**MULCHING**

**DESCRIPTION & PURPOSE:** Mulch is a temporary cover measure to protect against erosion. It also conserves moisture, moderates soil temperature, and holds topsoil, seed, and fertilizer in place while turf becomes established.

**CONSTRUCTION GUIDELINES:**
- Use type of mulch appropriate for area being covered. (See Table 3.)
- Use *chipped site vegetation* as a cost-effective way of disposing of site clearing debris and avoiding burning.
- Use mature (completely decomposed) quality *compost*, purchased from a fully permitted supplier.
- Use *hydromulcher* to apply *wood fiber cellulose* mulch.
- Use *straw* applied by hand or blower, where appropriate.
- Apply thicker applications for areas prone to high erosion.

**LOCATION:**
- Any disturbed areas that require protection for less than 30 days
- Over newly seeded areas during the wet season and hot summer months
- During the wet season on slopes greater than 3H:1V

**ESTIMATED LIFE:** 6 to 8 months

**DO’S & DON’TS:**
- Use compost for protecting final grades (till into soil as an amendment).
- Do not use chipped site vegetation on steep slopes. (Stormwater runoff will carry it off slopes.)
- Do not use chipped site vegetation within 200 feet of surface water. (It could carry it into water, compromising water quality and wildlife habitat.)
- Do not use chipped site vegetation where seeding is expected shortly after mulching. (Makes a poor surface for seeding.)
### MAINTENANCE:
- Maintain thickness of mulch, add more as required.
- Remulch eroded areas.

Refer to the BMP Maintenance Checklist on pages 53 and 54.

### TABLE 3. MULCH TYPES AND APPLICATIONS

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>APPLICATION RATE</th>
<th>ADDITIONAL GUIDELINES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straw</td>
<td>2-3 inches thick; 2-3 bales per 1000 sq. ft. or 2-3 tons per acre</td>
<td>Use air-dried straw, free from seed and coarse material. Apply straw by hand thicker than blown straw. Reduce straw thickness by half when used with seeding.</td>
</tr>
<tr>
<td>Wood Fiber Cellulose</td>
<td>25-30 lbs. per 1000 sq. ft. or 1000-1500 lbs. per acre</td>
<td>Use only material free from growth-inhibiting factors. Apply with hydromulcher. Double application rate if used without seed and tackifier.</td>
</tr>
<tr>
<td>Compost</td>
<td>2 inches thick minimum; 100 tons per acre or 800 lbs. per yard</td>
<td>Increase thickness to 3” for more effective control.</td>
</tr>
<tr>
<td>Chipped Site Vegetation</td>
<td>2 inches thick minimum</td>
<td>Make average chip size several inches.</td>
</tr>
</tbody>
</table>
Nets and blankets are used for permanent stabilization of soils in critical areas. They hold seed and mulch in place while vegetation becomes well established. A net is open woven fibers resembling a net; a blanket is a layer of interlocking fibers held together by netting material.

**CONSTRUCTION GUIDELINES:**
- Consult a design engineer to assure the appropriate product is used for each area where nets/blankets will be applied.
- Repair damage to the slope or ditch prior to re-installing material.
- Permanently stabilize a slope with natural fiber, biodegradable nets, and blankets.
- Permanently stabilize a channel with synthetic, non-biodegradable nets and blankets (sometimes an alternative to rip rap).
- Install nets and blankets with firm, continuous contact with the soil.
- Use mulch with natural fiber matting because of the open structure of the weave.
- Wood fiber cellulose blankets do not require mulch.

**LOCATION:**
- On short, steep slopes where erosion hazard is high and planting is likely to be slow in establishment (use natural fiber materials)
- On stream banks or tidal shorelines where moving water is likely to wash out new plantings
- On drainage ditches (use synthetic materials)
- On swales (use natural fiber materials)

**ESTIMATED LIFE:**
N/A

**DO’S & DON'TS:**
- Maintain good ground contact to ensure effectiveness.
- Do not allow erosion under the nets or blankets.
- Use synthetic nets and blankets only for long-term stabilization of ditches or channels. They do not biodegrade.
MAINTENANCE:
- Monitor until the area is permanently stabilized.
- Repair any damage to nets and blankets immediately.
- Maintain good ground contact with nets and blankets.

Refer to the BMP Maintenance Checklist on pages 53 and 54.
PLASTIC SHEETING

DESCRIPTION & PURPOSE:
Plastic sheeting is an immediate but temporary erosion protection for disturbed areas of soil. (Be aware that plastic sheeting can cause rapid runoff.)

CONSTRUCTION GUIDELINES:
- Use plastic with a minimum thickness of 6 mil.
- Overlap edges of plastic at least 12 inches and apply weights or tape to seams.
- Install a gravel berm, rip rap, silt fence or other BMP protection at the bottom of a plastic sheeted slope to reduce erosion from runoff.
- Weight plastic with tires, sandbags or equivalent on ropes with maximum 10-foot grid spacing in all directions.

LOCATION:
- Any disturbed areas that require protection for less than 30 days
- On cut and fill slopes and stockpiles
- Over newly seeded areas as a greenhouse effect during cooler months

ESTIMATED LIFE:
N/A

DO’S & DON’TS:
- Do not use on steep or unstable slopes. (Causes too rapid, erosive runoff on slopes.)

MAINTENANCE:
- Tape or replace any tears in plastic sheeting.
- Re-anchor as necessary.
- Replace completely any plastic showing deterioration from the sun.
- Remove all plastic from job site when no longer needed.

Refer to the BMP Maintenance Checklist on pages 53 and 54.
PLASTIC SHEETING

CODE: PC

Symbol: PC

Figure 9: Plastic Sheeting
TEMPORARY SEEDING

DESCRIPTION & PURPOSE:
Temporary seeding prevents erosion by stabilizing soils during construction.

CONSTRUCTION GUIDELINES:
• Install all surface runoff control measures before seeding.
• Seed disturbed areas at least one week prior to the wet season to prevent wash off.
• Roughen slopes steeper than 3H:1V.
• Use standard temporary erosion control seed mix of:
  • 40% chewings or red fescue, and
  • 40% annual or perennial rye, and
  • 10% retop or colonial bentgrass, and
  • 10% white dutch clover.
• Use Table 4 for bioswale and wet or dry mix of formulas.
• Mulch all seeded steep slopes (greater than 3H:1V).
• Mulch all seeded areas during the wet season.
• Use a tackifier when hydroseding.

LOCATION:
• On exposed soils that will remain unworked for more than 30 days, especially during the wet season
• In vegetation-lined channels
• In retention/detention ponds as required

ESTIMATED LIFE:
Temporary

DO’S & DON’TS:
☞ Mulch to protect seeds from heat, cold, moisture loss, and from being washed away.
☞ Use slow release, low-phosphorous fertilizer if within 200 feet of water bodies or wetlands (portions: 3-1-2 N-P-K). (More efficient and fewer negative environmental impacts).

MAINTENANCE:
• Reseed any areas failing to establish at least 80 percent coverage within 1 month.
• Reseed and mulch seeded areas experiencing erosion.
• Keep seeded areas adequately moist, but not enough to cause runoff or seeds to wash away.

Refer to the BMP Maintenance Checklist on pages 53 and 54.
### TABLE 4. TEMPORARY SEEDING MIXES

#### BIOSWALE SEED MIX

<table>
<thead>
<tr>
<th>Seed Mix</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tall or meadow fescue</td>
<td>75-80</td>
</tr>
<tr>
<td>Seaside/Creeping bentgrass</td>
<td>10-15</td>
</tr>
<tr>
<td>Redtop bentgrass</td>
<td>5-10</td>
</tr>
</tbody>
</table>

#### DRY AREA SEED MIX

<table>
<thead>
<tr>
<th>Seed Mix</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dwarf tall fescue</td>
<td>45</td>
</tr>
<tr>
<td>Dwarf perennial rye (Barclay)</td>
<td>30</td>
</tr>
<tr>
<td>Red fescue</td>
<td>20</td>
</tr>
<tr>
<td>Colonial bentgrass</td>
<td>5</td>
</tr>
</tbody>
</table>

#### WET AREA SEED MIX

<table>
<thead>
<tr>
<th>Seed Mix</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tall or meadow fescue</td>
<td>60-70</td>
</tr>
<tr>
<td>Seaside/Creeping bentgrass</td>
<td>10-15</td>
</tr>
<tr>
<td>Meadow foxtail</td>
<td>10-15</td>
</tr>
<tr>
<td>Alsike clover</td>
<td>1-6</td>
</tr>
<tr>
<td>Redtop bentgrass</td>
<td>1-6</td>
</tr>
</tbody>
</table>