SAFETY REGULATIONS

LOGGING, SAW-MILL AND WOODWORKING

DIGGING, DRILLING, CLEANING OR REPAIRING OF WATER WELLS

KNOW YOUR RULES

PRACTICE SAFETY PREVENT ACCIDENTS

ISSUED BY — THE WORKMEN'S COMPENSATION BOARD — PROVINCE OF ALBERTA

S A F E T Y R E G U L A T I O N S

Safety Regulations covering your industry, or equipment operated, have been made necessary as a result of accidents reported to this Board. Neglect on the part of someone is responsible for practically all accidents being received today. If these Regulations are complied with, and workmen impressed with the necessity of exercising reasonable care during the entire period of employment, the accident cost in the industry will be materially reduced.

Where accidents occur as a result of a violation of these Regulations the employers may be held responsible for the payment of one-half the cost of each individual claim as provided for by Sec. 15 (5). This legislation provides as follows:

15 - (5) "Where an accident causing injury to a workman in respect of which compensation is payable has occurred, and where, in the opinion of the Board, the accident was due entirely to the failure of the employer to comply with the directions of the Board, or with the Regulations made under the Act, the Board may levy and collect from the employer as a contribution to the accident fund, a sum of money not exceeding one-half of the amount of the compensation payable in respect of the injury and the payment of such sum may be enforced in the same manner as the payment of an assessment may be enforced."

SAFETY REGULATIONS

REMOVAL AND REPLACEMENT OF GUARDS

51. No person shall remove or make ineffective any safeguard, safety appliance or device attached to machinery except for the purpose of immediately making repairs or adjustments or as otherwise provided for in these Regulations; and any person who removes or makes ineffective any such safeguard, safety appliance or device, for repairs or adjustments, shall replace the same immediately upon the completion of such repairs or adjustments.

52. Employer's Responsibility - Every employer or person exercising direction or control over any workmen who remove such safeguard, safety appliance or device, or over any workmen for whose protection it is designed, shall have the safeguard, safety appliance or device so removed, promptly and properly replaced.

53. Workmen's Responsibility - Every workman shall use all safeguards, safety appliances or devices furnished for his protection and shall carry out all Regulations which may concern or affect his conduct.

The Workmen's Compensation Board
Edmonton, Alberta.

REGULATIONS ISSUED BY THE WORKMEN'S COMPENSATION BOARD IN ACCORDANCE WITH THE PROVISIONS OF THE WORKMEN'S COMPENSATION ACT

SAFETY REGULATIONS

LOGGING, SAW-MILL AND WOODWORKING

RIGGING

12. (a) Tail Sheave guards : When logs are hauled on a skid road, the tail sheaves shall be so guarded that no one may be caught between the sheaves and the on running rope.

(b) Slings: All Slings to which blocks are attached shall be of strength at least equal to one and one half ($1\frac{1}{2}$) times that of the hauling line.

(c) No workman shall be permitted to work within the bight of any line.

(d) Pins and fastenings of high lead sheaves shall be of a strength commensurate with the maximum load to which they may be subjected. All pins shall be securely fastened with a forelock. This equipment shall be given careful inspection by a competent authority before setting up.

(e) When conditions of unloading require that an unloading line be attached to logs or cars or passed under the logs, the equipment shall be so arranged that it will not be necessary to do any of the work of attaching the unloading line on the unloading side after the chains or chocks are released.

FALLING AND BUCKING

13. (a) Fellers: Before starting to fell a tree adjacent brush shall be cleared away so that there is plenty of room to swing an axe and to permit a quick get away.

(b) When a tree starts to fall, fellers shall quickly get away to a safe distance.

(c) Fellers shall give timely warning to buckers and other persons in the vicinity where a tree is being felled, taking notice that such persons are not only out of reach of the tree, but also out of danger of possible sidewinders, snags, or other trees which may be knocked over by the tree being felled.

(d) Fellers shall work in such positions that falling trees or side winders will not reach another set of fellers.

(e) Fellers or buckers shall not work on hillsides immediately below each other where there is danger of skidding, sliding or rolling trees.

(f) When practicable, snags shall be felled before the green timber and into the open.

(g) Before starting to buck a log, all brush and other objects which might catch the saw shall be cleaned away.

(h) In general, and without in any way relieving the employer of his responsibility the foreman shall be responsible for the safe working conditions for fellers and buckers.

YARDING AND LOADING

14. (a) When logs are to be hauled on sleigh, or truck roads, all trees where limbs are liable to fall, and all snags and sweepers shall be removed to permit a safe clearance before operating them.

(b) All limbs shall be trimmed close before logs are loaded.

(c) Engines used in yarding and loading, including steam, gas and diesel machines, shall be operated by workmen experienced in their use, and licensed where necessary. Employers shall ascertain that all such operators are familiar with their work. Except for licensed steam engineers, a record shall be kept of the experience of each operator, such record to be forwarded to the Board on request, or be open for inspection by any representative thereof.

TRACTOR AND MOTOR TRUCK LOGGING

15. (a) Motor logging trucks shall be equipped with brakes which will safely hold the maximum load on the maximum grade always having regard to the character of the road. When trucks are equipped with air or vacuum brakes, the equipment shall include break-away valves, boosters and receivers or retainers.

(b) All trucks, tractors, and trailers shall be kept in good order and brakes shall be regularly and frequently inspected by a competent mechanic. A test of brakes shall be made at the loading terminal immeddately after loading.

(c) Cranking of the tractors or trucks shall be done only by authorized drivers and mechanics.

(d) The speed of motor logging trucks shall not exceed a safe operating margin at any time.

(e) Tires worn beyond the point of safety shall not be used.

(f) Motor logging trucks and trailers shall be equipped with patent stake bunks or bunks with chains, so constructed that slip toggles can be released from opposite end of bunk.

(g) Logs or lumber carried on trailers shall be securely fastened with chains. At least two chains shall be used.

(h) All private roads, bridges and log dumps used for motor truck logging shall be so constructed and maintained as to insure safe operation at all times.

(i) Truck drivers or others shall not remain in cab of logging truck while truck is being loaded or unloaded. Not more than one man shall be allowed to ride in the cab with the driver, except in cases of emergency. Under no condition must workmen be permitted to ride on loads.

(j) Substantial guard rails or sheer rails shall be installed and maintained on all bridges used by motor logging trucks and on approaches to bridges.

(k) Log trailer reaches shall be of a size and strength sufficient to withstand all imposed strains.

(l) Motor logging trucks operating on or crossing public highways shall conform to all Provincial or Municipal regulations governing such traffic.

(m) All motor logging trucks shall be equipped with an ignition switch.

(n) All lights on trucks and trailers shall conform to the Motor Vehicle Act regulations.

(o) Loaded trucks shall not overtake and pass crew cars. These trucks shall follow crew cars at a safe distance. Loaded trucks shall come to a full stop when approaching crew cars coming from the opposite direction.

TRANSPORTATION OF WORKMEN

16. (a) Suitable provision shall be made for seating workmen when they are being transportated by motor trucks, speeders or cars, and workmen shall not sit on the floor of vehicle with their legs hanging over the side unless a foot board is provided.

(b) All vehicles used for transporting workmen shall be equipped with racks for saws, axes and similar tools, and all such tools shall be kept in racks when carried on these vehicles.

(c) Workmen are strictly prohibited from boarding or leaving any moving truck or car.

(d) Workmen shall not ride on running boards, fenders or the outside of trucks or trailers, or on the reaches.

(e) No stops shall be made on a trestle or bridge for unloading or picking up workmen.

(f) Crew cars shall pull off to the side of the road when picking up or letting off men.

(g) Where workmen ride on sleigh bunks, provision shall be made to prevent the possibility of workmen's feet being caught by stumps or other obstruction.

EQUIPMENT

17. (a) Leaky throttles shall be repaired immediately.

(b) Cross-cut saw handles shall be equipped with approved guards.

(c) There shall be a guard at side of main drive rod on all hoisting and logging engines.

(d) All belts, gears, frictions, sheaves, set-screws, keys, ends of shafts, and spoke hazards, shall be guarded as per general regulations.

(e) Saw wedges and similar tools with burred or mushroomed heads shall not be used. Such tools shall be properly tempered.

(f) All handles shall be of sound material and securely fastened.

(g) All hand tools shall be kept in good repair.

GENERAL

18. (a) Standing timber on camp sites and mill-sites shall be felled before buildings are erected, so that there shall be no possibility of trees falling on buildings.

(b) Power-boats used as camp tenders or tugs shall be provided with life-belts (one for each member of the crew) and a life-buoy. Such boats shall have substantial hand-railing around decks.

(c) All camps on floats shall have a proper landing-float, with a walk at least four (4) feet wide to shore, equipped with a hand-rail.

LOG HAULS

19. (a) For chain hauls, the return strand of the chain in the basement shall be so supported over passageways that in the event of its breaking it cannot fall on anyone beneath.

(b) Unless clearly impracticable, every log haul shall have at least one runway of sufficient width to enable a person to stand clear of logs in the chute.

LOG DECK

20. Provision shall be made at the mill end of the log-deck, to afford substantial protection from rolling logs to the sawyer and other employees who may be engaged around the band or circular saw.

CARRIAGE

21. (a) When a log-deck is equipped with a steam-operated nigger, carriage knees shall be equipped with goose-necks or straight bar extending eighteen (18) inches or more above the top of knee.

(b) The seat or stand of the setter shall be fitted with an adequate protection to prevent his coming in contact with the wall timbers or rafters where the clearance between the back of the setter's seat and the wall timbers of the mill structure is less than eighteen (18) inches.

(c) There shall be placed at each end of the carriage travel a substantial buffer-stop, preferably equipped with spring or pneumatic buffers.

(d) Means shall be provided for securely locking the sawyer's log-turning and carriage-control levers.

(e) Each carriage shall be provided with a safety device which will keep the head blocks at least one and one-eighth ($1\frac{1}{8}$) inches from the saw.

(f) Sweepers shall be provided in front and at the back of each carriage which will remove all obstructions from the track.

(g) Suitable flooring must be provided over the mill floor, and to include carriage tracks, the flooring to extend back at least twenty (20) feet at right angles from the carriage at skidway.

(h) Where saw-mills are operated one hour after sundown or one hour before sunrise the mill shall be adequately lighted with electric lights.

BAND-MILLS AND RESAWS

22. (a) All band-mills and band-saws shall be adequately protected when running.

(b) Every band-mill wheel shall be carefully inspected by the operator at least once a month, and all hubs, spokes, rims, bolts, and rivets subjected to hammer tests and examined thoroughly, this inspection

to be recorded as to date and conditions, and signed by the person making the inspection.

(c) Every band-mill shall be equipped with a saw-catcher or rest of substantial construction.

(d) The filing room shall be separated from the mill proper by a partition, and proper provision made for locking same.

BAND-SAWS

23. Band-saws shall have gears covered on feed-rolls and shall be adequately enclosed except for required cutting space.

CIRCULAR SAWS

24. (a) Screen of wire cloth, or other suitable device shall be so placed between the sawyer and the saw as to afford protection from flying particles.

(b) Circular saws shall be equipped with approved safety guides, which will admit of adjustment without the use of a wrench or other hand-tool.

(c) A rotary splitter at least 12 inches in diameter shall be located not further than 6 inches from the back of the head saw.

(d) On any saw-mill which may be used for edging lumber, the disc splitter must be replaced by a solid, stationary splitter which must be at least 20 inches above the surface of the roller blocks.

(e) Speed of saws shall not exceed that recommended by manufacturers, and in no case shall the rim speed exceed 12,500 feet per minute.

(f) Cross-cut Table Saws and Rip Saws: All circular cross-cut saws or rip saws shall be guarded by a hood which shall cover the saw at all times at least to the depth of the teeth. The hood shall adjust itself automatically to the thickness of, and shall remain in contact with, the material being cut. Rip saws shall have a spreader located at the rear of the saw.

SWING SAWS

25. (a) Swing cut-off saws shall be guarded with approved safeguards.

(b) Every swinging cut-off saw shall be provided with an approved safety device which will return the saw beyond the rear edge of the "guide" or "fence" of the table and which will prevent the saw from rebounding forward off the "guide" or "fence".

(c) The counter-balancing device shall be securely attached to frame.

(d) Approved wire rope or chain limit stops shall be provided on all swing cut-off saws.

(e) Guards protecting belt-drives of swing saws shall extend one-half ($\frac{1}{2}$) inch below the saw-mandrill pulley.

SLASHER SAWS

26. Slasher saws shall be guarded front and back.

TRIMMER SAWS

27. All trimmer saws shall be provided with approved guards which will prevent the possibility of workmen being struck by, or falling on to the saw.

CRACKED SAWS

28. (1) BAND SAWS - (a) Any band-saw found to have developed a crack, the depth of which is not greater than one-tenth (1-10) the width of the saw, shall be discontinued from service unless development of the crack is arrested by centre-punching or other effective means. Unless welding of cracks is done by a person recognized by the Board as a specialist in such work, welding will not be considered as an effective means of arresting cracks.

(b) Any band-saw found to have developed a crack, the depth of which is greater than one-tenth (1-10) the width of the saw, shall be discarded unless the width is so reduced as to eliminate the crack or unless the cracked section is replaced. Welding of cracks will not be acceptable unless the work is done by a recognized specialist approved by the Board. Butt-welding of band-saws in place of the present method of brazing will not be acceptable unless done by a recognized specialist approved by the Board.

(2) CIRCULAR SAWS - (a) Any circular saw found to have developed a crack more than one-half ($\frac{1}{2}$) inch deep shall be discontinued from service unless development of the crack is arrested by correcting the tension and by centre-punching at the inner end of the crack, or by other effective and reliable means, or unless the diameter is so reduced as to eliminate the crack. Unless welding of cracks is done by a recognized specialist approved by the Board, the same will not be considered as an effective means of arresting cracks.

(b) Any circular saw that is found to have developed a crack more than two (2) inches deep shall be discarded unless the diameter is so reduced as to eliminate the crack and the tension is corrected. Welding of cracks deeper than ten (10) per cent of diameter will not be allowed.

EDGERS

29. (a) There shall be a screen of wire cloth or wood on the front of the edger, to prevent flying knots, chips, etc., and the top of the edger must be completely covered over.

(b) Bench or single saw edgers shall be equipped with splitter and saw-guard.

LIVE-ROLLS

30. (a) All live-roll gears shall be guarded on the top, and sides.

(b) Driving shaft of live-rolls shall be guarded on top and sides.

CONVEYORS

31. (a) When the return of conveyors operate within seven (7) feet of the floor, there shall be a shallow trough provided of sufficient strength to carry the weight resulting from the broken chain.

(b) If the return of the conveyors are over seven (7) feet from the floor, a means shall be provided to catch and support the end of the chains in the event of a break over passageways or runway.

(c) Where conveyor openings are located on floor a handrail shall be provided around each opening.

(d) The removal by hand of sawdust from pits, or shavings from machines in operation is strictly prohibited. The following methods for removing sawdust or shavings from pits or machines will be approved of;

(1) Mechanically operated conveyors.

(2) Exhaust fans.

(3) Non-mechanical metal chute, where practical.

LATH-BOLTERS

32. The gears and sprockets of lath-bolters shall be fully guarded, and the feed chains shall be guarded to as low a point as the maximum height of the stock will permit.

LATH-MACHINES

33. The feed-rolls, saws, gears, sprockets, and chains of lath-machines shall be guarded.

MACHINES WITH KNIFE HEADS

34. Each planing, molding, sticking, matching, and tenoning machine shall have all cutting heads, and saws covered with a metal guard.

WOOD-JOINTERS

35. All wood-jointers shall be equipped with cylindrical cutter-heads of safety type. A suitable automatically adjusted guard shall be placed over the whole cutting space in the table.

SHAPERS

36. The cutting head of each wood-shaper or other similar machine where exposed to contact shall be enclosed with a cage or adjustable guard.

SANDING MACHINES

37. Disk-sanders shall have the circumference and back of the revolving head thoroughly guarded. Belt-sanders shall have both pulleys enclosed.

SHINGLE-MILLS

38. VERTICAL SHINGLE-SAWS - (a) The periphery and inside of shingle-saws shall be guarded to prevent chips or knots flying from saw.

(b) The cutting-face of the saw shall be guarded. If guard is at side of saw, it shall project one and one-half ($1\frac{1}{2}$) inches past cutting-edge of saw, and shall not be more than one-quarter ($\frac{1}{4}$) inch from side of saw.

(c) All direct-connected motor-driven shingle-machines shall have an independent brake on clipper-saw drive.

39. CLIPPER-SAWS - (a) There shall be an approved guard over clipper-saw, securely fastened with three bolts; said guard shall not be more than four (4) inches above saw and not more than one-half ($\frac{1}{2}$) inch from the perpendicular line of saw.

(b) Clipper-saw shall be encased, except that part of saw which is necessary to trim shingles.

(c) Clipper-boards shall be equipped with steel finger-guards five (5) inches long and one and one-quarter ($1\frac{1}{4}$) inches deep, no heavier than sixteen (16) gauge, nor lighter than twenty (20) gauge.

40. Ratchet-levers on set-works shall be guarded.

41. FLY-TRIPS - Fly-trips shall not be used on shingle-machines.

42. All Shingle-machines shall be equipped so that the carriage will stop when the treadle that operates the jaw of the carriage is down and machine will not start when treadle comes up. It shall be necessary for operators to put foot on the other treadle to start machine.

43. Saw-arbors shall be covered, and all bearing-caps on shingle-machine arbors shall be of steel.

44. SAW-DIAMETERS - (a) When cutting sixteen (16) inch shingles, the minimum diameter of saw shall be thirty-six (36) inches.

(b) When cutting eighteen-inch shingles, the minimum diameter of saw shall be thirty-eight (38) inches.

45. The speed of carriage shall not exceed thirty-four (34) strokes per minute.

46. SHINGLE-JOINTERS - The front of cutting-face of knife-type shingle-jointers shall be fully guarded, with the exception of a narrow slot through which the shingles may be fed against the knives.

47. (a) Power-splitters shall have spreaders behind saw; top of saw to be completely covered.

(b) Power-bolters shall have guard over top of saw to protect operator from flying slivers.

(c) The track and wheels of bolter-tables and the top of bolter-tables shall be kept in good repair at all times.

48. PINION-GEARS - These shall be covered on all shingle-machines.

49. Pulleys and Belts shall be guarded.

50. DRAG-SAWS - All gears and frictions on drag-saws shall be guarded.

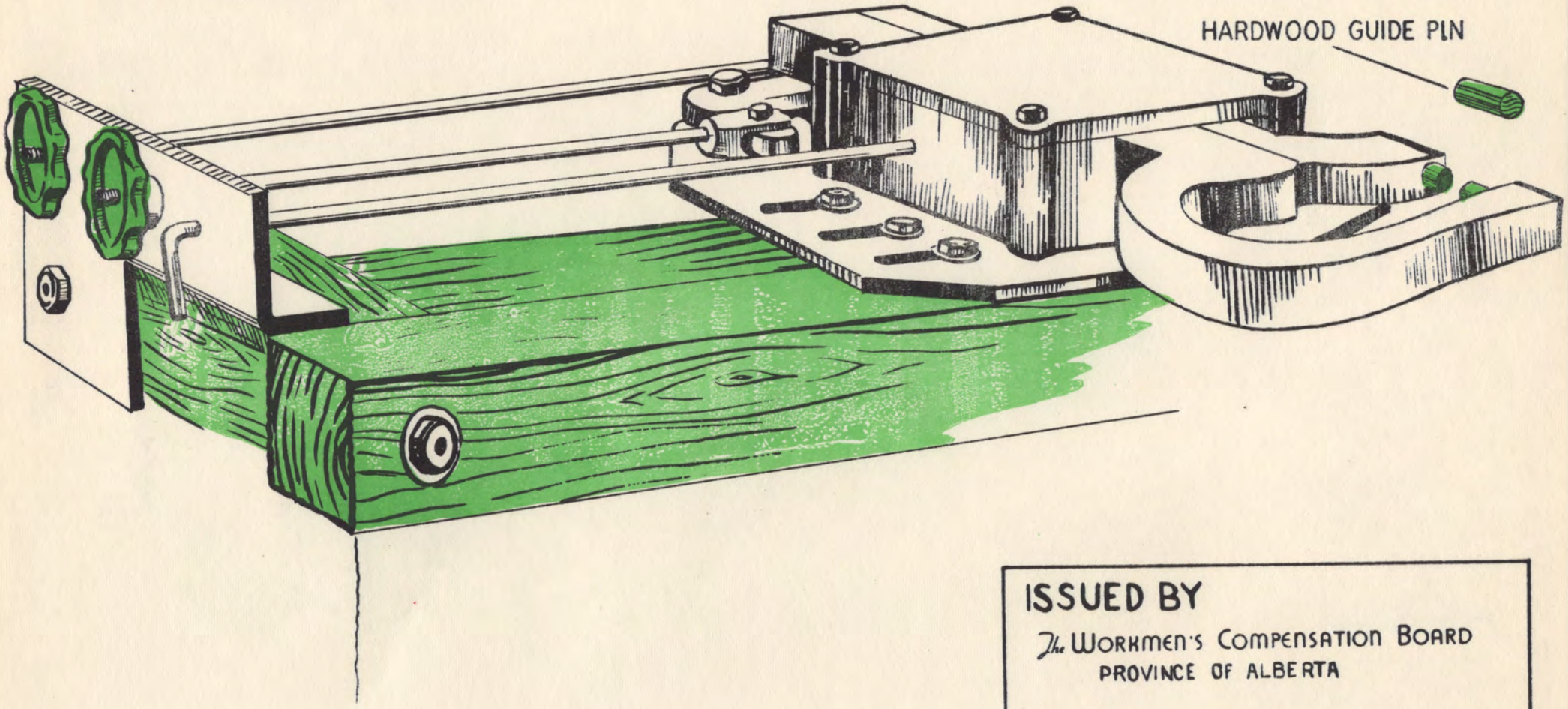
Issued by
THE WORKMEN'S COMPENSATION BOARD
Edmonton, Alberta.

APPROVED SAFETY SAW GUIDE

MADE FOR LEFT OR RIGHT HAND MILLS

ADJUSTABLE FROM OUTSIDE OF HUSK

WITH LOCKING DEVICE



ISSUED BY

The Workmen's Compensation Board

PROVINCE OF ALBERTA

S.E.#23

H.H.

REGULATIONS ISSUED BY THE WORKMEN'S COMPENSATION BOARD IN ACCORDANCE WITH THE PROVISIONS OF THE WORKMEN'S COMPENSATION ACT

SAFETY REGULATIONS

DIGGING, DRILLING, CLEANING OR REPAIRING OF WATER WELLS

1. In sinking, cleaning or repairing wells provision must be made to prevent the possibility of workmen being injured as a result of cave-in, gas fumes, falling into water, or falling materials.

2. All wells being sunk by hand shall be lined with approved metal, tile, concrete, or wood curbing. The lower end of the curbing shall be kept within three (3) feet of the bottom of the well while digging operations are being carried on.

3. Where wood is being used as curbing, planks at least two (2) inches thick must be provided.

(a) Where round wood curbing is installed the inside edges of each plank must be bevelled to fit the circle, each plank acting as a wedge when assembled.

(b) Metal or heavy wire bands shall be placed around the outside of each curb, one band being placed within six (6) inches of the end of each curb; the remainder spaced not more than two (2) feet apart.

(c) Where square curbing is used it shall be braced on the inside with not less than two by four (2 x 4) timbers located not more than four (4) feet apart.

4. Approved metal, tile or concrete materials may be used as well curbing.

5. A wood or metal ladder shall be provided in each well over twenty-four (24) inches in diameter extending the entire depth of the well. Where a wooden ladder is installed the rungs shall not be less than twelve (12) inches apart and constructed of not less than one by four (1x4) inch material set in one (1) inch on two by four (2x4) uprights. A heavy wire shall be securely fastened over the ends of the rungs for the entire length of the ladder.

All ladders shall be securely fastened to the curbing, and the back of the rungs shall have a clearance of at least four (4) inches for toe hold.

6. All hoisting drums shall be provided with a safety stop which will hold any load being lifted and prevent the possibility of the bucket dropping when being hoisted.

(a) A safety hook shall be provided on the end of each hoisting cable or rope for attaching to the bucket.

(b) All hoisting rope or cable shall be of sufficient size and strength to hold weights approved of by the manufacturers allowing a safety factor of ten (10).

(c) Suitable metal buckets shall be provided for hoisting material. Each bucket shall be provided with a metal bale extending down the sides and across the bottom.

(d) All hoisting equipment shall be tested daily and shall hold a weight at least ten (10) times that which may be lifted.

7. Before workmen are permitted to enter a well for any purpose it shall first be tested for gas. A flame safety lamp shall be lowered into the well and left at the working place as long as workmen are employed in the well, for the purpose of detecting gas, otherwise workmen may be overcome before the danger is known.

8. Where gas is discovered in a well workmen shall be taken out immediately if employed in the well. No workmen shall be lowered in the well until all gas has been removed by ventilation.

9. (a) Where cleaning or repairing work is to be done, an approved safety belt shall be attached to any workman entering the well. A rope shall be attached to this belt which will extend at least fifteen feet outside the top of the well after the workman is lowered to the bottom.

(b) No workman shall enter or work in a well for any purpose except when another workman is on top and sufficient help shall always be available to rescue any workman overcome by gas.

10. Where wells are being dug more than twenty (20) feet deep a plank platform at least two (2) feet wide shall be provided around the top of the well. A toe board for the purpose of preventing material falling into the well shall be securely fastened to the inside of this platform. The toe board shall be at least six (6) inches high.

11. The employer shall see that each workman employed inside the well wears safety boots, and a hard hat.

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Edmonton, Alberta