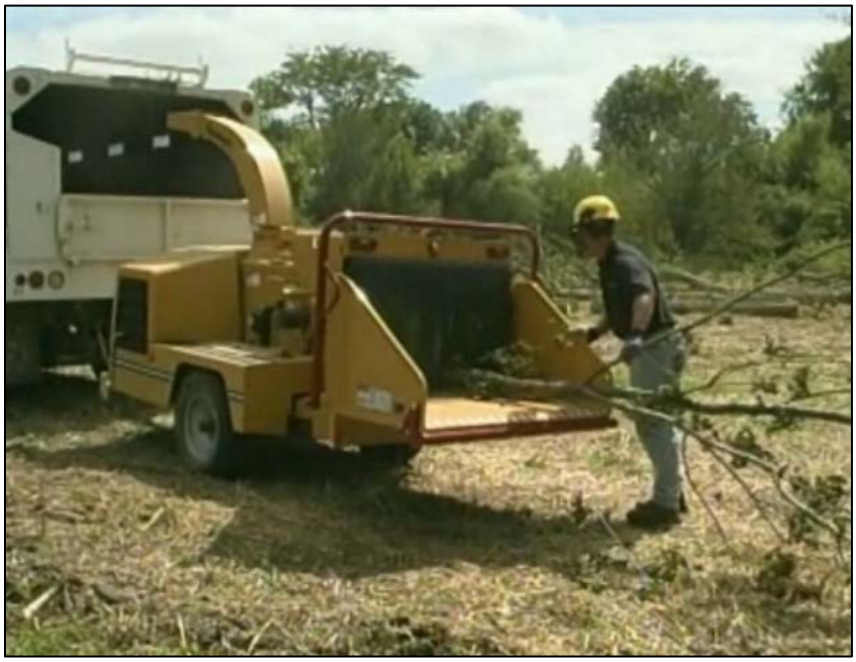
ADOT Vegetation Management Guidelines – Chipping

1.0 Purpose of Chipping

Chipping is an economical method for disposing of roadside vegetation waste, including stems, limbs and trunks. Chipping allows for:

- The recycling of vegetation material
- Avoids the presence of unsightly debris in scenic or urban interface areas
- Assists in retaining soil moisture
- Enhances soil structure over time
- Provides for erosion control



2.0 Planning to Chip

Prior to chipping, the area of slash should be calculated to estimate the Average Accomplishment for PeCoS reporting (in acres). The maintenance supervisor will make a determination as to whether there is an appropriate location(s) within the work area for the spreading of chipped material. Generally, chips should not be spread more than 2 inches deep to prevent erosion issues from loss of stabilizing plant roots in the area. It is best to fertilize areas after chips are spread with at least 200 lbs/acre of ammonium sulfate. If a large volume of material exists, burning or hauling may be preferable to chipping. Burning, if chosen as the disposal method, requires a burn permit from ADEQ or other applicable authority.

WHO TO CALL WITH QUESTIONS

Maintenance Supervisor
Design Landscape Architect – ADOT Roadside Development
Construction Landscape Architect –ADOT Construction Group

ADOT Vegetation Management Guidelines – Chipping

3.0 Activity Coordination

Intra-agency Coordination

Notify District Environmental Coordinator 10 work days prior to chipping for information on site status to avoid damage to plant communities, spreading noxious weeds, or conflicting with herbicide treatments.

COORDINATION

WHO TO CALL

- Maintenance Supervisor
- District Environmental Coordinator
- E-mail to MaintenanceWorkOrders@azdot.gov

Highway Operations Coordination

Coordinate chipping with thinning, or tree and brush removal operations wherever vegetation removal is proposed.

Environmental Concerns

Prior to chipping in the following areas, the maintenance supervisor shall ensure that all laws, rules, and regulations are adhered to, including:

- National Forest Land
- Native American Tribal Communities
- Environmentally sensitive areas containing endangered species habitat

4.0 Best Practices for Chipping

Chipping can provide an economical means for disposal of slash and can improve roadside aesthetics, but it is important to follow best practices.

Chipping Practices

- The size of material that can be chipped as a result of thinning, or tree and brush removal, is dependent on the capacity of the equipment and the manufacturer's recommendation; most ADOT chippers will handle 10-inch diameter material
- Only responsible and trained personnel are allowed to operate the chipper
- Work in pairs for safety
- Place safety devices and signs per current edition of the MUTCD
- Inspect chipper and cutters as required
- Ensure personnel are wearing proper personal protection equipment (hard hat, double hearing protection, eye protection, face shield, safety shoes, reflective clothing, gloves with narrow cuffs)
- Secure loose clothing and hair
- Do not attempt to operate chipper on uneven ground
- Operate equipment in a manner that minimizes soil disturbance and impacts to existing vegetation
- Allow enough room around the chipper for the operator to feed brush and material, and keep the area clear of obstacles
- Commence dragging stems, limbs or slash to chipper and begin feeding from the side of the chipper, not the rear

ADOT Vegetation Management Guidelines – Chipping

- Feed the base of the limb or material first, not the branches
- Observe chipping material to ensure that it does not contain rocks, metal, or other objects that could damage the chipper or become dangerous projectiles
- Ensure chipped material will not discharge onto the roadway or into watercourses
- Adjust discharge chute to scatter chipped material
- Ensure depth of chipped material does not exceed two (2) inches or per land owner requirement
- If the chipper becomes plugged, turn off the unit before clearing the obstruction
- Remove safety devices and signs after the completion of activity

This page intentionally left blank.