PURPOSE. This SOP outlines the procedures for conducting a safe weed trimming operation.

SCOPE. Weed trimmers (also known as string trimmers, weed wackers, or weed eaters) are useful in clearing grass, small soft vegetation and small shrubs (with the proper cutting blade) along ... [Each individual project needs to fill in the scope of their work with this equipment]

ROLES AND RESPONSIBILITIES. [Projects need to tailor the Roles/Responsibilities based on their staffing level]

Project Manager (PM) is responsible for the overall program safety including the use of weed trimmers used by project staff.

Project Safety Officer (PSO) is responsible for ensuring staff compliance with this SOP, that the staff are trained to use and maintain the equipment. The PSO will also maintain the project’s weed trimmers training records, maintenance records, and ensure that damaged trimmer is sent out for repairs to an authorized repair shop.

Field Supervisor is responsible for ensuring field staff are using the trimmers safely based on this SOP and the trimmer’s instruction manual.

Field Staff is responsible for operating the trimmer safely and in accordance with this SOP. Prior to operating any project trimmer, staff will be thoroughly familiar with the operational procedures of that trimmer by carefully reading the instruction manual.

TRAINING REQUIREMENTS. All project staff required to use a trimmer for the project will have documented safety training as conducted by a knowledgeable user. [Does your project require a specific training course? Do you require a refresher? State your requirements here.]

PERSONAL PROTECTIVE EQUIPMENT (PPE). PPE for head, eyes, ears, face, hands, legs are designed to prevent or lessen the severity of injuries and must be inspected prior to each use to ensure it is in serviceable condition. The following PPE is required for during trimmer use:

- Head protection: hard hat/helmet with chin strap; highly visibility color (ANZI Z89-approved type 1 compliant)
- Eye protection: face shield with safety glasses, or goggles; must have adequate sides, bottom and top protection (ANSI Z87.1 compliant)
- Hearing protection: approved hearing protection such as ear muffs and/or ear plugs
- Long sleeve shirt: reduces exposure to skin from flying debris
- Protective gloves: quality leather, supple, providing good grip, and absorb some vibrations
- Long pants: sturdy material but loose enough to provide complete freedom of movement
- Sturdy leather boots: well fitted, high enough (8") to provide ankle protection, nonskid soles adequate for the type of field terrain

WEED WACKER’S FIELD KIT. While using a trimmer in remote areas, project staff will have the following items with them:
• First aid kit
• Radio and/or cell communications
• Tool kit: with replacement cutting materials (trimmer nylon line, “plastic” or metal blades), required hand tools, wire brush

TRANSPORTATION [Include only what is appropriate for your project]

By Vehicle:
• Switch to off/stop position
• Secure trimmer in bed of vehicle to prevent fuel spillage or damaged during transit
• Ensure UL/DOT approved fuel container is secured and cannot tip over
• Do not transport a fueled trimmer and fuel containers in the passenger compartment

By Helicopter with pilot's approval:
• Fuel tank is empty, switch to off/stop position
• If transporting by cargo net, secure within net to prevent slippage through the net eyes, and ensure trimmer will not be damaged by other items in the net
• If transporting internally, it must be secured to prevent movement if turbulence is encountered; when carrying trimmer to and from helicopter, keep it low parallel to the ground
• External load transport for fuel container: must be kept upright during flight, fuel handles and vent levers must be secured to prevent accidental opening
• Internal transport for fuel: must be in secured hard container and kept upright

When hand carrying:
• Keep hot muffler away from your body
• Use the shoulder strap to help balance the trimmer while traversing short distance to continue working
• Turn off trimmer when carrying long distances.

PRECAUTIONS.
• Recognize the safety hazards of using a trimmer
  o Eye injuries are the most common injury for people using trimmers; wear eye protection
  o Lacerations to the user and others may occur when sharp objects are sent flying during use; use face shield, long sleeve shirt and sturdy trousers
  o Heat related illnesses are common during prolonged trimmer use; take frequent breaks and drink water to stay hydrated
  o Back strains occur during prolong use and incorrect bending; adjust the harness system to a comfortable length to reduce bending over
  o Wrist strains are common during prolonged use, adjust the harness system and hand grips for a comfortable hand position
• Inspect area to be cut for loose stones, metal, sticks, wire, or other objects that could be thrown by contact with the cutting materials
• Ensure the head is securely on prior to using
• Be aware of the location of other staff and ensure they are at least 50 feet away from your work area before starting
• Use caution when trimming in rocky areas when using metal cutting blades as sparks may result from the blade striking rocks; blades may chip and send out metal shards
• Use caution when changing the replaceable heads, trimmer lines, plastic or metal blades as the motor head will be very hot
• If you are approached, turn off the machine

OPERATING PROCEDURES.  [Due to the variety of trimmers in the field and different type of cutting heads and materials, each project needs to tailor the operating procedures to their trimmer]

Preparation.
• Adjust the hand grip position according to your comfort before starting to use the trimmer
• Check the condition of the trimmer
  o throttle trigger and interlock, trigger should move easily and always spring back to idle when released
  o stop switch should immediately stop the trimmer when engaged
  o cutting head is securely fastened
  o deflector shield in place and fastened securely

Fueling.
• Select bare level ground to refuel
• Fuel only in well ventilated area and when trimmer is shut down
• Slowly release pressure from gas can and trimmer’s gas tank by carefully removing the caps
• Carefully pour gas into the trimmer and wipe off any spilled gas on the trimmer
• Move at least 10-ft from the fueling spot before starting the trimmer

Starting.
• Follow the instructions from the trimmer’s Instruction Manual; do not deviate.
• Place on bare ground or solid surface in an open area
• Have good balance and secure footing
• Ensure cutting head is not in contact with obstructions or other objects
• Hold the starter grip firmly and do not wrap the starter cord around your hand
• Slowly pull starter cord in specified direction until you feel it engage then give it a strong brisk pull; be careful to not fully extended the starter cord to prevent breakage
• Guide the cord back to rewind properly; do not release the starter grip

Running.
• Keep both hands on the trimmer
• Do not raise the head above waist level
• Keep cutting head parallel to the ground when cutting
• When working on slopes be careful with your footing as well as the angle of the cutting head

Shutting down.
• Turn off trimmer by moving the switch to off position
• Do not place on ground until the cutting head has stopped
• Be careful of the engine and muffler areas; they are hot and can burn you

INSPECTION AND MAINTENANCE
• After use, inspect all safety features including trim guards, shut off switch
• Clean debris off the cutting heads and deflector shields
• Remove head following trimmer’s Instruction Manual for cleaning and replacing old trimmer line or cutting blades
• Inspect, clean, adjust, or replace as necessary any items based on the Instruction Manual: air filter, fuel cap, fuel filter, fuel pickup body, spark plug, spark arresting screen, starter cord, cylinder fins, cutting heads
• If a trimmer needs repair drain the fuel, disconnect the spark plug and tag the trimmer with a **DO NOT USE** label and identifying the problem; notify the PSO that the trimmer needs repair
• Take the trimmer to a service/repair facility to be repaired by qualified staff if the repairs required are not described in the Instruction Manual; if the staff is not qualified to do the repairs in the manual, send the trimmer to the repair facility
• For prolonged storage, follow the trimmer’s Instruction Manual

**REVIEW AND UPDATES.** This SOP may be updated at any time during the year; minimally, the SOP should be reviewed annually by those whose work is covered by the SOP. Program’s Manager and Project Safety Officer must concur and approve the updated versions. An electronic copy of updated versions with new signatures will be sent to the Principal Investigator for his review, approval/signature

**SIGNATURES**

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Program Manager/Date

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Project Safety Officer/Date

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Field Supervisor/Date

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Principal Investigator/Date