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Subcontractors	Program Requirements Documents	For Additional Info: <a href="http://EDMS">http://EDMS</a>	Effective Date: 09/19/22
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Manual: Subcontractors Requirements

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## 1. PURPOSE

This document establishes requirements for the maintenance and safe use of hand and portable power tools. This document implements requirements from codes and standards along with *contractor* (see def.) requirements. Any applicable regulatory or contractor requirements must be followed, with the most stringent requirement being met.

## 2. APPLICABILITY

This document applies to all subcontractors working at the Idaho Cleanup Project (ICP) who use hand tools and portable power tools, as specified in their contract with contractor. Stricter requirements may be imposed by subcontractors upon their employees or subtier contractors. The requirements of this document must be followed by subcontractors; however, the means of implementation may vary as determined by the subcontractor.

## 3. REQUIREMENTS

### 3.1 Training

- 3.1.1 All workers who use portable power tools must be trained on the proper use of all tools they are likely to use. This training must include the following:
  - A. Initial tool safety training (before using the tool) covering procedures and possible hazards
  - B. Retraining as needed to maintain safety awareness and operational proficiency.
- 3.1.2 Workers who operate powder-actuated tools must be trained on the proper use of the specific tools being used. This training must meet the following requirements:
  - 3.1.2.1 Initial training must be completed before the worker operates powder-actuated tools.
  - 3.1.2.2 Workers must be retrained as required by the equipment manufacturer.
  - 3.1.2.3 A record of the training must be retained by the subcontractor and will be made available for review by the contractor.

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3.1.2.4 A card signed by the trainer must be provided to the operator and must be in the operator's possession whenever a powder-actuated tool is used.

3.1.3 Employees in charge of issuing tools must be trained to recognize visible defects in all tools in their custody.

**3.2 Tool Use and Maintenance**

3.2.1 Tools must be used and maintained in accordance with 29 CFR 1926 Subpart I, "Tools—Hand and Power," and 29 CFR 1910 Subpart P, "Hand and Portable Powered Tools and Other Hand-Held Equipment," including requirements for properly guarding tools.

3.2.2 Machinery and power transmission apparatus must be properly guarded and maintained per 29 CFR 1926.307 and applicable sections of 29 CFR 1910 Subpart O, "Machinery and Machine Guarding."

3.2.3 Only the appropriate tool must be used for a particular task.

3.2.3.1 The use of personal pocket knives and multi-tools (Leatherman-type) is prohibited for work.

3.2.4 Tools must be examined for damage before each use.

3.2.5 Work with a tool must be stopped if there is a question regarding its safe use, and resolution must be obtained from a qualified person.

3.2.6 Tools must be used only as intended by the manufacturer and in accordance with the manufacturer's instructions.

3.2.7 Portable equipment, hand tools, and handheld power tools shall not be modified for use, including the use of handle extensions (i.e., cheaters).

3.2.7.1 An exception is allowed if Engineering performs an evaluation to allow tools to be modified for use in special applications. The tools must be modified under direction of Engineering providing both engineering and safety requirements, including necessary documentation, to provide a safe tool for its use.

3.2.8 All defective tools must be tagged out service or removed from use, and not used until repaired.

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- 3.2.9 The following tool safety practices must be followed:
- 3.2.9.1 Cutting edges must be protected when the tool is stored or transported.
  - 3.2.9.2 Work must be secured with clamps or a vise, when practical, so that the worker has both hands free to operate the tool.
  - 3.2.9.3 When flammable substances are present, spark-resistant tools must be used.
  - 3.2.9.4 Power tools must be disconnected from the power source when serviced and prior to performing attachment change outs, such as, but not limited to blades, saws, drills, grinding disc, and bits.
    - A. Exception is allowed for drills with keyless chucks.
    - B. Exception is allowed for magnetic (mag) drills and drill presses when the following three conditions are met:
      - 1. The control switch is placed in the “off” position
      - 2. The design of the press locates the control switch well away from the point of operation (chuck and bit) providing effective employee protection (cannot inadvertently start the machine)
      - 3. The location of the control switch on the drill press places the switch under the exclusive control of the employee performing the bit change out task.
- 3.2.10 Power cords and pneumatic hoses must be kept away from heat, oil, and sharp edges unless specifically approved for such use.
- 3.2.11 Tools designed for a fixed location must be securely anchored to prevent walking or moving.

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3.2.12 Tools must be maintained in accordance with the following requirements:

3.2.12.1 Cutting edges must be kept clean, sharp, and properly ground.

3.2.12.2 Metal striking surfaces must be kept clean, well dressed, and properly tempered.

3.2.12.3 Flats or teeth of wrenches and other tools designed for turning must be kept in the designed condition and at the proper angle.

**3.3 Electric Tools**

3.3.1 All portable (hand-held) power tools, extension cords, and ground fault circuit interrupters (GFCIs) must be visually inspected prior to use. GFCIs must be tested in accordance with OSHA guidelines by pushing the test button. If the device trips and resets, the GFCI is working properly

3.3.2 Ground fault circuit interrupter (GFCI) protection must always be used when using handheld electric power tools when:

- A. Used outdoors
- B. Attached to receptacles on portable or vehicle-mounted generators
- C. Used in wet or damp locations
- D. Attached to temporary power systems (such as bangboards and spider boxes)
- E. Used in construction-like activities.

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- 3.3.3 Electric tools and equipment that are cord and plug connected must be inspected as follows:

Condition	Criteria
Damage	Flexible cords and cables must not have worn, frayed, or damaged areas which present an electrical hazard to employees. There must be no breaks, damage, or cracks exposing live parts.
Strain relief	Strain relief must be maintained to prevent pull from being directly transmitted to joints or terminals.
Terminations	Terminations must have no stray strands or loose terminals.
Missing blades, etc.	There must be no missing or bent blades, pins, or contacts.
Missing cover plates	There must be no missing cover plates.
Marking	Marking, identification, or instructions for special configurations must be securely attached and in legible condition.

- 3.3.3.1 Tools that show evidence of damage or that have been repaired must be re-tested prior to releasing them for use. A record of the tests performed must be documented and retained.

### 3.4 Hand Tools

- 3.4.1 Hand tools must be used in a safe manner and must be used and maintained in accordance with 29 CFR 1926.301.

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**3.5 Knives and Scrapers**

**NOTE:** *Photograph examples of work knives, hand scrapers, micro-cutters, utility knives, and scrapers are located on the Industrial Safety website.*

- 3.5.1 Before using work knives, *utility knives and scrapers* (see def.), consider using other tools such as scissors, snips, wire cutters, wire strippers, or similar tools.
- 3.5.2 The following knives and scrapers are hand tools which are considered as general hazards:
- A. Hand scrapers, which do not have a knife edge, such as paint or putty knives
  - B. Micro-cutters, such as tape or plastic cutters, with rounded edges or ceramic edges
  - C. Utility knives with recessed blade, which are those with a guard in place, such as those protected by a J-hook design.

**NOTE:** *Utility knives and scrapers are separated into two categories as described below:*

- A. *Category I utility knives and scrapers are those self-retracting blades. Self-retracting knives include those that only expose the blade when pressure is applied to the material being cut and those with auto-closing blades, including those that require continuous thumb or hand pressure for the blade to be exposed for use and guarded wheel cutters.*
  - B. *Category II utility knives and scrapers are those with fixed or set blades, or blades that can be fixed or set by locking/setting in the open position. These types of knives include fixed exposed blades, adjustable blades, set open exposed blades, and non-guarded wheel cutters.*
- 3.5.3 When using work knives, utility knives, and scrapers (both Category I and II), proper hand protection, such as cut-resistant gloves must be worn as discussed in PRD-2001, “Personal Protective Equipment.”
- 3.5.4 Cutlery (kitchen knives) is exempt from the requirement to wear cut resistant gloves.
- 3.5.5 Work knives, such as insulator knives, cutlery (kitchen knives), linoleum knives, electrician knives, other similar knives, and Category II utility knives and scrapers are used by personnel according to work control documents.

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**3.6 Power-Operated Hand Tools**

- 3.6.1 Power-operated hand tools must be used and maintained in accordance with 29 CFR 1926.302 and 29 CFR 1910.243.
- 3.6.2 Electric-operated tools must either be of the approved double insulated type or grounded (3-prong grounded cord).

**3.7 Pneumatic and Hydraulic Tools**

- 3.7.1 Pneumatic and hydraulic tools must be used and maintained in accordance with 29 CFR 1926.302.
- 3.7.2 Hose air connections exceeding ½ inch ID must be secured by a “whip check” or other approved method at each connection.
- 3.7.3 Pneumatic power tools must be secured to the hose by some positive means to prevent the tool from becoming accidentally disconnected.
- 3.7.4 All hoses exceeding ½ inch inside diameter must have a safety device at the source of the supply or branch line to reduce pressure in case of hose failure.
- 3.7.5 The manufacturer's safe operating pressure for hoses, pipes, valves, filters, and other fittings must not be exceeded.
- 3.7.6 Compressed air must not be used for cleaning purposes except where reduced to less than 30 psi and then only with effective chip guarding except the 30 psi requirement does not apply for concrete form, mill scale and similar cleaning purposes.
- 3.7.7 Compressed air must not be used for cleaning worker clothing.

**3.8 Fuel-Powered Tools**

- 3.8.1 Fuel-powered tools must be used and maintained in accordance with 29 CFR 1926.302(c).
- 3.8.2 Fuel powered tools must be stopped while being refueled, serviced, and maintained.

**3.9 Powder-Actuated Tools**

- 3.9.1 A work control document or JSA must be used to authorize the use of a powder-actuated tool.

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**3.10 Abrasive and Grinding Tools**

- 3.10.1 Grinders must be used, maintained and inspected in accordance with 29 CFR 1926.303, 29 CFR 1926.300(b), and 29 CFR 1910.243.
- 3.10.2 Abrasive wheels and tools must meet other applicable requirements listed in ANSI B7.1-1970 (or current version), “Safe Code for the Use, Care and Protection of Abrasive Wheels.”
- 3.10.3 Cracked wheels must be replaced as soon as a crack is discovered.
- 3.10.4 All guards will be in place and properly adjusted.

**3.11 Woodworking Tools**

- 3.11.1 Woodworking tools must be used and maintained per 29 CFR 1926.304 and 29 CFR 1910.213.

**3.12 Portable Ventilation**

- 3.12.1 Portable ventilation ducts used in areas with combustible or flammable vapors or dust, must be bonded together and grounded, or be of anti-static design to reduce the potential for build-up of static charge.

**3.13 Jacks**

- 3.13.1 Jacks must be used and maintained in accordance with 29 CFR 1926.305 and 29 CFR 1910.244.
- 3.13.2 Lifting capacities will be clearly marked and readily visible.

**3.14 Air Receivers**

- 3.14.1 Air receivers must be used and maintained in accordance with 29 CFR 1926.306.
- 3.14.2 Every air receiver must be equipped with an indicating pressure gage located as to be readily visible and with one or more spring-loaded safety valves.

**3.15 Jackhammers**

- 3.15.1 Jackhammer operators must wear the appropriate personal protective equipment for protection from potential hazards, including noise, vibration, and metatarsal protection.



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**3.16 Lawn and Garden**

- 3.16.1 Lawn mowers must meet the requirements set forth in ANSI B71.1–2003 (or later version), “Lawn Mowers.”
- 3.16.2 Weed trimmers must meet the requirements set forth in ANSI B175.3, “Handheld Engine-Powered Grass Trimmers and Brushcutters.”
- 3.16.3 Chain saws must meet the requirements set forth in ANSI B 175.1-2000 (or later version), “Engine-Powered Handheld Chain Saws.”
- 3.16.4 Snow blowers must meet the requirements set forth in ANSI B71.3, “Snow Throwers.”

**4. DEFINITIONS**

See LST-27, “Glossary”

**5. REFERENCES****5.1 Source Documents**

- 29 CFR 1910, Subpart O, “Machinery and Machine Guarding”
- 29 CFR 1910, Subpart P, “Hand and Portable Powered Tools and Other Hand-held Equipment”
- 29 CFR 1926, Subpart I, “Tools – Hand and Power”
- NFPA 70E, “Electrical Safety Requirements for Employee Workplaces” (2018)
- NFPA 70, “National Electrical Code” (2017)

**5.2 Related Requirements**

The following documents may also contain requirements that apply to this activity:

- PRD-2001, “Personal Protective Equipment”
- PRD-2011, “Electrical Safety”
- PRD-2109, “Respiratory Protection”
- PRD-2110, “Confined Spaces”

**6. APPENDIXES**

None