



TOOLS - HAND & POWER



Purpose

The purpose of this program is to define the requirements for the safe operation of hand and power tools in accordance with subpart P of 29 CFR 1910.

Scope

This policy applies to all Validus Energy worksites and employees.

Process

The proper tool for the job shall be used. Homemade, makeshift and substitute tools shall not be used.

The employee tools necessary for work will be provided by Validus Energy. Employee-owned tools are not permitted to be used on a Validus Energy worksite unless approved by a supervisor.

All tools used near electrical installations must be nonconductive.

Tools shall not be left unsecured on elevated places nor be thrown from place to place or from person to person.

Unsafe tools shall be removed from service or tagged with a “DO NOT USE OR OPERATE” tag to prevent their use.

Electrical and powder actuated tools shall not be used where there is a hazard of flammable vapors, gases, or dusts without a valid Hot Work Permit.

Responsibilities

Leadership	Commit to, follow, and reinforce the requirements set forth in this program. Provide sufficient resources for implementation.
Supervisors	Ensure Validus employees have the knowledge and skills to follow this program. Verify that all employees' power tools are inspected and that the employees have been trained as required.
EHS	Provide technical advice and resources to monitor compliance. Facilitate employee training.
Validus Employees	Follow the requirements of this program. Use hand and power tools as required, complete inspections as required and training in a timely manner.



Policies

General

All tools, regardless of ownership, shall be of an approved type and maintained in good condition.

Impact tools such as chisels, punches, and drift pins that become mushroomed or cracked shall be dressed, repaired, or removed from service.

Chisels, drills, punches, ground rods, and pipes shall be held with suitable holders or tongs (not with the hands) while being struck by another employee.

Wrenches with sprung or damaged jaws shall not be used.

Tools with sharp edges shall be stored and handled so that they will not cause injury or damage. They shall not be carried in pockets unless suitable protectors are in use to protect the edge.

Wooden handles that are loose, cracked, or splintered shall be replaced.

Portable Electric Tools

The non-current carrying metal parts of portable electric tools such as drills, saws, and grinders shall be effectively grounded when connected to a power source, unless:

- The tool is an approved double-insulated type
- The tool is connected to the power supply by means of an isolating transformer or other isolated power supply.

All powered tools shall be visually examined prior to use to ensure general serviceability and the presence of all applicable safety devices.

Powered tools shall be operated in accordance with the manufacturer's instructions.

The use of electric cords for hoisting or lowering tools shall not be permitted.

All tools shall be disconnected from the power source while repairs or adjustments are being made.



Pneumatic Tools

Pneumatic tools shall never be pointed at another person.

Safety clips or retainers shall be securely installed and maintained on pneumatic impact (percussion) tools to prevent attachments from being accidentally expelled.

The manufacturer's stated safe operating pressure for hoses, pipes, valves, filters, and other fittings shall not be exceeded.

Hose and hose connections used for equipment shall be designed for the pressure and service to which they are subjected.

The use of hoses for hoisting or lowering tools shall not be permitted.

Before adjusting or changing air tools, unless equipped with quick-change connectors, the air shall be shut off at the air supply valve ahead of the hose.

Compressed air tools, while under pressure, must not be left unattended.

Power tools are to be operated only by competent employees who have been trained in their proper use.

All pneumatically driven nailers, staplers, and other similar equipment shall have a safety device on the muzzle to prevent the tool from ejecting fasteners, unless the muzzle is in contact with the work surface.

Powder Actuated Tools (Tools actuated by an explosive charge)

Only those employees who have been trained and certified in their use shall operate these tools.

Explosive charges shall be carried and transported in approved containers.

Operators and assistants using these tools must wear eye, face, and hearing protection.

Tools shall be maintained in good condition and serviced regularly by qualified third parties.

Prior to use, verify that the protective shield is properly attached to the tool.

Tools shall not be loaded until just prior to the intended firing time, nor shall an unattended tool be left loaded. Empty tools are not to be pointed at any workmen.

In case of a misfire, the operator shall proceed to remove the explosive load in strict accordance with the manufacturer's instructions.

Powder actuated tools or charges shall never be left unattended.



Hydraulic Jacks

The jack used must have a rating great enough to lift and sustain the load.

Each jack shall be thoroughly inspected before each use.

The load rating shall be legibly and permanently marked in a prominent location and not be exceeded.

The jack shall be placed on a firm foundation or blocked. If there is a possibility of cap slippage, a block shall be placed in between the cap and the load.

After the load has been raised, it shall be cribbed, blocked, or otherwise secured at once.

Hydraulic jacks potentially exposed to freezing temperatures shall be supplied with adequate antifreeze liquid.

All jacks shall be properly lubricated at regular intervals.

Fuel Powered Tools

All fuel-powered tools shall be stopped while being refueled, serviced, or maintained.

Fuel shall be transported, handled, and stored in accordance with the Flammable and Combustible Liquids Program.

When fuel powered tools are used in enclosed spaces, care must be taken to prevent the buildup of toxic gases.

Guarding Portable Tools

Guards shall always be in place and operable while the tool is in use.

The guard may not be manipulated in such a way that will compromise its integrity protection.

Portable Circular Saws

All portable, power-driven circular saws having a blade diameter greater than 2 in. shall be equipped with guards above and below the base plate or shoe.

When the tool is withdrawn from the work, the lower guard shall automatically and instantly return to the covering position.



Switches and Controls

All hand-held powered tools shall be equipped with a constant pressure switch or control.

Note: Small handheld power tools may have a lock-on control if turnoff can be accomplished by a single motion of the same finger or fingers that turn it on.

All hand-held gasoline powered chain saws shall be equipped with a constant pressure throttle control that will shut off the power to the saw chain when the pressure is released.

The operating control on hand-held power tools shall be so located as to minimize the possibility of its accidental operation.

Portable Abrasive Wheels

Guards shall be made of steel or other material with adequate strength.

A safety guard shall cover the spindle end, nut and flange projections.

The safety guard shall be mounted to maintain proper alignment with the wheel, and the strength of the fastenings shall exceed the strength of the guard.

Mounting and Inspection of Abrasive Wheels

Immediately before mounting, all wheels shall be closely inspected, and a ring test performed, to make sure they have not been damaged in transit, storage, or otherwise.

Note: Ring test method – “tap” wheels about 45 degrees each side of the vertical centerline and about 1 or 2 inches from the periphery; then rotate the wheel 45 degrees and repeat the test; an undamaged wheel will give a clear metallic tone - If cracked, there will be a dead sound and not a clear “ring.”

The spindle speed of the machine shall be checked before mounting the wheel to be certain that it does not exceed the maximum operating speed marked on the wheel.

Grinding wheels shall fit freely on the spindle and remain free under all grinding conditions.

All contact surfaces of wheels, blotters, and flanges shall be flat and free of foreign matter.

When a bushing is used in the wheel hole it shall not exceed the width of the wheel and shall not contact the flanges.



Portable Grinders

Vertical portable grinders, also known as right angle grinders, shall have a maximum exposure angle of 180 degrees and the guard shall be located between the operator and the wheel during use.

Adjustment of the guard shall ensure that pieces of an accidentally broken wheel will be deflected away from the operator.

Personal Protective Equipment

PPE must be provided and used by employees when exposed to any hazard created by hand and power tools as defined by the Validus Energy PPE program.

Examples: falling, flying, abrasive, and splashing objects, or exposed to harmful dust, fumes, mists, vapors or gases.

Training

All Validus Energy Field Operations employees will be trained on the requirements of this program.

Any employee using hands and power tools must be trained and certified if necessary to operate the equipment.

