Environmental Quality Incentives Program
2013 EQIP Signup

Minnesota Supplement for:
Practice Standard 490 – Tree and Shrub Site Preparation

Supplemental Criteria

1. Tree and Shrub Site Preparation (490) should be used in conjunction with any tree/shrub establishment practice. Examples include: Tree and Shrub Establishment, Windbreak/Shelterbelt Establishment, Riparian Forest Buffer.

Scenarios

Mechanical – Heavy
This practice involves the use of light/moderate machinery to clear above ground vegetation and to also rip/cut/lift underground root systems in order to improve site conditions for establishing trees and/or shrubs. Typical sites include abandoned fields, pastures, rangelands, agricultural fields or forestlands that have been harvested. This following resource concerns: soil quality degradation - compaction, soil erosion - sheet and rill, and degraded plant condition - undesirable plant productivity and health and inadequate structure and composition.

Mechanical – Light
This practice involves the use of light/moderate machinery to clear above ground vegetation and to also rip/cut/lift underground root systems in order to improve site conditions for establishing trees and/or shrubs. Typical sites include abandoned fields, pastures, rangelands, agricultural fields or forestlands that have been harvested. This following resource concerns: soil quality degradation - compaction, soil erosion - sheet and rill, and degraded plant condition - undesirable plant productivity and health and inadequate structure and composition.

Chemical - Ground Application
This practice involves the use of various herbicides applied using ground-based machinery (and hack-n-squirt treatment of selected trees, approximately 1/4 to 1/2 the trees on the site as determined and marked) in order to remove undesirable vegetation and improve site conditions for establishing trees and/or shrubs. Typical sites include abandoned fields, pastures, rangelands, agricultural fields or forestland that was recently harvested. This practice is typically used to address the following resource concerns: degraded plant condition - undesirable plant productivity and health and inadequate structure and composition.

Chemical - Hand Application
This practice involves the use of various herbicides applied using backpack sprayer or similar equipment, and hack-n-squirt for tree control, in order to remove undesirable vegetation and

improve site conditions for establishing trees and/or shrubs. Typical sites include lands such as old fields, pastures, rangelands, agricultural fields, previous forestlands that have been abandoned and are now covered with a mixture of grasses, forbs, shrubs and some remnant trees. Resource concerns are: degraded plant condition - undesirable plant productivity and health and inadequate structure and composition.

Hand site preparation

This practice typically involves removing all vegetation from the area of ground prior to the establishment of trees and/or shrubs. Typical sites include land such as old fields, pastures, rangelands, agricultural fields, or abandoned forests that are mostly grass or weed covered. This practice is typically used to address the following resource concerns: degraded plant condition - undesirable plant productivity and health and inadequate structure.

Windbreak - Site Preparation

This practice involves the use of various chemical/tillage methods to allow for the planting of a windbreak. Site preparation includes chemically killing vegetation prior to mechanical site preparation that includes appropriate methods to allow for planting of the site which may include one or all of the following, ripping, disking, and harrowing. This practice may be applied on all lands needing treatment to facilitate establishment of trees and/or shrubs to facilitate establishment of a windbreak. Typical sites include open land such as old fields, pastures, rangelands and agricultural fields. Resource concerns: Soil erosion--Wind erosion.

Chemical/Mechanical Site Preparation

This practice involves the use of chainsaws to clear above ground woody vegetation and chemicals to remove advanced herbaceous vegetation in order to improve site conditions for establishing trees and/or shrubs. Typical sites include hardwood forests that have been harvested. This practice is typically used to address the following resource concerns: degraded plant condition - undesirable plant productivity and health and inadequate structure and composition.

Chemical only Site Preparation for conversion sites

This practice is used when converting cropland or pastureland to forestland and involves the use of chemicals to clear above ground vegetation in order to improve site conditions for establishing trees and/or shrubs. Typical sites include abandoned fields, pastures, rangelands or agricultural fields. This practice is typically used to address the following resource concerns: degraded plant condition - undesirable plant productivity and health and inadequate structure and composition.

Mechanical - Medium Site Preparation

This practice involves the use of machinery on gentle to moderate slopes to treat an area in order to improve site conditions for establishing trees and/or shrubs. Typical sites include forestland after a harvest. Trees, brush and woody debris cover the site that is not appropriate or providing the desired condition for the landowner. This practice is typically used to address the following resource concerns: degraded plant condition - undesirable plant productivity and health and inadequate structure and composition.

Chemical Site Preparation Slopes >35%

This practice is used on slopes >35% where mechanical site preparation is not recommended and only chemicals are used to clear above ground vegetation in order to improve site conditions for establishing trees and/or shrubs. Typical sites include lands such as old fields, pastures, rangelands, agricultural fields, recently harvested forestlands and previous forestlands that have been abandoned and are now covered with a mixture of grasses, forbs, shrubs and some remnant trees. This practice is typically used to address the following resource concerns: degraded plant condition - undesirable plant productivity and health and inadequate structure and composition.