

**NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION PRACTICE STANDARD  
WOODY RESIDUE TREATMENT**

(Ac.)

CODE 384

### DEFINITION

The treatment of residual woody material that is created due to management activities or natural disturbances.

### PURPOSE

- Reduce hazardous fuels.
- Reduce the risk of harmful insects and disease.
- Protect/maintain air quality by reducing the risk of wildfire.
- To improve access for management purposes.
- Improve access to forage for livestock and wildlife.
- Develop renewable energy systems.
- Enhance aesthetics.
- Reduce the risk of harm to humans and livestock.
- Improve the soil organic matter.
- Improve the site for natural or artificial regeneration.

### CONDITIONS WHERE PRACTICE APPLIES

On all lands, except active cropland, where woody residue requires treatment.

### CRITERIA

#### General Criteria Applicable to All Purposes

The condition and extent of residual woody material shall determine the treatment method selected based on the operator's purpose.

Treatment methods (i.e., piling, burning, chipping/masticating, lop and scatter, offsite removal, crushing) will achieve landowner objectives while adequately protecting land and water resources.

Care shall be taken to minimize injury to or function of the residual plant communities.

Timing of treatment shall coincide with intended purpose(s) and minimize impact on other resources.

Any broadcast burning activities shall comply with the Conservation Practice Standard (CPS) Prescribed Burning (338).

Prescribed burning of logging slash or the burning of piled slash must be conducted in a safe manner and in accordance with open burning rules and laws. Starting of open fires within the Black Hills Forest Fire Protection District is prohibited unless a permit to do so is first obtained from the South Dakota Secretary of Agriculture or his designee. The United States Forest Service will not issue permits on private land.

Prescribed burning at any time of the year without first having in place a natural or manmade firebreak and without giving due caution to the prevailing wind and forecasted weather conditions is a violation of state law. Large continuous areas of slash shall be broken up by taking advantage of natural firebreaks or by providing fire lanes cleared of slash as deemed necessary. See CPS Firebreak (394) for design recommendations.

As a fire protection measure, all logging slash or slash resulting from thinning must be lopped and scattered so that it will not exceed 18 inches in depth on any part of the treated area or it must be piled and burned, removed from the site, treated by prescribed burning, or chipped. Slash must be removed or chipped for a distance of

100 feet around buildings. On sites with an average slope of 40 percent or greater, slash must be removed or chipped within 200 feet of buildings.

Where piling and burning of slash is necessary due to heavy slash concentrations, slash piles should be placed in natural openings and/or away from leave trees to avoid damaging or scorching them when burning the piles. Piles must be compressed and free of excessive dirt to facilitate complete consumption of the debris. Burn the piles during the winter season when snow cover will prevent the spread of fire.

The landowner is responsible to obtain any required permits and develop and follow an approved burn plan.

Any residual woody material left on the site after treatment will not present an unacceptable fire, safety, environmental, or pest hazard. Such remaining material will not interfere with the intended purpose or other planned management activities.

Abandonment of untreated logging slash in a timber harvesting operation consisting of 10 acres or more is a public nuisance and a violation of state law.

#### **Additional Criteria Applicable to Reduce Hazardous Fuels**

Reduce the amount of fuels to an acceptable level by controlling height, size, amount and distribution.

#### **Additional Criteria to Reduce the Risk of Harmful Insects and Disease**

The degree, intensity and timing of treatment shall consider the characteristics of harmful insects or diseases to enhance the effectiveness of control.

#### **Additional Criteria to Protect/Maintain Air Quality by Reducing the Risk of Wildfire**

Activities will be consistent with established regulations and guidelines for PM10 and PM2.5 emissions, ozone precursors (NOx and VOCs), as well as smoke and fugitive dust, and state and local permit requirements.

#### **Additional Criteria to Improve Access to Forage for Livestock and Wildlife**

Woody material shall be piled, contour windrowed, or removed sufficiently to allow access by livestock and wildlife, and to maximize forage growth.

#### **Additional Criteria for Develop Renewable Energy Systems**

Removal of woody material shall not be detrimental to the site and will adequately protect soil and water resources. Adequate woody material will be left to maintain or improve nutrient and organic matter cycling.

#### **Additional Criteria to Enhance Aesthetics**

Woody material left on the site that is scattered, windrowed or piled will be further treated to meet client objectives and any state or local requirements for aesthetics and visual resources.

#### **Additional Criteria to Reduce the Risk of Harm to Humans and Livestock**

Woody material left on the site that is scattered, piled or windrowed will be further treated to meet client objectives and any state or local requirements for safe use of the area.

#### **Additional Criteria to Improve Soil Organic Matter**

Woody material will be of a size and closeness to soil to accelerate in decomposition.

#### **Additional Criteria to Improve the Site for Natural or Artificial Regeneration**

Woody material will be treated to complement treatments specified in CPS Tree/Shrub Site Preparation (490).

### **CONSIDERATIONS**

When feasible, consider chipping, shredding, offsite disposal, bio-fuel composting, or other techniques in lieu of burning.

When determining method and timing of woody material treatment, consider air quality regulations, burning regulations, available resources, ability to use woody biomass and future regeneration needs.

Consider effects on soil carbon when off-site removal of woody material is to occur.

Consider wildlife habitat needs (e.g., large downed wood, snags, brush piles, etc.) when planning the timing of and performing treatment.

Consider establishing artificial habitat (e.g., bat boxes, nesting platforms, rock piles, etc.) where needed.

Consider pollinator needs when planning and performing treatment.

Consider the beneficial and other effects on cultural resources, and threatened and endangered species, natural areas, and wetlands.

## **PLANS AND SPECIFICATIONS**

Specifications for applying this practice shall be prepared for each site and recorded using approved specification sheets, job sheets, technical notes and narrative statements in the conservation plan, or other acceptable documentation.

## **OPERATION AND MAINTENANCE**

Monitor populations and the potential of damage to site resources by harmful pests and take controlling actions as necessary.

Access by vehicles or people will be controlled during treatment for safety. See CPS Access Control (472).

Monitor vegetation growth. Unwanted vegetation or excessive regrowth may occur, requiring treatment.

## **REFERENCES**

Ecological Restoration Institute 2010. Treating Slash. Northern Arizona University. Flagstaff, Arizona. <http://www.eri.nau.edu/en/information-for-practitioners/treating-slash>

Bennett, M. and Fitzgerald, S., 2008. Reducing Hazardous Fuels on Woodland Property: Disposing of Woody Material. Oregon State Extension publication EC-1574-E.