STORM WATER POLLUTION PREVENTION

PROTECTING WATER QUALITY ON CONSTRUCTION SITES

Tom Keegan, Dry Creek Rancheria
PURPOSE & NEED

Sediment loading in storm water has potential to:

• Destroy aquatic habitat;
• Prevent fish feeding, migration and spawning;
• Interfere with recreation;
• Threaten drinking water supplies

Other potential pollution includes:

• Nutrients cause algae blooms and low oxygen levels;
• Oil, grease and other petroleum products;
• Debris from construction activities
STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

- Prior to submitting Notice of Intent to EPA;
- Site Description
- Potential Pollutant Sources
- BMP’s
- Training Log
- Inspection Log
- Update The SWPPP
- Emergency Contacts
BMP’S

80% of BMP failures are from incorrect installation

GOOD

BAD

UGLY
BMP’S - SLOPES

Potential Riling:

Straw Wattles
BMP’S - SLOPES
Reinforced Silt Fencing:
BMP’S – Disturbed Areas

Hydroseed:

Native Seed Mix
BMP’S – SWALES

PROTECT STORM DRAINS:

STRAW BAILES

SILT FENCES
BMP’S – Other Contaminants

Petroleum:
Secondary Containment
Designated Fill and Repair Location

Cement Trucks:
Designated Wash Down Location
Settling Percolation Basin
BMP’S – TRACKING
Prevents Tracking onto Roadways

Large Drain Rock

Wash Down Station
BMP’S – Active Sites
Plastic Sheathing:
  Protects Work In Progress
  Must Protect Lower Edge
  Keeps Soil Dry
BMP’S – SEDIMENT BASINS
Lower Velocity Causes Sediment to Settle:
Designed for Sediment Loading
### SITE INSPECTION REPORT

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>ITEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>correction required</td>
<td>Install erosion control blanket, straw mulch, and biodegradable silt fence on E-2 outer east of existing access road to provide additional siltation control and stabilization of slope and cut slope anduddard (Vegetation should be placed on both sides of silt fence and biodegradable silt fence anduddard to pipe control and site barrier prevent erosion.</td>
</tr>
<tr>
<td>correction required</td>
<td>Install gravel berm on the eastern edge of grading area east of pipe where runoff is routing through the adjacent slope.</td>
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<tr>
<td>correction required</td>
<td>Clean sediment buildup from gravel bag hose in lower staging area to screen all runoff to facilitate sediment removal.</td>
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<td></td>
<td>Relining area that shall be designated in lower staging area to relieve shall occur within designated area when possible to prevent erosion or settlement.</td>
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<td>Positive recognition</td>
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<tr>
<td>correction required</td>
<td>Slope below radius wall requires additional gravel mulch to prevent sediment runoff into E-2.</td>
</tr>
</tbody>
</table>

**Note:** The SWPPP reference codes and dates are provided for each item.
BMP’S – Methods

References:

Erosion and Sediment Control Field Manual: RWDCB, San Francisco Region