Portable Power Tools Safety OHS Requirements — Know The Laws of Your Province



Portable power tools like drills, grinders, nail guns, wrenches, chainsaws, and sanders are a leading source of work injuries. OHS laws require employers to ensure that all tools at their workplace are safe and operated in accordance with safe work procedures and manufacturers' instructions. This is true even if workers use their own tools at the worksite. Failure to comply with these requirements may result in OHS <u>fines</u>, stop-work, and other enforcement actions. Safety requirements for power tools vary slightly by jurisdiction. Here's a summary of the requirements in each part of Canada.

- How soon the required training must be provided.
- What training must cover.
- Whether JHSC members also get educational leave.

Note: These are general, rather than tool-specific requirements. OHS Insider also has separate Game Plans for power tools that have their own set of OHS regulations, including powder actuated tools, chainsaws, and grinding wheels.

FEDERAL

- 1. All portable electric tools used by employees must meet CSA C22.2 No. 71.1-M89, *Portable Electric Tools* (*OHS Regs*, 13.3).
- 2. All portable electric tools used by employees must be grounded except tools that:
 - Are powered by a self-contained battery.
 - Have a protective system of double insulation.
 - Are used in a location where reliable grounding can't be obtained if the tools are supplied from a double insulated portable ground fault circuit interrupter of the class A type that meets CSA C22.2 No. 144-1977, Ground Fault Circuit Interrupters (OHS Regs, 13.4).
- 3. All portable electric tools used by employees in a fire hazard area must be marked as appropriate or designed for use or designed for use in that area (*OHS Regs*, 13.5).
- 4. If an air hose is connected to a portable air-powered tool used by an employee, a restraining device must be attached:
 - To the tool, if an employee may be injured were the tool to fall.
 - To all hose connections, so as to prevent injury to an employee in the event of an accidental disconnection of a hose (OHS Regs, 13.6).
- 5. The exterior surface of any tool used by an employee in a fire hazard area must be made of non-sparking material (OHS Regs, 13.2).
- 6. Employees who find any defect in a tool or machine that may make it unsafe to use must report the defect to their employer as soon as feasible (OHS Regs, 13.9).
- 7. Employer must mark or tag as unsafe and remove from

- service any tool or machine used by its employees that has a defect that may make it unsafe to use (*OHS Regs*, 13.10).
- 8. Every employee must be instructed and trained by a qualified person appointed by their employer in the safe and proper inspection, maintenance and use of all tools and machinery that they're required to use (OHS Regs, 13.11).
- 9. Employer must maintain a manual of operating instructions for each type of portable electric tool, portable air-powered tool, explosive actuated fastening tool and machine used by its employees and keep it readily available for examination by an employee who's required to use the tool or machine to which the manual applies (OHS Regs, 13.12).

ALBERTA

- 1. Employer and a blaster must ensure that only nonsparking tools that will not detonate an explosive are used for:
 - Opening a package of explosives.
 - Crimping activities.
 - Cutting fuses and explosives.
 - Any other work performed directly with explosives (OHS Code, Sec. 480(1)).
- 2. Employer must ensure that if the power switch is released on a hand-held drill used by a worker in a mine:
 - The power to the drill is interrupted.
 - The drill stops operating (OHS Code, Sec. 572).

BRITISH COLUMBIA

 An unsafe tool, machine or piece of equipment must be removed from service and identified so as to ensure it's not inadvertently returned to service until it's been

- made safe for use (OHS Reg, Sec. 12.10).
- 2. Portable powered tools must have operating controls that meet a standard acceptable to the Board (*OHS Reg*, Sec. 12.11(2)).

MANITOBA

- 1. Employer must:
 - Develop and implement safe work procedures for all machines and tools used in the workplace.
 - Train workers in the safe work procedures.
 - Ensure that workers comply with the safe work procedures (WSH Regs, Sec. 16.2(1)).
- 2. Employer must ensure that any machine or tool in the workplace is:
 - Capable of safely performing the functions for which it's used.
 - Used, inspected, and operated in accordance with the manufacturer's specifications and safe work procedures for the workplace (*WSH Regs*, Sec. 16.4(1)).
- 3. An employer and the supplier of any machine or tool must ensure that the installation, testing, repair, and maintenance of or any modification to any machine or tool is carried out in accordance with either:
 - The manufacturer's specifications.
 - The specifications certified by a professional engineer (WSH Regs, Sec. 16.4(2)).
- 4. An employer and a supplier must ensure that any machine or tool under its control is inspected at regular intervals to ensure that, so far as reasonably practicable, the machine or tool is capable of:
 - Withstanding any stress that is or is likely to be imposed on it.
 - Safely performing the functions for which it's used (WSH Regs, Sec. 16.4(3)).

- 5. Employer must ensure that a hand tool or portable power tool is inspected before use to make certain it is in safe working condition (WSH Regs, Sec. 16.25(1)(a)).
- 6. Employer must ensure that a defective hand or power tool is removed from service (WSH Regs, Sec. 16.25(1)(b)).
- 7. Before refueling or servicing a gas-operated power tool, employer must ensure that the worker stops the motor and lets the motor cool in accordance with the manufacturer's specifications (WSH Regs, Sec. 16.25(2)).
- 8. Employer must ensure that an effective restraining device is used on a hose, pipe or connection that is under pressure if inadvertent disconnection of the hose, pipe, or connection could create a safety or health hazard to a worker or another person (WSH Regs, Sec. 16.26(1)).
- 9. Employer must ensure that the restraining device is used in accordance with the supplier's instructions or manufacturer's specifications (WSH Regs, Sec. 16.2(2)).

NEW BRUNSWICK

- 1. "Portable power-operated hand tool" defined as a tool held with one or both hands and powered by a hydraulic, pneumatic, electrical, or chemical energy source (OHS Act General Reg, Sec. 2).
- 2. Employer must ensure that a portable power-operated hand tool is cleaned with a nonflammable, non-toxic solvent or according to the manufacturer's specifications (OHS Act General Reg, Sec. 83(a)).
- 3. Employer must ensure that an electric portable poweroperated hand tool is double insulated or bonded to ground or, if it's not double insulated and it's not practical to bond to ground, is equipped with a double insulated portable ground fault circuit interrupter of the class A type (OHS Act General Reg, Sec. 83(b)).
- 4. Employer must ensure that fittings and couplings

- appropriate for the intended use and meeting the manufacturer's specifications are used on all hydraulic, pneumatic, chemical and electrical lines, and hoses for a portable power-operated hand tool (OHS Act General Reg, Sec. 83(c)).
- 5. Employer must ensure that a shut-off that's readily accessible to the user of the tool is installed on all hydraulic, pneumatic, chemical and electrical lines and hoses for a portable power-operated hand tool (*OHS Act General Reg*, Sec. 83(d)).
- 6. Employer must ensure that hydraulic, pneumatic, chemical and electrical lines, and hoses for portable power-operated hand tools are not run across aisles, travelways or work areas so as to create a hazard to employees (OHS Act General Reg, Sec. 84(1)).
- 7. An employee must not run the hydraulic, pneumatic, chemical and electric lines and hoses for portable power-operated hand tools across aisles, travelways, or work areas so as to create a hazard to other employees (OHS Act General Reg, Sec. 84(2)).
- 8. Exception: Items #6 and #7 above don't apply if a firefighter is engaged in structural firefighting or rescue (OHS Act General Reg, Sec. 84(3)).
- 9. Employees who use a portable power-operated hand tool must:
 - Keep guards on the tool in place while using it.
 - Disconnect the source of power before changing accessories on the tool.
 - If the tool has a flexible shaft, hold the end of the tool firmly when starting its motor to prevent whipping (OHS Act General Reg, Sec. 85).

NEWFOUNDLAND & LABRADOR

1. Employer must ensure that each tool, machine and piece of equipment in the workplace is capable of safely

- performing the functions for which it's used ($OHS\ Regs$, Sec. 88(1)(a))
- 2. Employer must ensure that each tool, machine and piece of equipment in the workplace is selected, used and operated in accordance with:
 - The manufacturer's recommendations and instructions, where available.
 - Safe work practices.
 - The requirements of the *OHS Regs* (*OHS Regs*, Sec. 88(1)(b)).
- 3. Except as otherwise provided in the OHS regulations, the installation, inspection, testing, repair, maintenance, or modification of a tool, machine, or piece of equipment must be carried out:
 - In accordance with the manufacturer's instructions or a standard acceptable to the minister.
 - As specified by a professional engineer (OHS Regs, Sec. 88(2)).
- 4. Portable powered tools and mobile equipment must have operating controls that meet an appropriate standard acceptable to the minister (*OHS Regs*, Sec. 93).

NOVA SCOTIA

- 1. Employer must ensure that a tool, its accessories and supplies are:
 - Made of good quality material adequate for the work for which they're intended to be used.
 - Inspected before being used, and, if not in an adequate condition, repaired or replaced before use.
 - Used only for their intended purpose.
 - Equipped with a device to ensure a secure hand grip where necessary.

- Installed, assembled, started, operated, used, handled, stored, stopped, inspected, serviced, tested, cleaned, adjusted, carried, maintained, repaired, and dismantled in accordance with the manufacturer's specifications, or, where there are no manufacturer's specifications, in accordance with adequate work procedures established by a competent person (Occ Safety Gen Regs, Sec. 104).
- 2. No person may point a tool that ejects pins, nails, or other projectiles at another person (*Occ Safety Gen Regs*, Sec. 105(1)).
- 3. Where reasonably practicable, employer must ensure that where a person works with a device that's to be struck by a tool used by another person, the device to be struck is held by an adequate holding device (*Occ Safety Gen Regs*, Sec. 105(2)).
- 4. Employer must ensure that a portable power-operated hand tool:
 - Is repaired by a competent person.
 - Where powered by electricity, is double insulated or grounded, except where battery operated.
 - Where lines or hoses are connected to the tool, has a shut-off mechanism installed on the tool so as to be immediately accessible to the operator.
 - Is an explosion-proof device where there's a risk of an explosive atmosphere (*Occ Safety Gen Regs*, Sec. 106).
- 5. If reasonably practicable, employer must ensure that hydraulic, pneumatic, chemical and electrical lines, and hoses do not run across aisles, travel ways, or work areas, except where a firefighter is engaged in structural firefighting or rescue (*Occ Safety Gen Regs*, Sec. 107).

NORTHWEST TERRITORIES

- 1. "Equipment" defined as any mechanical or non-mechanical article or device, such as a machine, tool, appliance, apparatus, implement, service, or utility, other than personal property owned by a person unless that property is used in the carrying on of any work (OHS Regs, Sec. 1).
- 2. Employer must ensure that equipment is maintained at intervals sufficient to ensure the safe functioning of the equipment (OHS Regs, Sec. 24(1)).
- 3. If a defect is found in equipment, an employer must ensure that, as soon as is reasonably possible:
 - Steps are taken, until the defect is corrected, to protect the health and safety of workers who could be endangered.
 - The defect is corrected by a competent worker or the equipment is replaced (OHS Regs, Sec. 24(2)).

Power Tools

- 4. "Power tool" defined as a hand-held machine that's powered by energy other than the energy of a worker (OHS Regs, Sec. 140).
- 5. Employer must, before a worker undertakes the maintenance, testing, repair, or adjustment of a power tool, ensure that the energy source has been isolated from the power tool, any residual energy in the power tool has been dissipated and the energy source remains isolated during that activity (OHS Regs, Sec. 147(2)).

NUNAVUT

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ONTARIO

Industrial Establishments

- 1. A hand-held nailing gun or similar tool must be:
 - Capable of being operated only when in contact with the work surface.
 - Operated only by a competent person and only while the operator/competent person is wearing eye protection (OHS Ind Establishment Regs, Sec. 38).
- Tools and other equipment capable of conducting electricity and endangering the safety of any worker must not be used in such proximity to any live electrical installation or equipment that they might

- make electrical contact with the live conductor (OHS Ind Establishment Regs, Sec. 43).
- 3. Cord-connected electrical equipment and tools must have a casing that's adequately grounded; Exceptions: This requirement doesn't apply to:
 - Cord-connected electrical equipment or tools that are adequately double-insulated and whose insulated casing shows no evidence of cracks or defects.
 - A portable electrical generator in which the electrical equipment or tools aren't exposed to an external electric power source if the casing of portable electrical equipment or tools connected to the generator is bonded to a non-current-carrying part of the generator (OHS Ind Establishment Regs, Sec. 44).
- 4. When used outdoors or in wet locations, portable electrical tools must be protected by a ground fault circuit interrupter installed at the receptacle or on the circuit at the panel (*OHS Ind Establishment Regs*, Sec. 44.1).
- 5. A ground fault that may pose a hazard must be investigated and removed without delay (*OHS Ind Establishment Regs*, Sec. 44.2).

Construction Projects

- 6. All vehicles, machinery, tools, and equipment must be maintained in a condition that doesn't endanger a worker (OHS Const Project Regs, Sec. 93(1)).
- 7. No tool, vehicle, machine, or equipment may be used:
 - While it's defective or hazardous.
 - When the weather or other conditions make its use likely to endanger a worker.
 - While it's being repaired or serviced, unless the repair or servicing requires that it be operated (OHS Const Project Regs, Sec. 93(2)).

- 8. All tools, vehicles, machines, and equipment must be used in accordance with any operating manuals issued by the manufacturers (*OHS Const Project Regs*, Sec. 93(3)).
- 9. Every replacement part for a tool, vehicle, machine, or equipment must have at least the same safety factor as the part it's replacing (*OHS Const Project Regs*, Sec. 95(1)).
- 10. No modification to, extension to, repair to or replacement of a part of a tool, vehicle, machine, or equipment may result in a reduction of the safety factor of the tool, vehicle, machine, or equipment (OHS Const Project Regs, Sec. 95(2)).
- 11. No worker may operate a vehicle or powered machine, tool or equipment at a project unless they're competent to do so; Exception: A worker being trained in the operation of a vehicle or powered machine, tool or equipment may operate it while being instructed and supervised by a competent person (OHS Const Project Regs, Sec. 96).
- 12. Tools, ladders, scaffolding, and other equipment or materials capable of conducting electricity must not be stored or used so close to energized electrical equipment, installations or conductors that they can make electrical contact (OHS Const Project Regs, Sec. 187).
- 13. All tools, devices, and equipment, including PPE, that are used for working on or near energized exposed parts of electrical equipment, installations, or conductors must be designed, tested, maintained, and used so as to provide adequate protection to workers (OHS Const Project Regs, Sec. 192).
- 14. All electrical extension cords used at a project must have a grounding conductor and at least two other conductors (*OHS Const Project Regs*, Sec. 195).
- 15. Cord-connected electrical equipment or tools must have a casing that's adequately grounded (*OHS Const Project Regs*, Sec. 195.1(1)).
- 16. All cord connections to electrical equipment or tools

- must be polarized (*OHS Const Project Regs*, Sec. 195.1(2)).
- 17. Exception: Items #15 and#16 above don't apply to cord-connected electrical equipment or tools that are adequately double-insulated and whose insulated casing shows no evidence of cracks or defects (OHS Const Project Regs, Sec. 195.1(3)).
- 18. Exception: Item #15 doesn't apply to a portable electrical generator in which the electrical equipment or tools aren't exposed to an external electric power source if the casing of portable electrical equipment or tools connected to the generator is bonded to a non-current-carrying part of the generator (OHS Const Project Regs, Sec. 195.1(4)).
- 19. When a portable electrical tool is used outdoors or in a wet location:
 - If the source of power is an ungrounded portable generator having a maximum output of 1.8 kilowatts or less, a ground fault circuit interrupter of the Class A type must be located in the cord feeding the tool, as close to the tool as possible.
 - In all other cases, the tool must be plugged into a receptacle protected by a ground fault circuit interrupter of the Class A type (OHS Const Project Regs, Sec. 195.2).
 - Defective electrical equipment and tools that may pose a hazard must be immediately disconnected, removed from service and tagged as being defective (OHS Const Project Regs, Sec. 195.3(1)).
 - The cause of a ground fault or the tripping of a ground fault circuit interrupter must be immediately investigated to determine the hazard and corrective action must be taken immediately (OHS Const Project Regs, Sec. 195.3(2)).
- 20. All electrical pumps and electrical tools must be either adequately grounded or double-insulated (*OHS Const Project Regs*, Sec. 275).

PRINCE EDWARD ISLAND

- 1. Key definitions that you need to know to apply the PEI requirements:
 - "Hand tool" means handheld equipment that's dependent on the energy of the worker for its direct effect and which doesn't have any hydraulic, pneumatic, electrical, or chemical energy source for its operation.
 - "Owner" means a person who's purchased, rented, or otherwise obtained a tool and brought the tool to a place of employment for use at that place of employment (c).
 - "Portable power operated hand tools" means those powered by a hydraulic, pneumatic, electrical, or chemical energy source and which are used by holding with one or both hands.
 - "Tool" means a hand tool, portable power operated hand tool, and power-actuated hand tool.
 - "User" means any person who uses a tool at a place of employment (OHS Act General Regs, Sec. 29.1).

Tools

- 2. The owner of a tool must ensure that the tool:
 - Is of good quality material appropriate for the intended use.
 - Is inspected before being used and repaired or replaced if necessary.
 - Is maintained in safe working condition.
 - Is equipped with adequate devices to ensure a secure hand grip.
 - Has smooth handles without splinters or sharp edges, firmly attached to the tools so as to prevent them from becoming loose.
 - Is of a non-sparking type where there's risk of an explosive atmosphere.

■ Has a proper storage place or facility to store or guard the tool when not in use at the place of employment (OHS Act General Regs, Sec. 29.2).

3. The employer must ensure that:

- Workers are competent in the safe handling and use of tools.
- Workers are properly instructed and trained in the safe use of the hand tools they use.
- Workers are instructed to use tools only for the specific purpose for which they're designed.
- Workers wear and use protective clothing and equipment required by the OHS regulations.
- Procedures are implemented for safely supplying tools and materials to workers located in hazardous places.
- Hammers, sledges, cold chisels, cutters, pinchers, and other similar shock tools are made of carefully selected steel, hard enough to withstand repeated blows without extensive mushrooming but not so hard as to chip or break.
- Files are provided with substantial metal ferruled handles or other suitable holders and are not used without them.
- Lifting jacks are of such construction that the load will remain supported in any position and can't be lowered inadvertently.
- When lifting objects with jacks, the jacks are set on solid footing, properly centered for the lift and so placed that they can be operated without obstruction.
- *After objects have been raised to the desired height by means of jacks, substantial blocking is placed under the object before work is started on the object or before the worker gets under the object (OHS Act General Regs, Sec. 29.3).
- 4. The user of a tool must use and handle tools in a safe manner, which includes but isn't limited to:

- Inspecting tools before use.
- Not using defective tools.
- Reporting the existence of defective tools to the employer.
- Maintaining tools in safe working condition.
- Using tools only for the specific purposes for which they were designed.
- Placing tools in safe suitable containers when not in use.
- Ensuring that tools aren't left lying on floors, passageways, stairways, or in other places where persons work or are likely to work or pass, or on elevations from which they may fall on persons below.
- Ensuring that sharp edged or sharp pointed tools are provided with protection for the edges or points when not in use.
- Carrying tools in a way that doesn't interfere with their using both hands on the ladder or while climbing a structure or on any hazardous work requiring the use of both hands.
- Passing tools from one person to another in a safe manner.
- Holding with a holding tool or other suitable device all chisels, drills, etc., which are held by one worker and struck by another with the worker holding the tool placing themselves where they'll be in the least danger of being hit by the hammer if it should glance off the tool or if the handle should break.
- Keeping all axes sharp and not using an axe as a mall or wedge.
- Clearing away interfering objects before swinging an axe.
- Laying crowbars or pinchbars flat in safe places when not in use and not leaning against a flat surface.

- Keeping points or edges of crowbars or pinchbars in good condition to minimize slipping hazards.
- Keeping corrugations on the jaws of pipe wrenches sharp.
- Using proper size wrenches and spanners when tightening or loosening nuts and bolts.
- Discarding or removing from service until repaired any wrenches with spread, battered or cracked jaws, cracked or broken handles, or other defects.
- Not carrying edged or pointed tools such as screwdrivers, chisels, etc., in pocket.
- Not using pipe or other extensions on wrenches or spanners unless the tools are designed for use in this manner.
- Not chopping an axe towards their feet or legs (OHS Act General Regs, Sec. 29.4 + 5).

Power Tools

- 5. The employer must ensure that:
 - Portable power tools are inspected at regular intervals and any defective tools are removed from service until repaired.
 - Power tools are cleaned with a non-flammable nontoxic solvent.
 - All electrically powered tools are properly grounded or of the double insulated type.
 - Electric cords used on power tools are inspected periodically and repaired or replaced where necessary.
 - Electric cords and air lines used on power tools are suspended over aisles or work areas, where possible, to eliminate stumbling or tripping hazards.
 - Drill steel used for pneumatic hammers shall be sharpened and tempered in accordance with manufacturer's specifications (OHS Act General

Regs, Sec. 29.6).

6. Workers must:

- Wear eye protection when using power tools.
- Wear dust type respirators while buffing, grinding, or sanding material which produces harmful dusts.
- Disconnect the source of power from power tools before changing accessories.
- Keep all guards on power tools in place while the tool is in use.
- Protect flexible shafts of flexible tools against denting and kinking which may damage the inner core.
- When starting the motor of a flexible shaft tool, hold the tool end firmly to prevent whipping (OHS Act General Regs, Sec. 29.7).

7. Workers must NOT:

- Wear gloves, ties, loose clothing or jewelry while using revolving power tools such as drills, saws, and grinders.
- Disconnect air lines from air operated tools and use the lines for cleaning clothing.
- Point a pneumatic hammer at anyone or stand directly in front of a person handling a pneumatic hammer (OHS Act General Regs, Sec. 29.8).

QUÉBEC

General

- 1. Hand tools and portable power tools must be appropriate for the intended job and used solely for the purposes for which they were designed (*OHS Regs*, Sec. 227).
- Hand tools and portable power tools must be examined regularly and if found defective, be repaired or replaced (OHS Regs, Sec. 228).
- 3. Hand tools must not be left on the floor, in passages,

- on stairs or in other areas where people work or circulate or placed in elevated locations from where they could fall on people (*OHS Regs*, Sec. 229).
- 4. Handles for tools such as axes, hammers, sledgehammers, etc., must be carefully adjusted at the heads, firmly fixed, and replaced if found defective (*OHS Regs*, Sec. 230).
- 5. Files must not be used unless they have metal ferruled handles or other sturdy handles (*OHS Regs*, Sec. 231).
- 6. It's prohibited to adapt an extension to a tool used for tightening or loosening nuts, screws, bolts, or pipes unless the tool was designed to be fitted with such an extension (OHS Regs, Sec. 232).
- 7. The head of a steel tool used with a hammer or a sledgehammer, such as a punch, stone chisel, or other similar tool, must be kept free of burrs (*OHS Regs*, Sec. 233).
- 8. A cutting tool, such as an axe or a saw must be transported in such manner as to prevent any contact with the worker, namely by being stored in a box or in a covered container, or firmly attached to the vehicle (OHS Regs, Sec. 234).
- 9. A portable electric power tool must use an extension with a third conductor for grounding which is connected to the tool's exterior metal casing, unless the tool is battery powered or equipped with double-layered insulation (OHS Regs, Sec. 235).
- 10. The trigger on a portable electric power tool must be designed so as to eliminate any risk of an accidental start-up (OHS Regs, Sec. 236).
- 11. The switch for an air-driven portable tool must, in addition, be designed to automatically close the compressed air supply inlet valve when the operator releases the trigger (*OHS Regs*, Sec. 237).
- 12. If they hamper circulation, the electrical wire feeding an electric power tool and the flexible hose supplying an air-driven power tool with compressed air must:

- When left on the ground, be protected so as not to be damaged and be secured so as to eliminate any risk of falling.
- When suspended, be at a sufficient height to ensure clearance, but at least at 2 m (*OHS Regs*, Sec. 238).
- 13. A portable power tool may not be carried from one working area to another unless and until the power supply is cut off and the tool comes to a complete stop (OHS Regs, Sec. 240).

Construction Projects

- 14. For purposes of the following items, "portable tool" is defined as a tool whose weight is supported by a person during its use (Safety Code for Const, Sec. 7.0.1).
- 15. A portable tool must be:
 - Maintained in good working condition.
 - Verified by a qualified person, where it's powered by a source of energy other than manual, before its initial use on the site and each day thereafter when it's used.
 - Maintained in accordance with the manufacturer's instructions (Safety Code for Const, Sec. 7.0.2).
- 16. A portable tool must be used in accordance with the manufacturer's instructions and not used if weather conditions may make its use dangerous (*Safety Code for Const*, Sec. 7.0.3).
- 17. Unless the manufacturer's instructions allow it, a portable tool must not be in operation while it's being recharged, repaired or adjusted, maintained, or cleaned (Safety Code for Const, Sec. 7.0.4).
- 18. The engine of a portable tool must be cooled before refueling and the portable tool must not be started less than 3 m from the place it was refueled (*Safety Code for Const*, Sec. 7.0.4).
- 19. A portable tool must not be modified unless the

manufacturer or an engineer certifies in writing that the modification doesn't compromise its safety or offers the same safety as the original tool (*Safety Code for Const*, Sec. 7.0.5).

- 20. Workers must use appropriate PPE when using a portable tool (*Safety Code for Const*, Sec. 7.0.8).
- 21. Where a portable tool powered by an electrical source is used:
 - It must be bonded or have double insulation.
 - Electrical extension cords must:
 - have a bonding conductor.
 - be designed for outdoor use.
 - be of the Hard Usage type for a circuit 300 V or less, or of the Extra-Hard Usage type for a circuit 600 V or less.
 - have a capacity at least equal to the value of the circuit overcurrent device.
 - •Where an extension cord is suspended, the suspension height shall allow free passage and supports for suspending the extension cord shall not be conducting or sharp.
 - An extension cord that passes on a floor must be protected to avoid any damage or reduce risks of tripping.
 - An extension cord not in use must be disconnected and stored.
 - An extension cord that has a broken, defective or repaired element must not be used and must be removed from the construction site (*Safety Code for Const*, Sec. 2.11).

SASKATCHEWAN

1. Employer must ensure that all equipment is maintained at intervals sufficient to ensure the safe functioning of the equipment (OHS Regs, Sec. 3-14(1)).

- 2. If a defect is found in equipment, employer must ensure that:
 - Steps are taken immediately to protect the health and safety of any worker who may be at risk until the defect is corrected.
 - The defect is corrected by a competent person as soon as reasonably practicable (*OHS Regs*, Sec. 3-14(2)).
- 3. Before a worker undertakes maintenance, repair, test or adjustment of a power tool, an employer or contractor must ensure that the energy source has been isolated from the power tool, any residual energy in the power tool has been dissipated and the energy source remains isolated during that activity (OHS Regs, Sec. 10-6(2)).
- 4. "Power tool" defined as a hand-held machine powered by energy other than the energy of a worker (*OHS Regs*, Sec. 1-2(1)).

YUKON

- 1. Every hand tool or portable power tool must be selected for its design and construction to be safe under all conditions of its intended use (WSC Regs, Sec. 4.02)
- 2. Hand tools must:
 - Be suitable for the intended work.
 - Be used for the purposes for which they're designed.
 - Be inspected and replaced or repaired if they're found to be defective.
 - No be left in elevated locations where they could fall on workers (WSC Regs, Sec. 4.02(1)).
- 3. Handles for tools such as axes, hammers, and sledgehammers must be firmly fixed to the heads of the tools and replaced if found defective (WSC Regs, Sec.

- 4.02(2)).
- 4. Files must be provided with metal ferruled handles or other suitable handles, and not used without them unless the tangs are bent in a loop (WSC Regs, Sec. 4.02(3)).
- 5. Pipes and other extension pieces must not be used to extend wrench handles unless the tools are designed by the manufacturer to be used under such conditions (WSC Regs, Sec. 4.02(5)).
- 6. Workers must:
 - Carry, handle, and use tools in a safe manner.
 - Maintain tools in proper working condition.
 - Inspect a tool before use.
 - Report any defects to a supervisor.
 - Place tools in a safe and appropriate containers or places when not in use.
 - Use a holding device to hold any tool to be struck by another worker.
 - Keep guards in place while using a tool.
 - Hold the end of a tool with a flexible shaft firmly when starting the motor to prevent the shaft from whipping.
 - Not use defective tools.
 - Use a tool for its designed purpose.
 - Not leave a tool on the floor, passageway, or stairway where it may create a tripping hazard.
 - Not point a tool at any person if it ejects pins, nails, or any other projectiles (WSC Regs, Sec. 4.03).
- 7. If there's a risk of igniting an explosive or flammable

atmosphere, only tools made of non-sparking material or that have non-sparking exteriors may be used (*WSC Regs*, Sec. 4.04).

- 8. Portable electric power tools used by workers must be:
 - Designed for commercial or industrial use.
 - Certified for safe operation by the CSA or other agency acceptable to the board.
 - Cleaned with a non-toxic, non-flammable solvent or according to the manufacturer's specification.
 - Intrinsically safe if used in an area where there's the possibility of an explosive atmosphere.
 - Effectively grounded by using three wire cords and three pronged polarized plugs inserted in grounded, polarized receptacles or provided with double insulation, and so marked.
 - Equipped with a double insulated portable ground fault circuit interrupter of Class A type, if impractical to bond to ground.
 - Regularly examined with any defects remedied before use.
 - Operated with guards or any safety devices left in place.
 - Equipped with fittings and couplings appropriate to the intended use and that meet the manufacturer's specification.
 - Provided with a shut-off device that's readily accessible to the workers (WSC Regs, Sec. 4.08(1)).
- 9. Temporary electrical wires and air hoses to power driven tools or other equipment must be:

- Replaced when the insulation becomes cracked or frayed.
- Suspended appropriately off the floor.
- Protected against any physical damage or from presenting a tripping hazard when laid on the floor (WSC Regs, Sec. 4.08(2)).
- 10. Extension cords and other temporary electrical services must be kept free of moisture, dirt, and unnecessary abrasion (WSC Regs, Sec. 4.08(3)).
- 11. Electrical wires supplying power to tools must incorporate a ground conductor (WSC Regs, Sec. 4.08(4)).
- 12. Portable power-driven tools must be examined regularly with any defects corrected before use (WSC Regs, Sec. 4.08(5)).
- 13. Guards or safety devices must be left in place while the tool is in use (WSC Regs, Sec. 4.08(6)).
- 14. Where power tools, lamps, or other electrical equipment are subject to hard usage, the cords must be coated or provided with heavy-duty insulating material (*WSC Regs*, Sec. 4.08(7)).
- 15. Before removing or changing any attachment or adjusting or repairing a power tool, the worker must disconnect the tool from its power source in a way that ensures it can't be reconnected inadvertently (WSC Regs, Sec. 4.09(1)).
- 16. Before disconnecting the air supply from a portable power-driven tool, a worker must shut off the air supply and bleed the air line, unless the air line has a quick disconnect coupling that makes such precautions unnecessary (WSC Regs, Sec. 4.09(2)).
- 17. A worker must not use a pneumatic portable tool or air hose so as to direct the air stream against any person (WSC Regs, Sec. 4.09(3)).
- 18. A worker must not use hydraulic, pneumatic, chemical or electrical lines or hoses in a way that creates a safety

- hazard to workers (WSC Regs, Sec. 4.09(4)).
- 19. The operating trigger of a portable pneumatic tool must be:
 - Located to reduce the risk of accidental starting.
 - Designed to automatically close the compressed air supply valve when the operator releases it.
 - Released after each shot to allow the muzzle safety device to function (WSC Regs, Sec. 4.05).
- 20. When using a portable pneumatic fastening tool, a worker must:
 - Not secure the trigger or hold it in operating position while moving between operations.
 - Not point it at anyone.
 - Disconnect the air supply before the tool is serviced (WSC Regs, Sec. 4.06).