the outside of the case. When the duration of the tone frequency(s) performs a function, the pulse-tone duration shall also be permanently indicated on the outside of the case. On the FCC restricted frequencies 154.57 MHz and 154.60 MHz, a maximum of two (2) watts of power will be allowed. (9-7-92)

d. Activating Pulse-tone to be Limited to forty (40) Milliseconds Duration. The activating pulse-tone of any multi-tone transmitter shall be of not more than forty (40) milliseconds duration. (9-7-92)

e. Adjustment, Repair or Alteration by Qualified Person Only. All adjustments, repairs or alterations of radio-signaling devices shall be done only by or under the immediate supervision and responsibility of a person holding a first or second class commercial radio operator's license, either radio-telephone or radio-telegraph, issued by the Federal Communications Commission. (9-7-92)

f. Tone-Signal Controlled Devices to be Tested Each Day. Tone-signal controlled devices shall be tested each day before work begins. If any part of the equipment fails to function properly, the system shall not be used until the source of trouble is detected and corrected. Audible signals used for test purposes shall not include signals used for movement of lines or material. NOTE: Equipment or machines controlled by radio-signaling devices should be designed and built to "fail safe" or stop, in case of failure of the radio-signaling device. (9-7-92)

g. Interference, Overlap, Fadeout or Blackout. When interference, overlap, fadeout or blackout of radio signals is encountered, the use of the tone-signal controlled device shall be immediately discontinued. The use

of such tone-signal controlled device shall not be resumed until the source of trouble has been detected and corrected.
(9-7-92)

h. Number of Transmitters Required. Two radio transmitters shall be in the vicinity of the rigging crew at all times when transmitters are being used by persons who are around the live rigging. Only one (1) radio transmitter will be required, if in possession of a signalman who has no other duties and remains in an area where he is not subjected to hazards created by moving logs or rigging. (9-7-92)

i. Voice Communication shall be used for explanation purposes only. Actual activation of equipment shall be done by audible horn, bell or whistle and not by voice. The signal must be audible throughout the entire yarding and machine area. (9-7-92)

061. -- 069. (RESERVED).

070. TRUCK ROAD STANDARDS.

01. Standard 14, Truck Road Standards. (9-7-92)

a. When building roads, all construction shall be carried on in accordance with good logging engineering practices and shall be constructed and maintained in a manner to insure reasonably safe operation. Due consideration shall be given to the following factors: (9-7-92)

i. Type of material used for roadbed and surfacing. (9-7-92)

ii. Type of hauling equipment which will travel road. (9-7-92)

iii. Size of loads to be hauled. (9-7-92)

iv. Pitch and length of grades. (9-7-92)

v. Degree of curvature and visibility on turns. (9-7-92)

vi. Volume of traffic. (9-7-92)

b. Truck roads shall not be too steep for safe operation of logging or work trucks which operate over them and should not exceed twenty (20) percent grade unless an auxiliary means of lowering truck is provided. (9-7-92)

c. Main truck roads shall be of sufficient width and evenness to insure the safe operation of equipment. Truck roads with blind curves where visibility is less than three hundred (300) feet shall be of sufficient width for two (2) trucks to pass or some type of signal system shall be maintained or speed limited to fifteen (15) miles per hour. (9-7-92)

d. Conditions such as broken planking, deep holes, large rocks, logs, etc., which prevent the safe operation of equipment shall be immediately corrected. (9-7-92)

e. Sufficient turnouts shall be provided and a safe side clearance maintained along all truck roads. (9-7-92)

f. Brush and other materials that obstruct the view at intersections or on sharp curves shall be eliminated and all possible precautions taken. (9-7-92)

g. Culverts and bridge structures shall be adequate to support the maximum imposed loads without exceeding the maximum safe working unit stresses. Such structures shall be maintained in good condition and shall be inspected yearly by a qualified man. (9-7-92)

h. Wheel guard rails on bridges shall be not less than eight (8) inches above deck and shall be

substantially fastened to withstand impact of shearing wheels. Such guard rails shall extend full length of bridge. (9-7-92)

i. Dangerous trees, snags and brush, which create a hazard, shall be cleared a safe distance on both sides of the right-of-way. (9-7-92)

j. Pile Drivers, power driven shovels, tractors, bulldozers, and other equipment shall be operated in a safe and careful manner. All precautions shall be taken to insure the safety of all employees. (9-7-92)

071. -- 079. (RESERVED).

080. TRANSPORTATION OF EMPLOYEES.

01. Standard 15, Transportation of Employees. (9-7-92)

a. Anchored seats shall be provided for each person riding in any vehicle. (9-7-92)

b. Vehicles used for the transportation of employees shall be constructed, or accommodated, for that purpose and shall be equipped with adequate seats with back rest properly secured in place, and shall be protected on sides and ends to prevent falls from vehicle. (9-7-92)

c. Vehicles, as described above, shall be equipped with adequate steps, stirrups, or other similar devices, so placed and arranged that the employees can safely mount or dismount the vehicle. (9-7-92)

d. On vehicles designed to transport nine (9) or more passengers, an emergency exit not less than six and one-half (6 1/2) square feet in area, with the smaller dimension being not less than eighteen (18) inches, shall be placed at the back of the vehicle or near the back on the side opposite the regular entrance. The route to and egress from the exit must be unobstructed. (9-7-92)

e. Every emergency exit shall be conspicuously marked "Emergency Exit" and be so fastened that it can be readily opened by a passenger in the case of emergency. (9-7-92)

f. Emergency doors shall be not less than twenty-four (24) inches in width. (9-7-92)

g. Every vehicle used for the transportation of employees shall be equipped with an Underwriters Laboratories, Inc., approved fire extinguisher, or its equivalent, with at least a 4BC rating. (9-7-92)

h. Regular drivers of vehicles used for the transportation of employees shall have an appropriate operator's license for the state of Idaho. (9-7-92)

i. Before operating any vehicle, drivers shall check it, and if it is found to be in any way unsafe, it shall be reported to proper authority and shall not be operated until it has been made safe. (9-7-92)

j. Brakes, steering mechanism and lights shall be tested immediately before starting any trip. (9-7-92)

k. No flammable materials, or toxic substances shall be transported in passenger compartments of vehicles while carrying personnel. (9-7-92)

l. Should it become necessary, and only under emergency conditions, to transport more than the seating capacity in the vehicle, all employees not having seats must ride within the vehicle. (9-7-92)

m. Under no circumstances shall employees ride on fenders or running boards. (9-7-92)

n. An employee must never ride in, or on, any vehicle with his legs hanging over the end or sides. (9-7-92)

o. If tools are transported at the same time that employees are being transported, the tools shall be

enclosed in boxes or racks and properly secured to the vehicle. (9-7-92)

p. No one shall board, or leave, moving equipment except in case of emergency (except trainmen or others whose duties require such). (9-7-92)

q. Equipment shall be operated in a safe manner and in compliance with traffic regulations. Safe speeds shall be maintained at all times. (9-7-92)

r. No explosives shall be transported on, or in, vehicles used primarily for carrying personnel while such vehicles are being used for carrying personnel. (9-7-92)

s. The driver shall do everything reasonably possible to keep his crew vehicle under control at all times and shall not operate in excess of a speed at which he can stop the vehicle in one-half (1/2) the distance between him and the range of unobstructed vision. He shall take into consideration the condition of the roadway, weather factors, curves, grades and grade crossings, the mechanical condition of his equipment and other pertinent items. He shall clear rocks from between dual tires before driving on multi-lane roads. A daily inspection shall be made of trucks and trailers with particular attention to: steering apparatus, brakes, boosters, brake hoses and connections, reaches and couplings. Any defects found shall be corrected before equipment is used. (9-7-92)

081. -- 089. (RESERVED).

090. FALLING AND BUCKING.

01. Standard 16, Falling and Bucking. (9-7-92)

a. There shall be an established method of checking the men in from the woods. Each supervisor shall be responsible for his crew being accounted for at the end of each shift. (See Section A.3.i. of this Code.) (9-7-92)

b. Common sense and good judgment must govern the safety of cutters as effected by weather conditions. At no time shall they work if wind is strong enough to prevent the falling of trees in the desired direction or when vision is impaired by weather conditions or darkness. (9-7-92)

c. All cutters shall have a current first aid card, or shall avail themselves of the first opportunity to obtain such training. Employers shall provide an opportunity for cutters to take a standard first aid course. (9-7-92)

d. Tools of cutters such as axes, sledges, wedges, saws, etc., must be maintained in safe condition. Battered sledges, and wedges shall not be used. When power saws are used, wedges shall be made of soft material, such as wood or plastic. (9-7-92)

e. Cutters shall not be placed on hillsides immediately below each other or below other operations where there is possible danger. (9-7-92)

f. Trees shall not be felled if a falling tree endangers any workman, line or any unit in operation. (9-7-92)

g. Before starting to fall or buck any tree or snag, the cutter must survey the area for possible hazards and proceed according to safe practices. Snags, which are unsafe to cut, shall be blown down with explosives, or felled by other methods. (9-7-92)

h. Dangerous or hazardous snags shall be felled prior to or in the course of cutting a strip. No danger tree shall be felled by one cutter where and when the assistance of a fellow employee is necessary to minimize the danger or hazards involved. In the case that any danger tree or snag cannot be safely felled and must remain standing or unattended, such tree or snag shall be clearly identified and suitably marked, including all surrounding impact area, and the employee's supervisor shall be notified as soon as possible. (9-7-92)

j. In falling timber, adjacent brush and/or snow shall be cleared away from and around the tree to be felled to provide sufficient room to use saws and axes and provide an adequate escape path. (9-7-92)

- k. Cutters shall not fall into another strip; leaners on the line shall be traded. Trees shall be felled into the open whenever conditions permit. (9-7-92)
- l. Undercuts and side cuts shall be large enough to safely guide the trees and eliminate the possibility of splitting and/or barber chairing. Particular care shall be taken to hold enough wood to prevent the tree from prematurely slipping or twisting from the stump. Undercuts shall be cleaned out to the full depth of the saw cut. Especially large undercuts are necessary in heavy leaners. When required to safely fell a tree, mechanical or other means shall be employed to accomplish this objective (See illustration in Chapter E.1.d.) Pre-cutting of trees for the purpose of production logging is prohibited. NOTE: Trees with no perceptible lean having an undercut to a depth of 1/4 the diameter of the tree with an undercut height equal to one fifth (1/5) of the diameter of the tree will be assumed to be in reasonable compliance with the rule. (9-7-92)
- m. Backcuts shall be as level as possible and shall be above the level of the upper horizontal cut of the undercut. (9-7-92)
- n. While wedging, fallers shall watch for limbs or other material which might be jarred loose. Cutting of holding wood in lieu of using wedges is prohibited. (9-7-92)
- o. When falling or bucking a tree is completed the power saw motor should be stopped. Power saw motor should be stopped while the operator is traveling to the next tree. (9-7-92)
- p. Cutters shall not work on the downhill side of the log being bucked unless absolutely unavoidable and only when the log is blocked or otherwise secured to prevent rolling when cut is completed. (9-7-92)
- q. Cutters must give timely warning to all persons within range of any log which may have a tendency to roll or slide after being cut off. (9-7-92)
- r. Logs shall be completely bucked through whenever possible. If it becomes hazardous to complete a cut, then the log shall be marked and identified by a predetermined method. Rigging crews shall be instructed to recognize such marks and when possible cutters shall warn rigging crew of locations where such unfinished cuts remain. (9-7-92)
- s. A competent person properly experienced in this type of work shall be placed in charge of falling and bucking operations. Inexperienced workmen shall not be allowed to fall timber or buck logs unless under the direction of an experienced workman. (9-7-92)
- t. Power saws shall be kept in good repair at all times. All exhaust parts on power chain saws shall be constructed and maintained so operator is exposed to a minimum amount of fumes and noise. (9-7-92)
- u. Chain saws shall have sprockets and drive end of the bar adequately guarded. Idler ends, when used as two man saw, shall also be guarded. (9-7-92)
- v. Combustion engine driven power saws shall be equipped with a clutch. Saws with faulty clutches shall not be used. (9-7-92)
- w. Combustion engine driven power saws shall be equipped with an automatic throttle which will return the motor to idling speed upon release of the throttle. (9-7-92)
- x. Power saw motors shall be stopped while being fueled. Any person operating a power saw shall have immediately available a fire extinguisher in conformity with the applicable laws. (9-7-92)
- y. All personnel shall wear approved head protection, proper clothing and footwear. (9-7-92)
- z. Employees whose normal duties require them to operate a chain saw, shall wear ballistic nylon or equivalent protection covering each leg from upper thigh to boot top, except when working as a climber or working from a bucket truck. (9-7-92)

02. Standard 17, Mechanical Delimbers and Feller Bunchers. (9-7-92)
- a. Before start-up or moving equipment, check area for fellow employees or equipment. (9-7-92)
 - b. If any protective device is missing, it is to be replaced as soon as possible. If it affects a safe operation, the machine is to be shut down. (9-7-92)
 - c. When machine is working, extreme caution should be used when approaching. Operator should be notified by radio or visual contact. (9-7-92)
 - d. All raised equipment shall be lowered to the ground or to a safe position and the park brake set before leaving the machine. (9-7-92)
03. Standard 18, Illustration of Undercuts. (9-7-92)
- a. Conventional Undercut (Illustration I) - Can be made with parallel saw cut and a diagonal cut. (9-7-92)
 - b. Both cuts made with the saw (Illustration II) - Leaves square end log. Same as I except that waste is on the stump. (9-7-92)
 - c. Two angle cuts with the saw (Illustration III) - Used when it is necessary that the face does not close until the tree is near the ground. (9-7-92)
 - d. A Humbolt undercut with faced stump (Illustration IV) - Used to allow the butt of the tree to hit the ground before the top. (9-7-92)

NOTE: Illustrations are available from the Industrial Commission,
317 Main Street, Boise, Idaho 83720, phone (208) 334-6000.

091. -- 099. (RESERVED).

100. RIGGING, LINES, BLOCKS AND SHACKLES.

01. Standard 19, Rigging. (9-7-92)
- a. General: The determining factor in rigging-up shall be the amount of rated rump pull which a machine can deliver on each line. (9-7-92)
 - b. Equipment shall be classed according to manufacturer's rating. Where lower gear ratios or other devices are installed to increase the power of equipment, the size of the rigging shall be increased proportionately so that it will safely withstand the increased strains to conform to the Rule I.I.d. (9-7-92)
 - c. Rigging, and all parts thereof, shall be of a design and application to safely withstand all expected, or potential, loading to which it will be subjected. (9-7-92)
 - d. In no case shall the allowable loading or stress imposed exceed one-half (1/2) of the rated breaking strength of any parts of the rigging. This shall not be construed as applying to chokers. (9-7-92)
 - e. Chokers shall be at least one-eighth (1/8) inch smaller than the mainline. (9-7-92)
 - f. The placing, condition and operation of rigging shall be such as to insure safety to those who will be working in the vicinity. (9-7-92)
 - g. Rigging shall be arranged and operated so that rigging or loads will not found, rub or saw against lines, straps, blocks or other equipment. (9-7-92)

- h. Running lines and changed settings shall be made in a way to avoid bight of line hazards. Signals to operator shall be made before moving lines. (9-7-92)
- i. Reefing or similar practices to increase line pull shall be prohibited. (9-7-92)
- j. "V" leads are prohibited unless the equipment and rigging are of approved design for such usage. (9-7-92)
- k. Inspection of Rigging. (9-7-92)
 - i. A thorough inspection by operator or qualified person of all blocks, straps, guylines and other rigging shall be made before they are placed in position for use. This inspection shall include an examination for damaged, cracked or worn parts, loose nuts and bolts, lubrication, condition of straps and guylines. The repairs or replacements necessary for safe operation shall be made before rigging is used. (9-7-92)
- 02. Standard 20, Guylines in General. (9-7-92)
 - a. Guylines shall be of plow steel or equivalent, in good condition. (9-7-92)
 - b. Guylines shall be provided in sufficient number, condition and location to develop stability and strength equivalent to the breaking strength of any component part of the rigging or equipment. (9-7-92)
 - c. Guylines shall be fastened by means of shackles or hooks and slides. The use of loops or molles for attaching guylines is prohibited. (9-7-92)
 - d. The "U" part of a shackle shall be around the guyline and the pin passed through the eye of the guyline. Pins shall be secured with molles, cotterkeys, or the equivalent. (9-7-92)
 - e. Guylines shall be kept tightened while equipment or rigging they support is in use. (9-7-92)
 - f. Anchoring guylines. (9-7-92)
 - i. Stumps used for fastening guylines and skylines shall be carefully chosen as to position, height and strength. They shall be tied back if necessary. (9-7-92)
 - ii. Guyline anchors shall not be attached directly to deadmen. (9-7-92)
 - iii. Stumps, trees and guyline anchors shall be inspected from time to time while operation is in progress and hazardous conditions immediately corrected. (9-7-92)
 - iv. Standing trees which will reach landing or work areas shall not be used for guyline anchors. (9-7-92)
 - v. Any guyline anchor tree that can reach the landing or work area shall be felled before using as an anchor. (9-7-92)
- 03. Standard 21, Lines, Shackles and Blocks. (9-7-92)
 - a. All lines, shackles, blocks, etc., should be maintained in good condition and shall be of sufficient size, diameter and material to withstand one and one-half (1.5) times the maximum stress imposed. (9-7-92)
 - b. Wire rope or other rigging equipment shall be replaced which shows a fifteen percent (15%) reduction in strength. (9-7-92)
 - c. Two (2) lines may be connected by a long splice, or by shackles of patent links of the next size larger than the line where practical. (9-7-92)

- d. Safe margin of line must be used for making long splices. (9-7-92)

Rope Diameter	Unraveled	Total Length
3/8"	8'	16'
5/8"	13'	20'
3/4"	15'	30'
7/8"	18'	36'
1"	20'	40'

- e. All blocks must be of steel construction or of material of equal or greater strength and so hung that they will not strike or interfere with other blocks or rigging. (9-7-92)

- f. All pins in blocks shall be properly secured by keys of the largest size the pin hole will accommodate. When blocks are hung in trees, threaded pins and nuts shall be used. The nut shall be kept in position on the in by use of keys of the largest size the pin hole will accommodate. Key must go through nut and pin. (9-7-92)

- g. Spread in jaws of shackles shall not exceed by more than one (1) inch the size of yoke or swivel of the block to which it is connected. (9-7-92)

- h. All shackles must be made of forged steel or material of equivalent strength and one size larger than the line it connects. (9-7-92)

- i. Cable cutters, soft hammers, or cutting torch shall be available and shall be used for cutting cables. (9-7-92)

- j. Wire rope worn or damaged beyond the point of safety shall be taken out of service or properly repaired before further use. (9-7-92)

- k. All wire rope offered for sales shall be certified as to its breaking strength by the manufacturer or vendor in accordance with the U. S. Bureau of Standards specifications, or Industrial Commission before being used. (9-7-92)

Table 1, TYPICAL WIRE ROPE SPECIFICATIONS, (6 x 19, 6 x 21, or 6 x 25 IWRC*), available from the Industrial Commission, 317 Main Street, Boise, Idaho 83720, phone (208) 334-6000.

Table 2 - PUT CLIPS ON RIGHT		
Diameter of Rope	Number of Clips Required	Space between Clips
1/2-inch	8	10 inches
1 3/8-inch	7	9 inches
1-1/4-inch	6	8 inches
1-1/8-inch	5	7 inches
1- inch	5	6 inches
7/8-inch	5	5-1/4 inches

Table 2 - PUT CLIPS ON RIGHT		
Diameter of Rope	Number of Clips Required	Space between Clips
3/4-inch	5	5-1/2 inches
3/8 to 5/8-inch	4	3 inches

Clips should be spaced at least six rope diameters apart to get the maximum holding power and should always be attached with the base or saddle of the clip against the longer or "live" end of the rope. The "U" bolt goes over the dead end. This is the only right way. Do not reverse the clips or stagger them. Otherwise the "U" bolt will cut into the live rope when the load is applied. After the rope has been used and is under tension the clips should again be tightened to take up any looseness caused by the tension reducing the rope diameter. Remember that even when properly applied a clip fastening has only about ninety percent (90%) of the strength of the rope and far less than that when on wrong. (9-7-92)

Illustration showing proper way of fastening clips is available from the Industrial Commission, 317 Main Street, Boise, Idaho 83720, phone (208) 334-6000. .

Table 3 - EFFECTIVENESS OF GUYS ACCORDING TO ANGLE	
Degree	Effectiveness
60 to 45	50% to 75%
45 to 30	75% to 85%
30 to 10	85% to 95%

Guys making an angle with the horizontal greater than sixty (60) will be considered less than fifty percent (50%) effective. (9-7-92)

Table 4 - EFFECTIVENESS OF GUYS ACCORDING TO NUMBER AND SPACING		
No. of Guys Equally	Guys Most Effective When Pull is:	Guys Will Support Strain Equal to the Following
3	Opposite 1 guy	100% of strength of 1 guy
4	Halfway between 2 guys	140% of strength of 1 guy
5	Opposite 1 guy or halfway between 2 guys	160% of strength of 1 guy
6	Opposite 1 guy or halfway between 2 guys	200% of strength of 1 guy
7	Opposite 1 guy or halfway between 2 guys	225% of strength of 1 guy
8	Halfway between 2 guys	260% of strength of 1 guy
9	Opposite 1 guy or halfway between 2 guys	290% of strength of 1 guy
10	Opposite 1 guy or halfway between 2 guys	325% of strength of 1 guy

Illustrations of monocable, corner block vertical block, loader with tong, slackline, running skyline with mechanical slack-pulling carriage, north bend, south bend, block in bight, endless tyler, standing skyline with double tree support

and clamping carriage, standing skyline with single tree support and mechanical slack-pulling carriage, guylines on uneven ground, and examples of double tree intermediate support system are available from the Industrial Commission, 317 Main Street, Boise, Idaho 83720, phone (208) 334-6000. (9-7-92)

Table 6, MINIMUM GUYLINE REQUIREMENTS.

A minimum of four (4) top guys are required on any portable spar tree used for yarding, swinging, loading or cold-decking. (9-7-92)

Illustrations of profile of common three (3) stump anchor and common two-stump anchor available from the Industrial Commission, 317 Main Street, Boise, Idaho, phone (208) 334-6000.

101. -- 109. (RESERVED).

110. CANOPY AND CANOPY CONSTRUCTION FOR LOGGING EQUIPMENT.

01. Standard 22, Canopy and Canopy Construction for Logging Equipment. (9-7-92)

a. A substantial metal guard for the protection of the driver shall be installed on every piece of equipment, where exposed to overhead hazards. This guard shall be strongly constructed to afford adequate protection for the driver against overhead hazards. It shall be of sufficient width and height so that it will not impair the movements of the driver or prevent his immediate escape from the equipment in emergencies. It shall be of open construction to allow the driver all the visibility possible. (9-7-92)

b. The canopy framework shall consist of at least two (2) arches, either transverse or longitudinal. If transverse, one arch shall be installed at the rear of the equipment and the other at the center of the equipment. They shall be joined together by three (3) longitudinal braces, one at the top and one at each side of the arches. There shall be a shear or deflecting guard extending from the leading edge of the forward arch to the front part of the frame of the tractor or similar equipment. If longitudinal arches are used they shall be extended from the rear of the tractor or equipment to the front frame of the tractor or equipment and each arch shall have an intermediate support located approximately at the dash so that ingress or egress will not be impeded. Regardless of the type of construction used, the fabrication and method of connecting to the tractor or equipment shall be of such design as to develop a strength equivalent to that of the upright members. (9-7-92)

c. The canopy structural framework shall be fabricated of pipe of the following size, or materials of equivalent strength, depending upon the gross weight of the tractor or similar equipment as equipped: Under twenty eight thousand (28,000) lbs., two inch (2") double extra strong pipe (XXS); twenty eight thousand (28,000) to fifty eight thousand (58,000) lbs., three (3") double extra strong pipe (XXS); Over fifty eight thousand (58,000) lbs., four inch (4") double extra strong pipe (XXS). (9-7-92)

d. Gusset plates or braces shall be installed on the canopy framework so that the framework will withstand a horizontal pressure equal to twenty five (25) percent of the gross weight of the tractor or similar equipment, as equipped, when such pressure is applied to any vertical member at a point not more than six inches (6") below the roof of the canopy. (9-7-92)

e. The clearance above the deck of the tractor or similar equipment at points of egress shall be not less than fifty-two (52) inches and the clearance above the driver's seat shall be of such height as will allow sufficient clearance above the driver's head. (9-7-92)

f. The overhead covering on this canopy structure shall be of not less than three-sixteenth (3/16) inch steel plate except that the forward eighteen (18) inches may be made of one-quarter (1/4) inch woven wire having not more than one (1) inch mesh. (9-7-92)

g. The opening in the rear of the structure shall be covered with one-quarter (1/4) inch woven wire having not less than one and one half (1-1/2) inch or more than two (2) inch wire mesh. This covering shall be affixed to the structural members so that ample clearance will be provided between the screen and the back of the operator. Structural members shall present smooth, rounded edges and the covering shall be free from projections which would

tend to puncture or tear flesh or clothing. (9-7-92)

h. Pin connections are recommended for joints in the structural frame and especially at connections to the tractor frame or similar equipment frame. Gusset plates shall be installed at each place where individual pieces of pipe are joined. (9-7-92)

i. When practical, sideguards shall be installed to protect the operator from hazards. (9-7-92)

02. Standard 23, Tractors and Similar Logging Equipment. (9-7-92)

a. The general operating condition of a tractor or equipment shall be sufficiently good to ensure the safety of the driver and other workmen. (9-7-92)

b. All guards shall be kept in place and in good repair at all times when the tractor or similar equipment is used. (9-7-92)

c. Repairs or adjustments to clutches, frictions, or other parts of equipment which may cause hazardous movement of equipment shall not be done while engines are running. (9-7-92)

d. Blades or similar equipment shall be blocked or otherwise securely supported when making repairs or performing other work around such equipment when they are elevated from the ground. (9-7-92)

e. All equipment shall be equipped with a braking system capable of stopping and holding the maximum load on all grades at all times. (9-7-92)

f. Any defect found in braking system or steering devices of any equipment used in skidding or yarding operations shall not be used until repaired or replaced. (9-7-92)

g. Equipment shall be started (cranked) only by the operator or other experienced persons. (9-7-92)

h. Seatbelts shall be installed on all tractors and mobile equipment having roll-over protection or in accordance with a design by a Professional Engineer which offers equivalent employee protection. Seatbelts shall be used unless the equipment operator and the person in charge of the job site have reasonable cause to believe that safety of the operator is jeopardized by wearing a seatbelt. (9-7-92)

i. All equipment, especially those used in woods operation shall be equipped with an approved fire extinguisher and shovel. (9-7-92)

j. When leaving equipment, blades or grapples shall be lowered to the ground and brakes shall be set. (9-7-92)

111. -- 119. (RESERVED).

120. SKIDDING AND YARDING.

01. Standard 24, Skidding and Yarding. (9-7-92)

a. All personnel shall wear approved head protection and proper clothing at all times in skidding and yarding. (9-7-92)

b. Getting on or off moving equipment is strictly prohibited. (9-7-92)

c. Equipment operators shall move rigging only on signal of authorized person. (9-7-92)

d. Workmen shall at all times watch for and protect themselves and their fellow workmen from side-winders, rolling logs, up ending logs, snags, and other hazards caused by the movement of equipment, logs and/or lines. (9-7-92)

- e. Chokers should be placed near, but not closer than two (2) feet, from the ends of logs if possible. (9-7-92)
- f. Choker holes shall be dug from the uphill side of a log if there is any danger of its rolling. (9-7-92)
- g. Knots shall not be used to connect separate lengths of chain or cable. (9-7-92)
- h. Chaser (hooker) shall not unhook logs (trees) until rigging has stopped and equipment operator is aware of his location. (9-7-92)
- i. Riding on drag or logs or any part of equipment used in skidding and yarding except in the area of the driver's seat is prohibited. (9-7-92)
- j. A tool handle, stick, iron bar or similar object shall be used in guiding lines onto drums. Guiding lines with hands is prohibited. (9-7-92)
- k. Make sure all personnel are in the clear before skidding turn, drag, log or tree into landing. (9-7-92)
- l. All personnel shall keep out of the bight of line and clear of running lines. (9-7-92)
- m. Logs shall not be swung over personnel. (9-7-92)
- n. Knot bumping should be done before log is loaded. (9-7-92)

121. -- 129. (RESERVED).

130. LOG TRUCK TRANSPORTATION.

- 01. Standard 25, Log Truck Transportation. (9-7-92)
 - a. General. The following requirements are supplemental to any Idaho law governing automobiles, trucks, tractors, trailers, and any combination of these units. If there are any discrepancies in the codes between this section and the Federal and Idaho vehicle regulations for the state of Idaho, the governmental regulation will govern (Idaho Code Title 49 Chapter 25). (9-7-92)
 - b. Stopping and Holding Devices for Log Trucks. (9-7-92)
 - i. Motor logging trucks and trailers must be equipped with brakes and/or other control methods which will safely stop and hold the maximum load on the maximum grade. Air or vacuum brake lines shall be of the type intended for such use and shall have fittings which will not be interchangeable with water or other lines. (9-7-92)
 - ii. Brake Test - A brake test shall be made before and immediately after moving a vehicle. Any defects shall be eliminated before proceeding. (9-7-92)
 - c. Lighting Equipment Required. Motor vehicles used on roads not under the control of the State Highway Board, counties or cities, shall have equipment necessary for safe operation, such as head, tail, and stop lights. Such lights shall be used during clearance periods of reduced visibility. (9-7-92)
 - d. Safe Operating Requirements. The driver shall do everything reasonably possible to keep his truck under control at all times and shall not operate in excess of a speed at which he can stop the truck in one-half the distance between him and the range of unobstructed vision. He shall take into consideration the condition of the roadway, weather factors, curves, grades and grade crossings, the mechanical condition of his equipment and other pertinent items. He shall clear rocks from between dual tires before driving on multilane roads. A daily inspection shall be made of trucks and trailers with particular attention to steering apparatus, brakes, boosters, brake hoses and connections, reaches, and couplings. Any defects found shall be corrected before equipment is used. (9-7-92)

e. **Stakes, Bunks, or Chock Blocks.** All stakes and bunks, installed on log trucks and trailers, together with the means provided for securing and locking the stakes in hauling position, shall be designed and constructed of materials of such size and dimensions that they will withstand a pressure of fifteen thousand (15,000 lbs.) pounds applied outward against the tops of the stakes, and, or extensions when used, without yield or permanent set resulting in the stakes, bunks or the means provided for securing and locking the stakes. NOTE: Test Procedure - A test pressure of fifteen thousand (15,000) pounds is applied to the top of one stake, using the top of the stake opposite as a base for applying pressure. Bunk is not to be secured to floor or other base except in a manner similar to that used to mount it to truck or trailer. Stakes must return to normal upright position at end of test and stakes and all component parts examined and checked with original specifications. If no yield results in any part, the design and construction may be considered as meeting code requirements. (9-7-92)

f. **Stake Extensions.** Stake extensions shall not be used unless all component parts of the bunking system are of sufficient size and strength to support the added stresses involved. Stake extensions shall be secured by safety chains, pins, or other approved devices. Truck drivers shall report, to the proper authority, missing or broken stake extensions. (9-7-92)

g. **Stake and Chock Tripping Mechanisms.** Stakes and chocks which trip shall be constructed in such a manner that the tripping mechanism, which releases the stake or chocks, is activated at the opposite side of the load from the stake being tripped. (9-7-92)

h. **Linkage for Stakes or Chocks.** The linkage used to support the stakes or chocks must be of adequate size and strength to withstand the maximum imposed impact load. "Molly Hogans" or cold shuts are prohibited in chains or cable used for linkage. (9-7-92)

i. **Notify Engineer When Around Truck.** Persons shall not walk along side of or be underneath any truck being loaded. Prior to performing any duties, such as releasing bunk locks, placing or removing compensating pin, scaling logs, reading scale, chopping limbs or making connections, they shall notify the loading engineer of their intentions and be acknowledged. (9-7-92)

j. **Number of Binders Required.** Each unit used for hauling logs longer than twenty six (26) feet, shall have the load secured by a minimum of three (3) binders, one within six (6) feet of each bunk. All exposed outside logs shall be secured by one (1) binder passing near each end of the log. On high loads a third binder must be used. The third binder may be either a full binder or a gut binder. Binders shall be kept snug at all times. On one (1) log load where trailer bunk is equipped with cheese blocks, one (1) binder securing log to the trailer bunk will be sufficient. Outside binders on short logs shall have a minimum of six (6) feet spread. NOTE: High loads are defined as logs loaded above bunk stakes. NOTE: See diagram of binders following L.2.C. (9-7-92)

k. **Requirements for Crosswise Loaded Trucks.** When loads of short logs are loaded crosswise, the logs shall be properly contained by use of stake or chock blocks and shall be secured by a minimum of two (2) binders. Binders shall be securely fastened to the vehicle. (9-7-92)

l. **Construction of Binders.** Cables shall have a spliced eye or swaged fittings. "Molly Hogans" or cold shuts are prohibited to make splices or connections. Binders shall have a minimum breaking strength of not less than thirteen thousand (13,000) pounds. (9-7-92)

m. **Binder Placement Requirements.** Binders shall be placed in a manner whereby they will be released on the side opposite the brow log, or on the side where the unloading equipment operator can see the binders. Truck drivers shall be required to stop vehicles, dismount, check and tighten loose load binders, either just before or immediately after leaving a private road to enter the first public road they encounter. (9-7-92)

n. **Precautions when Placing or Removing Binders.** Binders shall remain on the load until an approved safeguard has been provided to prevent logs from rolling off the side of truck where binders are being released. At least one binder shall remain secured while relocating or tightening other binders. (9-7-92)

o. **Binders to be Placed Before Leaving Landing Area.** Binders shall be placed and tightened around the completed load before shifting the load for proper balance and a binder or binders shall be placed and secured to

hold the load in place before the truck is moved from the landing area or out of sight of the landing crew. (9-7-92)

p. Ride in Truck Cab Only. Persons shall ride only in the cab of log trucks. Persons are not to remain in cab while load is being lifted. (9-7-92)

q. Adequate Reaches Required. Log trailers must be connected to tractors by reaches of a size and strength to withstand all imposed stresses. Spliced reaches shall not be used. Proper repair of metal reaches by welding will be permitted. (9-7-92)

r. Proper Lay of Logs in Stakes or Bunks. The method of loading shall be such that the logs in any tier or layer unsecured by stakes or cheese blocks shall have their centers inside of the centers of the outer logs of the next lower tier or layer so that the load is stable without the aid of binders. Logs shall be well saddled without crowding so that there will be no excessive strain on the binders, bunk chains or stakes. No more than on half of any log shall extend above the stakes unless properly and securely saddled. (9-7-92)

s. Traffic travel on right side of road except where posted. All trucks shall keep to the right side of the road. (Except where road is plainly and adequately posted for left side traveling.) (9-7-92)

t. Securing Trailer for Transporting. A method shall be provided to assure that the trailer will remain mounted on the truck while driving on highways or logging roads. (9-7-92)

u. Backing Trucks into Landing. Trucks shall not be backed into landing without a signal to do so from the head loader or a member of the landing crew. The person giving the signal shall direct the backing operation. (Reference: Truck signal Standard E.1.h.) (9-7-92)

v. Towing of Trucks. When trucks must be towed on any road, the person guiding the vehicle being towed shall, by prearranged signals, govern the speed of travel. Trucks shall never be towed at a speed in excess of thirty-five (35) miles per hour. (9-7-92)

w. Scaling and branding to be done while binders in place. When at the dump or reload and where logs are scaled or branded on the truck, the logs shall be scaled or branded before the binders are released. (9-7-92)

x. Metal parts between bunk and cab to be covered. Suitable material shall be used on treading surfaces between the bunk and cab to prevent persons from slipping on the metal parts. (9-7-92)

y. Design and construction requirements for steered trailers. Steered trailers not controlled from the truck cab shall be designed, constructed, and operated as follows: (9-7-92)

i. A secure seat with substantial foot rests shall be provided for the steerer at the rear of the bunk. Any arrangement that permits the steerer to ride in front of the bunk is prohibited. (9-7-92)

ii. The seat for the steerer shall be so arranged that the steerers have an unobstructed exit from both sides and the rear. (9-7-92)

iii. The bunk support shall be so constructed that the steerer has a clear view ahead at all times. (9-7-92)

iv. Adequate means of communication shall be provided between the steerer and the truck driver. (9-7-92)

v. Eye protection and respirator shall be provided for the steerer. (9-7-92)

vi. The trailer shall be equipped with fenders or splash plates to protect the steerer from mud and dust so far as possible. (9-7-92)

vii. If used during period of reduced visibility on roads not under the control of the State Highway Board, counties or cities, the trailer shall be equipped with head, tail and stop lights. (9-7-92)

- z. Bunks to be Kept in Good Condition and Repair. Log bunks or any part of bunk assembly bent enough to cause bunks to bind shall be straightened. Bunks shall be sufficiently sharp to prevent logs from slipping. (9-7-92)
- aa. Following Other Vehicles. A vehicle not intending to pass shall not follow another closer than on hundred and fifty (150) feet. Passing shall be done only when it can be done safely. The passing vehicle shall consider all factors which may be essential; such as condition of the roadway, width of the road and distance of clear visibility ahead. (9-7-92)
- bb. Reaches to be Clamped when Towing Unloaded Trailer. A positive means, in addition to the clamp shall be installed on the reach of log truck trailers when the trailers are being towed without a load. (9-7-92)
- cc. Inserting of Compensating Pin. Persons shall never enter the area below suspended logs or trailers. At dumps where the load must remain suspended above the bunks until the truck is moved away and when the trailer is the type with a compensating pin in the reach, a device shall be installed which will allow the trailer to be towed away from the danger area. (9-7-92)
- dd. Safety Chains. All trailers shall be secured with a safety chain, or chains, which connect the frame of the truck assembly to the trailer unit. The chains shall be capable of holding the trailer in line in case of failure of the hitch assembly. (9-7-92)
02. Standard 26, Common Carriers. (9-7-92)
- a. It shall be the responsibility of the common carrier, and particularly the operator of the common carrier, upon entering the premises of any sawmill, woodworking or allied industry, to exercise all possible caution and to use all necessary safety devices and precautions to their fullest extent. (9-7-92)
- b. All common carriers equipped with audible and visual warning devices shall activate such warning devices before entering a danger zone and they shall remain activated as long as the carrier is moving in that zone. A danger zone shall be defined as an area where men or vehicles are working or normally work. (9-7-92)
- c. When train is operating on plant railway system the safety rules shall apply as outlined by the Association of American Railroads governing train, engine and transportation of employees. (9-7-92)
03. Standard 27, Self-Loading Log Trucks. (9-7-92)
- a. Self-loading log trucks manufactured after January 1, 1981, shall be equipped with: (9-7-92)
- i. A load check valve (velocity fuse) or similar device installed on the main boom. (9-7-92)
- ii. A seat that is offset from the point of attachment of the boom. The seat and boom structure shall rotate concurrently. (9-7-92)
- b. The operator of a self-loading log truck shall not: (9-7-92)
- i. Heel the log over his head; or (9-7-92)
- ii. Heel the log on the operator side of the boom of the seat if offset from the point of attachment of the boom. (9-7-92)
- c. A safe and adequate means of access to and from the loading work station on self-loading log trucks shall be provided. (9-7-92)
- d. A self-loading log truck shall not load itself or another truck when the loading process is under or within a guyline circle or similar overhead hazard. (9-7-92)

- e. Self-loading truck trailers shall be secured to the truck when the trailer is being hauled on the truck. (9-7-92)

131. -- 139. (RESERVED).

140. LOG DUMPS, LANDING, LOG HANDLING EQUIPMENT, LOADING AND UNLOADING BOOMS, LOG PONDS, RAFTING, TOWING, STIFF BOOMS, BOOM STICKS AND FOOT LOGS, POND BOATS AND TOW BOATS AND TRAILER LOADING HOISTS.

- 01. Standard 27, Log Dumps, Landings, Log Handling Equipment, Loading and Unloading. (9-7-92)
 - a. Only authorized persons shall operate log handling equipment. Machine operators shall be capable and experienced personnel. No persons other than the operator may be in the operator's compartment while machine is operating, except for purposes of operating instructions. Unnecessary talking to the operator of log handling equipment while the machine is in operation is prohibited. (9-7-92)
 - b. Machine operators shall make necessary inspection of machines each day before starting work. All repairs or adjustments shall be made before any strain or load is placed upon the equipment. (9-7-92)
 - c. Substantial barriers or bulkheads to protect the operator shall be provided for all log handling machines where the design, location, or use of such machines exposes the operator to material or loads being handled. Such barriers or bulkheads shall be of adequate area and capable of withstanding impact of materials handled. (9-7-92)
 - d. A safe and adequate means of access to, and egress, from the operator's station shall be provided. Necessary ladders, steps, step plates, foot plates, running boards, walkways, grab irons, handrails, etc. shall be provided and maintained. (9-7-92)
 - e. All moving parts shall be guarded in an approved manner to afford complete protection to the operator and other workmen. (9-7-92)
 - f. Throttles and all power controls shall be maintained in good operating condition. (9-7-92)
 - g. Landings shall be prepared and arranged to provide maximum safety for all employees and shall provide ample space for the safe movement of equipment and storage and handling of logs. (9-7-92)
 - h. Adequate means shall be used to prevent logs from rolling into the road or against trucks. Workmen shall be sure that logs are securely landed before approaching them. While unhooking chokers workmen shall choose the safest approach. This is usually from the upper side of the log. (9-7-92)
 - i. Logs shall not be landed at loading areas until all workmen, tractors, trucks, or equipment are in the clear. All persons shall stay in the clear of running lines, moving rigging, and loads until rigging or loads have stopped. (9-7-92)
 - j. Loading machine shall be set so that the operator shall have an unobstructed view of the loading area, or a signalman shall be properly placed and his signal shall be followed. Signaling the operator shall be done by standard, hand signals, whistles, or other positive means of communication. (9-7-92)
 - k. Machines, sleds, or bases shall be of sufficient strength to safely withstand moving, and machines shall be securely anchored to their bases. (9-7-92)
 - l. Mufflers shall be installed on all internal combustion engines of log handling equipment and located or guarded in such a manner as to prevent accidental contact with the muffler or exhaust pipes and afford protection from fumes. (9-7-92)
 - m. Brakes shall be installed on all machine drums and maintained in effective working condition. (9-7-92)

- n. Brake levers shall be provided with a ratchet or other equally effective means for securely holding the drum. (9-7-92)
- o. Brake bands shall have a safety factor of five (5) times the stress to be imposed and they shall be of a design which will render them impervious to exposure. Operator shall test brakes before lifting any load at the start of each shift. (9-7-92)
- p. In no case shall stresses in excess of the manufacturer's recommendation be permitted. Equipment not carrying a manufacturer's recommendation shall not exceed stresses of more than one half of the yield strength of the material used. Conversion of Cranes, Shovels, etc., into yarders shall be in conformity with these rules. Necessary guylines and/or outriggers shall be provided and used to effectively prevent mast, A-frames, etc., from tipping or overturning. (9-7-92)
- q. The manufacturer's recommendations for line sizes, if in compliance with this Code, shall be followed and such line sizes shall not exceed the rated capacity of the machine using it. (9-7-92)
- r. Fork lifts or arms, tongs, clams or grapples shall be lowered to their lowest position and all equipment brakes set before operator leaves the machine. (9-7-92)
- s. Log unloaders shall not be moved about premises for distances greater than absolutely necessary with the lift extended or the loads higher than necessary for clear vision. (9-7-92)
- t. All log handling machines which have lift arms that create a shear point with the driver's cab or position shall be provided sheer guards that will eliminate the operators exposure to such hazard. Grapple arms or other positive means of keeping logs on the forks shall be required on fork lift type loading machines. (9-7-92)
- u. All workmen shall be in the clear and in view of the machine operator before a lift is made. (9-7-92)
- v. All mobile log handling machines shall be equipped with rearview mirrors, a horn or other audible warning device, and lights front and rear so as to illuminate the entire length of the load being lifted or carried. An automatic warning device that will activate when the vehicle is moved is preferable in areas where other workmen are employed. (9-7-92)
- w. Logs or loads shall not be swung over occupied equipment or workmen and no one shall ride the load or rigging. (9-7-92)
- x. While logs are being loaded no one shall remain on chain deck or behind truck cab protector where he could be pinned between end of log and cab, tank, or cab protector. Cab protectors shall be cleaned of all loose gear before trucks are moved from the landing. (9-7-92)
- y. An unimpaired clearance of not less than three feet shall be maintained from swinging or moving parts of machine, where such swinging or moving parts create a hazard to personnel. If this clearance cannot be maintained, suitable barricades or safeguards shall be installed to isolate the hazardous area. (9-7-92)
- z. A-frames, towers, masts, etc., shall be designed and constructed to provide adequate structural strength and height for positive control of materials or loads lifted. When in use, they shall be guyed or braced to provide stability and prevent tipping. Their base shall be secured against possible displacement. (9-7-92)
- aa. When moving machines on sleds etc., stumps shall be used, when available, in preference to trees. These stumps shall be carefully examined to make sure that they will safely withstand the strains imposed by moving. If there is any doubt, the stumps shall be tied back. Insecure trees used for holds shall be guyed. Workmen shall stand in the clear while pulls are being made. When holds are being changed, the machine shall be secured with a separate line if there is danger of the machine sliding. When snubbing machines down steep grades, the main line shall be used for snubbing and the haulback for pulls. Only the operator and those required to assist him shall ride on the machine while it is being moved. NOTE: All lines, blocks, etc., and their use shall be in conformity with the applicable

- provisions of the "Rigging" (Chapter E) of this Code. (9-7-92)
- bb. All log handling equipment shall be equipped with brakes capable of holding and controlling the vehicle with capacity load. (9-7-92)
 - cc. A limit stop which will prevent the lift arms from overtraveling shall be installed on all electric powered log unloaders. (9-7-92)
 - dd. Gas powered vehicles shall not be refueled while motor is running nor in the vicinity of smoking or open flames. (9-7-92)
 - ee. All log handling equipment shall be provided with approved fire extinguisher of at least 4 B.C. rating easily accessible to operator. (9-7-92)
 - ff. Methods of unloading logs shall be properly arranged and used in a manner to provide protection to all employees. (9-7-92)
 - gg. A substantial log dump shall be constructed at each log pond or mill dumping ground. The road bed shall be of hard packed stone, heavy planking or equivalent material. (9-7-92)
 - hh. Where logs are dumped directly into water from truck or rail car, a substantial brow log eighteen inches (18') or more shall be provided and securely anchored. (9-7-92)
 - ii. After cars or trucks are spotted at such dump or landing, no person will be permitted to pass between brow log and truck or rail car. (9-7-92)
 - jj. The use of plain end hooks without a bell is prohibited. Loading hooks shall be kept in good repair at all times. They shall be equipped with at least one half inch diameter hand ropes in good condition and of sufficient length for workmen to be in the clear. In carrying tongs, they shall not be rested on both shoulders with points around the neck. (9-7-92)
 - kk. Where there is danger of tongs or hooks pulling out of the logs, straps shall be used. (9-7-92)
 - ll. All equipment shall be so positioned, equipped, or protected so that no part shall be capable of coming within ten feet of any power line. (9-7-92)
 - mm. Bunk logs shall extend not less than twelve (12) inches beyond the bunks. (9-7-92)
 - nn. The method of loading shall be such that the logs in any tier or layer unsecured by stakes or cheese blocks shall have their centers inside of the centers of the outer logs of the next lower tier or layer so that the load is stable without the aid of binders. Logs shall be well saddled without crowding so that there will be no excessive strain on the binders, bunk chains, or stakes. No more than one half of any log shall extend above the stakes unless properly and securely saddled. (9-7-92)
 - oo. Binders shall be so placed that they will not be fouled by the unloading machine and that they may be released from the side on which the unloader operates. Proper protection shall be provided for workmen while placing binders. (9-7-92)
 - pp. Whenever loads consist of logs to be dumped at different landings, lots shall be separated with gut wrappers. Binders shall be used for the entire load, as required for single unit loads. Not more than two lots shall be loaded on a single vehicle. (9-7-92)
 - qq. Logs shall be loaded so that no more than one-third of the weight of the logs extends beyond the trailer bunk and no more than one-third of the weight of any log shall extend beyond the rear of the logs supporting it. (9-7-92)
 - rr. Truck drivers shall be in the clear and in view of the log unloader operator before forks are moved

into the load or against it, before a lift is made. All persons are prohibited from standing under, or near, the ends of logs being lifted or moved. (9-7-92)

ss. Loads or logs shall not be moved or shifted while binders are being applied or adjusted. NOTE: For logs in transit see "Log Truck Transportation." (9-7-92)

tt. The unloading machine or lines shall be so positioned to securely hold the logs to keep them from rolling off on the side from which the binders, bunk blocks, or stake trips are being released and they shall not be released until the machine is so placed. Signs to this effect shall be prominently posted at each landing or dump. An extra binder shall be placed to hold the logs if it becomes necessary to move a binder to prevent it from being fouled by the unloading machine. Stake finger trips shall be released by using rip chains. The use of hammers, peavies, etc., is strictly prohibited. (9-7-92)

uu. Where logs are unloaded onto skids, and workmen are exposed, a minimum space of fourteen inches shall be provided between the ground and top of skid to accommodate the body of a man. Where logs are scaled on trucks, at dumps or landings, all scaling shall be completed before binders are released. (9-7-92)

vv. All log dumps, trailer loading areas, and landings shall be kept reasonably free from bark and other debris. (9-7-92)

ww. Artificial log ponds, subject to stagnation, shall be drained and refilled at such intervals necessary to keep them in a sanitary condition. (9-7-92)

xx. Logs in storage decks shall be so arranged as to prevent logs from rolling off face of deck. (9-7-92)

yy. All log load binders shall be arranged so that they must be released in view of unloader, operator or signal man. When binders are released by remote control devices and when the person releasing the binders is in a safe location, and when in view of the unloading operators, or signal man, the binders may be released from either side. After the unloading machine is in position to hold the load, the binders shall be removed and the person removing them shall be in a safe location in view of the operator. The operator will be given a signal by the person releasing the binders before the machine or load is moved. (9-7-92)

02. Standard 28, Log Ponds. (9-7-92)

a. Pond walks shall be kept in good repair and free of protruding nails and obstructions. (9-7-92)

b. Persons working on logs or around booms in water shall wear sharp calked shoes. When conditions such as snow and ice render calks ineffective, other types of shoes with "safety soles" may be worn. (9-7-92)

c. Approved buoyant life vests or life jackets shall be worn and fastened by the persons working on water. (9-7-92)

d. Pike poles shall be of metal, fiberglass, or continuous, straight-grained No. one (1) wood material. Metal or conductive pike poles shall not be used around exposed electrical conductors. Defective poles, blunt or dull pikes shall not be used. They shall be restricted to the use for which they are intended. (9-7-92)

e. Sufficient walkways and floats shall be proved and securely anchored to insure the safe passage or workmen. (9-7-92)

f. Decks of floats or other walkways shall be kept reasonably level and above the waterline at all times and shall be capable of supporting four (4) feet from log haul. (9-7-92)

g. Pond walkways shall be at least four (4) feet or more in width for a distance of at least forty (40) feet from log haul. (9-7-92)

h. Gaps between end of boom sticks or walkways shall not be over twenty four inches (24"). (9-7-92)

03. Standard 29, Booms-Rafting-Towing. (9-7-92)
- a. Life Rings with a minimum of fifty (50) feet of approved line attached shall be provided at convenient points where water is more than five (5) feet in depth. Life rings shall be maintained so as to retain their positive buoyancy. (9-7-92)
 - b. Workmen whose duties require them to work from boats or from floating logs, boom sticks, or walkways along or on water shall be provided with and shall wear, approved, positive, buoyant equipment while performing such duties. (9-7-92)
04. Standard 30, Stiff Booms. (9-7-92)
- a. All stiff booms shall be made of not less than two (2) boom sticks. Width of stiff booms shall be not less than thirty-six (36) inches from outside to outside float logs. Float logs shall be fastened together with not less than four by six (4" x 6") cross ties, or equivalent, or cable lashings notched into float logs. All stiff booms and floating walkways shall be decked with not less than two by six (2" x 6") planking and kept free of snow and other debris. (9-7-92)
 - b. All sorting gaps shall have a substantial stiff boom on either side of gap. Stiff booms or walkways shall be planked over with not less than two by six (2" x 6") or wider planks and shall be kept free of tripping hazards. (9-7-92)
05. Standard 31, Boom Sticks and Foot Logs. (9-7-92)
- a. All regular boom sticks and foot logs shall be made of sound straight timber and shall be free of protruding knots and bark, and shall be of a size to support two men above the water line. (9-7-92)
 - b. Boom sticks which have been condemned shall be marked with three (3) chopped crosses ten feet (10') from the butt end and shall not be reused as boom sticks. (9-7-92)
 - c. Gaps between ends of boom sticks shall not be over twenty-four (24) inches. All wire shall be removed from boom sticks or boom chains before they are reused or stored. (9-7-92)
 - d. When power driven machinery is used on booms or sorting jacks, it shall be placed on raft or float with enough buoyancy to keep machine well above waterline. If electric power is used it shall be grounded in an approved manner. Electric powered hand tools shall not be used unless the tool has a positive ground. (9-7-92)
 - e. When dog lines become hazardous, they shall be discarded. (9-7-92)
 - f. Booms, ponds, sorting jacks or walkways, shall be provided with sufficient illumination for all employees to have clear vision at all points where work is being carried on. (9-7-92)
06. Standard 32, Pond Boats and Tow Boats. (9-7-92)
- a. All persons whose duties require them to work from boats, floating logs, boom sticks, or floating walkways shall wear sharp calked shoes. When conditions render calks ineffective, other approved foot gear may be worn. (9-7-92)
 - b. All metal decks of pond boats or tow boats shall be covered with a material that will prevent slippage of calks. (9-7-92)
 - c. All boats used by workmen shall be provided with at least one (1) life ring with fifty (50) feet of approved line attached. (9-7-92)
 - d. All power boats shall be provided with one (1) or more approved fire extinguishers of four (4) or more B-C rating for each fifteen (15) feet in length. (9-7-92)

- e. Power boats shall not be re-fueled while motor is running. (9-7-92)
- f. All powered boats shall be vented in accordance with U.S. Coast Guard Regulations. (9-7-92)
- g. All powered boats shall conform to operating requirements of the U.S. Coast Guard where applicable. (9-7-92)
- 07. Standard 33, Trailer Loading Hoist/ Sawmill Log Dump. (9-7-92)
 - a. Hoist shall be designed and constructed in accordance with the National Electrical Code, so as to provide safe loading or unloading of the trailer. (9-7-92)
 - b. The hoist shall be equipped with a limiting device to maintain safe takeup limits of line on the hoisting drum. (9-7-92)
 - c. Regular service and inspection of the hoist and hoisting equipment shall be made to assure reliable serviceability of the facility. (9-7-92)

141. -- 149. (RESERVED).

150. HELICOPTER LOGGING.

- 01. Standard 34, General Requirements. (9-7-92)
 - a. Prior to each day's operation, a briefing shall be conducted. This briefing shall set forth the daily plan of operation for the pilot and ground personnel. (9-7-92)
 - b. Personal protective equipment for employees receiving the load shall consist of complete eye protection and hard hats secured by chinstraps. (9-7-92)
 - c. Loose-fitting clothing likely to flap in the downwash, and perhaps be snagged on the hoist line, shall not be worn. (9-7-92)
 - d. When visibility is reduced by dust or other conditions, ground personnel shall keep clear of main and stabilizing rotors. (9-7-92)
 - e. No unauthorized person shall be allowed to approach within 50 feet of the helicopter when the rotor blades are turning. (9-7-92)
 - f. All employees approaching or leaving a helicopter with blades rotating shall remain in full view of the pilot and remain in a crouched position. (9-7-92)
 - g. Employees shall avoid the area from the cockpit or cabin rearward unless authorized by the helicopter operator to be there. (9-7-92)
 - h. Helicopter approach and departure zones shall be designated and no equipment or personnel will occupy these areas during helicopter arrival or departure. (9-7-92)
 - i. Helicopters with an external load shall not pass over areas where fallers are working. (9-7-92)
 - j. Open fires shall not be permitted in an area that could result in such fires being spread by rotor downwash. (9-7-92)
 - k. Helicopters shall be expected to comply with any applicable regulation of the Federal Aviation Administration. (9-7-92)
 - l. Every practical precaution shall be taken to provide for the protection of the employees from flying

- objects in the rotor downwash. (9-7-92)
02. Standard 35, Signal Systems. (9-7-92)
- a. Signal systems between air crew and ground personnel shall be understood and checked before hoisting the load. This applies to either radio or hand signal systems. (9-7-92)
- b. There shall be constant reliable communication between the pilot and a designated signalman during the period of loading and unloading. (9-7-92)
- c. The helicopter shall be equipped with a siren to warn workers of hazardous situations. (9-7-92)
03. Standard 36, Loading Logs. (9-7-92)
- a. It shall be the responsibility of the firm, supervisor or person who is in charge of the actual loading operation to comply with the Section in these rules applicable to log loading. (9-7-92)
- b. The helicopter operator shall be responsible for the size, weight and manner in which loads are attached to the helicopter. If, for any reason, the helicopter operator believes the lift cannot be made safely, the lift shall not be made. (9-7-92)
- c. When employees are required to perform work under hovering aircraft, a safe means of access shall be provided for employees to reach the hoist line hook and engage or disengage cargo slings. (9-7-92)
- d. Employees shall not work under hovering aircraft except while hooking or unhooking loads. (9-7-92)
- e. The weight of an external load shall not exceed the manufacturer's rating. (9-7-92)
- f. The hook-up crew shall not work on slopes below felled and bucked timber when an unsafe situation exists. Culls left, that have a potential of rolling, should be moved to a safe position. (9-7-92)
04. Standard 37, Loading and Landing Areas. (9-7-92)
- a. The minimum dimensions of a drop zone shall be determined by the length of the logs being hauled. All zones shall be at least one (1) times as long, and as wide as the length of the average log being harvested. (9-7-92)
- b. Landing or loading machinery shall be a reasonable distance away from where logs are to be landed. (9-7-92)
- c. Landing crew shall be in the clear before logs are landed. (9-7-92)
- d. The approach to the landing shall be clear and long enough to prevent tree tops from being pulled onto the landing. (9-7-92)
- e. Separate areas shall be designated for landing logs and fueling helicopters. (9-7-92)
- f. Sufficient ground personnel shall be provided for safe helicopter loading and unloading operations. (9-7-92)
- g. A clear area shall be maintained in all helicopter loading and unloading areas. (9-7-92)
- h. Emergency landing areas for injured workers shall be located within a reasonable distance from all working areas. (9-7-92)
05. Standard 38, Cargo Hooks and Chokers. (9-7-92)

- a. The electrical activating device of all electrically operated cargo hooks shall be designed and installed to prevent inadvertent operation. In addition, these cargo hooks shall be equipped with an emergency mechanical control for releasing the load. (9-7-92)
- b. Logs will be laid on the ground and the helicopter completely free of the chokers before workers approach the logs. (9-7-92)
- c. One end of all the logs in the turn shall be touching the ground and at an angle no greater than 45 degrees before the chokers are released. (9-7-92)
- d. If the load must be lightened, the hook shall be placed on the ground on the uphill side of the turn before the hooker approaches to release the excess logs. (9-7-92)
- 151. -- 999. (RESERVED).**