Erosion and Sediment Control Field Guide, SBD-10837 (R6/15)

If you wish to print the guide and use it as a check-list for projects, you can:

1. Print pages 2 through 5 of this PDF file. These pages are numbered to be in a 5.5-inch by 8.5-inch booklet with the Department of Safety and Professional Services logo on the front.
2. Make back to back copies (top side up) of pages 8 and 1, and pages 7 and 2.
3. Make back to back copies (top side up) of pages 3 and 6, and pages 4 and 5.
4. Fold the two two-sided copies in half horizontally.
5. Place 3-6/4-5 inside 8-1/7-2.
6. Staple along binding edge.

You can laminate a booklet and use a special erasable marking pen so you can reuse the booklet for projects. If you wanted a record of each project, you could photo copy the marked up laminated pages before you erased them.
### Channel Erosion Mat - 1053

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PAL listed materials?
- Class II or III mat?
- Installed after seeding, fertilizing etc.?
- Continuous, firm contact with soil?
- Anchored per manufacturer’s requirements?
- TRM w/topsoiling & followed by ECRM?
- Extend > 1ft vertically from ditch bottom or > 6 in above design flow (whichever is greater)?

### Erosion Control Land Application of Anionic Polyacrylamide - 1050

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Slopes < 2.5: 1?
- Not applied to channel bottoms?
- Used as approved in the PAL?

### Storm Drain Inlet Protection - 1060

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Emergency spillway?
- Fabric per PAL?
- Correct Type (A,B,C,D)

### Ditch Checks - 1062

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Not located in stream?
- Weir formed in center of ditch check?
- > 2 ft top width
- 2:1 maximum slope on sides of ditch check?
- 1 ditch check per 2 ft channel drop?
- 3 in graded annular stone? or PAL listed?
- Erosion mat at base?
- Stone chinked or sealed?
- 10 - 16 in high (mfg. or bio.) or 36 in high for stone?

## Standards Covered in Field Guide

- Construction Site Diversion 1066
- Temporary Grading Practices 1067
- Stone Tracking Pad & Tire Washing 1057
- Silt Fence 1056
- Vegetative Buffer 1054
- Non-Channel Erosion Mat 1052
- Seeding for Erosion Control 1059
- Mulching for Construction Sites 1058
- Channel Erosion Mat 1053
- Land Application of Anionic Polyacrylamide 1050
- Storm Drain Inlet Protection 1060
- Ditch Check 1062

## Standards Not Covered in Field Guide

- Sediment Basin 1064
- Dust Control 1068
- Water Application of Polymers 1051
- Sediment Trap 1063
- Turbidity Barrier 1069
- Silt Curtain 1070

SBD-10837-P (R6/15)
Erosion and Sediment Control for Building Construction Sites

Phase II of the Federal Clean Water Act has impacted all soil disturbances of one acre or more. The Department of Natural Resources (DNR) has developed performance standards for runoff from construction sites. The solutions that provide a method to achieve the level of performance required are found in Standards Oversight Council (SOC) Technical Standards. These SOC Technical Standards are found in the internet at:

www.dnr.state.wi.us/org/water/wm/nps/stormwater/techstds.htm

The SOC Technical Standards included in this field guide are the replacement for the “Blue Book” referenced in both the Commercial Building Code and the Uniform Dwelling Code.

If you have questions concerning this publication or the interpretation of the standards, please contact the soil erosion control technical contacts listed on the DSPS Industry Services WebSite:

http://dps.wi.gov/Programs/Industry-Services/Industry-Services-Programs/

Seeding for Erosion Control - 1059

<table>
<thead>
<tr>
<th>Species</th>
<th>Lbs/Acre</th>
<th>% Purity</th>
<th>Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oats</td>
<td>131</td>
<td>98</td>
<td>Spring &amp; Summer</td>
</tr>
<tr>
<td>Cereal Rye</td>
<td>131</td>
<td>97</td>
<td>Fall</td>
</tr>
<tr>
<td>Winter Wheat</td>
<td>131</td>
<td>95</td>
<td>Fall</td>
</tr>
<tr>
<td>Annual Ryegrass</td>
<td>80</td>
<td>97</td>
<td>Fall</td>
</tr>
</tbody>
</table>

Mulching for Const. Sites 1058

<table>
<thead>
<tr>
<th>Area under mulch free of gullies &amp; rills?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
</tr>
<tr>
<td>Mulch not in concentrated flow channels?</td>
</tr>
<tr>
<td>Y</td>
</tr>
<tr>
<td>Erosion occurring in mulched areas?</td>
</tr>
<tr>
<td>Y</td>
</tr>
<tr>
<td>Natural biodegradable materials?</td>
</tr>
<tr>
<td>Y</td>
</tr>
<tr>
<td>Free of toxic, noxious or diseased substances?</td>
</tr>
<tr>
<td>Y</td>
</tr>
<tr>
<td>Marsh hay only on upland sites?</td>
</tr>
<tr>
<td>Y</td>
</tr>
<tr>
<td>Crimped straw or hay fiber length &gt; 6 in.?</td>
</tr>
<tr>
<td>Y</td>
</tr>
<tr>
<td>No bark or wood chips on seeded sites?</td>
</tr>
<tr>
<td>Y</td>
</tr>
<tr>
<td>Mulch covers 80% of unseeded areas?</td>
</tr>
<tr>
<td>Y</td>
</tr>
<tr>
<td>Mulch covers 70% of seeded areas?</td>
</tr>
<tr>
<td>Y</td>
</tr>
<tr>
<td>Mulch 1/2 to 1-1/2 in thick in seeded areas?</td>
</tr>
<tr>
<td>Y</td>
</tr>
<tr>
<td>Mulch 1-1/2 to 3 in thick for unseeded areas?</td>
</tr>
<tr>
<td>Y</td>
</tr>
<tr>
<td>Wood chips 1/2 to 1-1/2 in thick?</td>
</tr>
<tr>
<td>Y</td>
</tr>
<tr>
<td>Mulch anchors w/crimping, matting &amp; tackifier?</td>
</tr>
<tr>
<td>Y</td>
</tr>
</tbody>
</table>
Silt Fence - 1056 (cont.)

Buried as shown in diagram?

**Y N N/A**

8 in filter fabric buried 6 in

8 in of filter fabric buried in trench

6 in deep "V" notch

Vegetative Buffer - 1054

Used only for sheet & rill erosion control?

**Y N N/A**

Buffer across entire downslope of area?

**Y N N/A**

Buffer located on the contour?

**Y N N/A**

Buffer slope < 5%?

**Y N N/A**

Upslope disturbed area < 6% slope?

**Y N N/A**

Width adequate (25 ft/125ft and +1 ft/5 ft)?

**Y N N/A**

Buffer marked and undisturbed?

**Y N N/A**

Buffer adequately vegetated?

Non-Channel Erosion Mat - 1052

PAL approved?

**Y N N/A**

Upslope edge of mat trenched in?*

**Y N N/A**

OK per erosion control matrix in PAL?

**Y N N/A**

All seeding, fertilizing, etc under mat?

**Y N N/A**

Mat has complete contact with soil?

**Y N N/A**

No eroded areas under mat?

**Y N N/A**

Checked manufacturer’s instructions?

Questions for Every Site

**Y N N/A**

Is the erosion control plan being implemented?

**Y N N/A**

Is the plan effective as installed?

**Y N N/A**

Are soil stockpiles protected?

**Y N N/A**

Is there no evidence that water is getting around or under the installed practices?

**Y N N/A**

Maintenance conducted as per plan?

**Y N N/A**

Repairs to practices completed?

Code violations involving erosion control are based on:

SPS 321.125 of the Uniform Dwelling Code

or

SPS 361.115 of the Commercial Building Code

All questions posed in this field guide require a “yes” answer to comply with the requirements of the SOC Technical Standards.

* means this is a consideration in the standard
Construction Site Diversion - 1066

Diversion discharges to stable outlet or channel?
> 2 ft top width?
< 2:1 side slopes?
> 1.5 ft high?
Not over-topped after 2-yr, 24-hr storm?
Stabilized prior to downslope disturbance?
Overflow area rip rapped?*
Sediment accumulation < 1/2 height of berm?

Temporary Grading Practices - 1067

End of day directional tracking?
Tilled < 15 in. apart ridge & furrow?
Temp. ditch sumps in drainageways?
Temp. ditch check 1/2 yd³/1% grade per 500 ft?*
Failure doesn’t threaten health or property?

Stone Tracking Pad & Tire Washing - 1057

Tracking pad or gravel mulch installed?
Tire washing stand if pad/mulch is ineffective?
Pad > 50 ft long and full width?
Gravel mulch to structure?
Pad >12 in thick of 3-6 in. washed, clear stone?
No surface H₂O flows through tracking pad?
No unprotected exits?
Aggregate does not need replacing?
Saturated soil:Type R geotex. fabric under pad?

Silt Fence - 1056

Not installed in concentrated flow areas?
Not installed below H₂O or in channels?
Slope gradient is < 50% (2:1)?
Stand alone practice on slope per Table 1?

Table 1.

<table>
<thead>
<tr>
<th>Slope</th>
<th>Fence Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2%</td>
<td>100 feet</td>
</tr>
<tr>
<td>2 to 5%</td>
<td>75 feet</td>
</tr>
<tr>
<td>5 to 10%</td>
<td>50 feet</td>
</tr>
<tr>
<td>10 to 33%</td>
<td>25 feet</td>
</tr>
<tr>
<td>&gt; 33%</td>
<td>20 feet</td>
</tr>
</tbody>
</table>

Silt fence parallel to contour lines?
“J hook” constructed in end of fence?
Height 14 in - 28 in above finished grade?
Post spacing < 3 ft non-woven, < 8 woven?
Support cord in silt fence?
Wrapped joints or overlapped?
> 20 in bury depth of posts?
Sediment on the downhill side of fence?
Sediment < 1/2 of fence height
No torn or degraded fence?
Support posts correct?

Wood - > 1 1/8 in square, hickory or oak
3 ft long for 24 in silt fence
4 ft long for 36 in silt fence
1/2 in staples
Stapled in 3 places
Steel - 5 ft long, attached in 3 places
Attached with tie straps or wire
Sharp ends away from fabric