

*Potential Hazard Review*

Physical Hazards

- Noise: Hearing loss
- Striking against: Laceration, puncture, abrasion
- Electrical: Shock, burn, cardiac arrest, death
- Slips/fall: Bruise, contusion, sprain, strain, fracture from fall and impact

Ergonomic Hazards

- Repetition: Pain, impairment of bodily capacity, cumulative trauma disorder
- Vibration: Swelling, inflammation

*Related Safe Work Practices*

- Chainsaws
- Electrical Safety
- Fuel Safety
- Ladders
- Lifting, Body Mechanics and Ergonomics

*Personal Protective Equipment*

- Face shield
- Hearing protective devices
- Head protection (if pruning overhead; use of chinstrap optional)
- Heavy gloves or puncture-resistant gloves
- Respiratory protection
- Safety glasses

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This Safe Work Practice (SWP) addresses the hazards of pruning and is organized into the following areas:

- A. Manual Pruning
- B. Pollarding

- C. Pole Chainsaw Pruning
- D. Powered Hedge Shears/Trimmers

This SWP is dedicated to helping you avoid an injury or illness from known hazards. You are advised to follow these recommendations, read and follow this SWP and any related SWPs, complete any required or recommended training, and to obtain advice from a Qualified Person if you have any questions.

A Qualified Person is a person **designated** by the employer; and by reason of **training**, experience, or instruction who has demonstrated the ability to perform safely all assigned duties; and, when required is properly licensed in accordance with federal, state, or local laws and regulations.

All tasks require that you:

- Use the equipment in accordance with the guidelines set forth by the manufacturer. This includes following all signs and labels, and reviewing any manufacturer's operating manuals.
  - If the instructions provided in the operating manual conflict with this SWP, then follow the instructions in the manual. The manufacturer's instructions prevail over this SWP.
- Review the safety data sheets (SDSs) for each chemical.
- Be trained on this SWP and those listed above as related. Training on SWPs must be completed before initial assignment. It is also recommended that you complete refresher training every two years.

## A. MANUAL PRUNING

Manual pruning includes the use of hand pruners, loppers, pruning/hand saws and pole pruners/saws. It does not include the use of gasoline or pneumatic powered pruners.

1. Pole pruners, pole saws and other similar pruning tools shall be equipped with wood or non-metallic poles, and actuating cords. The actuating cord shall be of nonconducting material (e.g. polypropylene).
2. Inspect the area for overhead and other electrical lines, particularly when using a pole pruner. Plan your work to keep adequate distance from all lines (see *Electrical Safety*).
3. Never carry tools in your pockets. Have them in a tool box, or leather holster or pouch to hold small hand tools.

4. Make sure hand and power tools are well sharpened. Sharp blades require less force and stamina, and reduce fatigue.
5. Choose the right-sized tool for the job.
6. Puncture resistant gloves should be used when doing tasks with an elevated risk of receiving puncture wounds, such as pruning palm trees<sup>1,2</sup>. Consider using gauntlet type gloves for these jobs (they protect the forearm).
7. Work deliberately and don't rush.
8. Respiratory protection may be warranted when pruning Sycamores with trichomes present<sup>3</sup> (trichomes refer to the hairy or fuzzy material found on the underside of the leaf). Evidence shows illness may be caused by inhaling the trichome spores that may be present at certain times of the year on sycamore leaves
  - a. Use of a respirator may require fit-testing, training and medical clearance on an annual basis depending on what type of respirator is needed. Contact EHS for further help.
9. Use an orchard ladder (see *Ladders*) if pruning up high rather than a conventional step ladder. Do not overreach!
10. Take several breaks if pruning for a long period of time.
11. Be aware of where plant material is dropping. If it impacts a public or staff area, restrict access (using barricades, tape, cones, etc.) to prevent anyone from walking near or underneath your work area.
12. Be aware and anticipate that some plant material may be cut more easily than initially expected. This may cause pruning saws to swing toward you. Position your body and body parts away from the path and potential path of pruning saws to prevent being cut or struck.<sup>4</sup>
13. Don't pull brush out from underneath ladders; it may make the ladder unstable.
14. If pruning consists of removing larger branches, be aware that large pieces can swing down after being cut and hit the leg of the ladder, making the ladder unstable and possibly causing a fall. Therefore consider using other means to access the branches, such as an aerial lift.

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1 RPD Industrial Investigation, EHS Case #3403, DOI 3/29/07

2 "Jab From a Rose Can Lead to Severe Infection", San Francisco Chronicle, October 13, 2004, Pg. 3

3 RPD Industrial Investigation, EHS Case #2777, DOI 11/9/04, and as per EHS Project 712.

4 RPD Industrial Investigation, EHS Case #3353, DOI2/5/07.

15. If you suffer a wound (puncture, scrape, abrasion) from plant material, clean the wound immediately with soapy water, or get a first aid kit and clean the wound. If the wound penetrates deep into the skin (down to a tendon or into a joint), see a doctor immediately.
16. Pole pruners or pole saws shall not be hung on utility wires or cables, or left in the tree overnight. They shall also be hung so that the sharp edge is away from the employee.

## **B. POLLARDING**

17. Don personal protective equipment:
  - a. Ensure that your shoelaces are tied and the soles of your shoes are free of any debris or greasy, oily or wet substances.
  - b. Do not wear leather-soled shoes, as they are slippery.
18. Ensure all equipment (ladders, aerial lifts, hand tools etc.) are in good working order. Any equipment that is not adequate shall be removed from service.
19. Use aerial lifts when possible (see *Aerial Lifts SWP*).
20. Choose one of three pruning tools depending on the density and diameter of the branch:
  - a. Use a handsaw when pruning branches that are 1 inch and above in diameter. The use of a saw is also recommended if too much force is required to cut off a branch less than 1 inch in diameter to reduce possible repetitive strain injuries.
  - b. Use loppers when pruning branches that are 1 inch in diameter.
  - c. Use hand pruners when pruning branches that are below 1 inch in diameter.
21. Refrain from stepping on or cutting an unsafe branch (e.g. dead, cracked, hollow etc.). Look for the following when trying to determine if a branch is unsafe or dead<sup>5</sup>:
  - a. Leafless while other branches have green leaves.
  - b. Bark has mostly fallen off, exposing smooth wood underneath.
  - c. Large fungus is present.
  - d. Scrape lightly and look for green.
  - e. Shake the branch; dead wood will snap or crack.
  - f. The presence of buds.
22. While using an orchard ladder ensure that:
  - a. stabilizing kits are utilized if the ground is hard (compacted dirt, concrete).

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<sup>5</sup> How to Recognize Dead Wood and Branches, Jonathan Landsman, The Spruce, <https://www.thespruce.com/how-to-recognize-dead-wood-3269556>, accessed 2/16/2018

- b. every ladder is placed on a firm level surface.
- c. the ladder is placed as close to the tree as possible. Over-reaching or leaning too far to one side while pruning can make you lose your balance and fall.
- d. keep your belt buckle between the ladder rails.

23. Do not:

- a. reach so that your belt buckle goes outside the side ladder rails.
- b. stand on the top three rungs of the ladder.
- c. place ladders on ground that is uneven and watch for soft, muddy spots.
- d. use excessive force to cut off a branch; find another tool or speak with your supervisor.
- e. use equipment that is damaged.

24. Remove defective tools from service.

25. Use a blade cover when transporting tools from one location to the other.

26. Clean the tools and lubricate if necessary. Use brushes with handles to clean saw blade or other types of blade teeth.

27. Store the tools safely out of the reach of children.

28. Report any problem or deficiencies noted during your shift. If the problem is serious, make it your responsibility to have the equipment removed from service.

## C. POLE CHAINSAW PRUNING

29. Inspect the area for overhead and other electrical lines, particularly when using a pole pruner. Plan your work to keep adequate distance from all lines (see *Electrical Safety*).

30. Never wear loose clothing, and be sure to secure/tie back long hair.

31. Ensure adequate lighting.

32. Have a manual pole saw on hand in case the pole chainsaw pruner binds up.

33. Use the strap attached to the pole pruner to reduce stress on your back and shoulders.

34. Be aware of where plant material is dropping. If it impacts a public or work area, restrict access (using barricades, tape, cones, etc.) to prevent anyone from walking near or underneath your work area.

35. Use caution when telescoping the pole pruner.
36. The pole pruner gets heavy quickly; take breaks when tired, and be extra cautious.
37. Maintain visual communication with other crew member(s) and the public at all times.
38. To prevent the pole pruner from binding on heavier branches, make two cuts; one on the bottom and then one on the top. Ensure you have the proper cutting angle as well.
39. Watch for falling limbs. Ensure a safe zone between a falling limb and you, your crew and the public. The public should be a minimum of 50 feet away from work area/falling limbs.
40. Do not cut limbs into long sections; cut them into short segments to reduce weight of falling limbs.
41. Maintain proper footing and balance at all times; be aware that the pole pruner tends to pull you. Keep the area around your feet clear at all times.
42. Monitor the chain tightness while using. Watch oil levels.
43. Always use two hands.
44. Never operate without a guard shield in place (if one is provided by the manufacturer).
45. Watch out for foreign objects when cutting.
46. Use a blade cover when transporting.
47. Report any problem or deficiencies noted during your shift. If the problem is serious, make it your responsibility to have the equipment removed from service.

## **D.POWERED HEDGE SHEARS/TRIMMERS**

48. Read the owner's manual to familiarize yourself with the machine and its use.
49. Check the trimmer carefully for loose screws, bolts, and damaged or broken parts.
50. Replace parts or make necessary repairs before you use the trimmer.

51. Sharpen the blades if necessary.
52. If not double insulated be sure that you use a three-wire extension cord equipped with a three-prong plug. Be sure the outlet you use is the grounded type. Use an outlet with ground fault protection for maximum safety.
53. Clear the working area of children, pets, and other bystanders. Use caution tape and/or cones as needed.
54. Inspect the shrubbery carefully for hidden wires, posts, or other trash.
55. Always wear long pants, long-sleeved shirt, gloves, eye protection, and ear protection.
56. Do not operate the trimmer above chest height. If trimming taller shrubbery, stand on a stepladder or other firm support.
57. Keep your hands and body away from the blades.
58. Keep the cord of electric models away from the trimmer to avoid damaging or cutting it, and to prevent yourself from getting caught in the cord.
59. Work slowly and deliberately. Plan your cuts before you make them.
60. Take an occasional rest break to avoid fatigue.
61. Stop the engine or unplug electric models before cleaning or adjusting.
62. Never leave the trimmer unattended, to prevent children playing with it.
63. Clean the trimmer and lubricate if necessary.
64. Store the trimmer safely out of the reach of children.

**For any questions, please contact EHS at 415-831-2780.**