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STRAW MULCHING FACT SHEET

Straw mulching is the application of straw as a protective cover over bare soils to reduce erosion or to aid in revegetation. Straw mulch can either be used as a temporary ground cover in areas that will be disturbed again, or as a cover over seeded areas to aid in revegetation and stabilization. Straw should be clean rice, barley or wheat straw.



When should straw mulch be used?

Straw mulch should be applied as soon as possible after land-disturbing activities have ceased, either temporarily or permanently. See Minnesota Pollution Control Agency (MPCA) and NPDES Phase II guidelines for more information on required temporary and permanent stabilization timelines. Straw mulch should be used in all areas that have been disturbed by construction activity, especially in areas that have a high potential for soil erosion. Mulch should not be applied on slopes greater than 3:1; in steeper areas, erosion control blanket should be utilized. Straw mulch requires some type of anchoring, including disk anchoring, plastic netting, and using a tackifying agent.

Placing the mulch

On gentle to moderate slopes, straw mulch can be applied by hand broadcasting to a uniform depth of 2 to 3 inches. On steeper slopes (not greater than 3:1), the straw should be blown onto the slope to achieve the same degree of cover. When applied properly, approximately 20-40 percent of the original ground surface can be seen. The application rate per acre should be about 2 tons (*or one 74-pound bale per 800 square feet*).

Anchoring the mulch

Straw mulch must be anchored to be effective. Methods include:

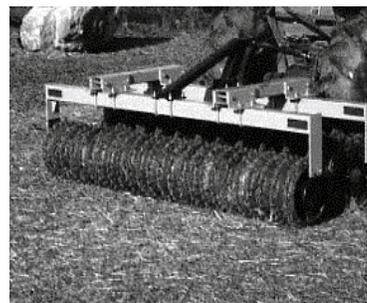
Hand Punching – A spade or shovel is used to punch the straw into the ground until all areas have straw standing perpendicular to the slope and embedded at least 4 inches into the ground. It should be punched about 12 inches apart.

Roller Punching – A roller equipped with straight studs not less than 6 inches long, from 4-6 inches wide, and approximately one inch thick is rolled over the slope.

Disk Anchoring – Like roller punching, the disk anchoring equipment has serrated disk blades about 4-8 inches apart that forces straw mulch into the soil. Disking should be done in two directions with the final pass across the slope.

Plastic Netting – Netting is used on large, steep (no greater than 3:1) areas that cannot be punched with a roller or by hand. Jute, wood excelsior or plastic netting is applied over unpunched straw mulch and anchored with sod staples.

Tackifying Agent – On steep slopes (greater than 3:1), a specialized tackifying agent may be used to stabilize mulch that has been seeded and disk anchored. This method may reduce the need for erosion control blankets on steep slopes, when applied properly.



Examples of Disk Anchoring

Prepared by the Washington Conservation District. For more information, please contact the Washington Conservation District office at 651-275-1136 or look online at www.mnwcd.org.