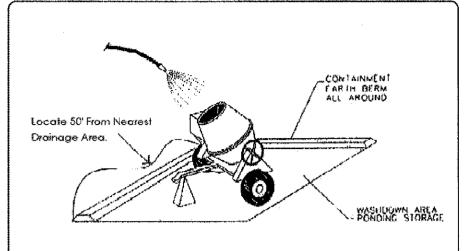


BMP: Concrete Waste Management



OBJECTIVES

- ☐ Housekeeping Practices
- ☑ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
 - Control Internal Erosion

DESCRIPTION:

Prevent or reduce the discharge of pollutants to storm water from concrete waste by conducting washout off-site, performing on-site washout in a designated area, and training employees and subcontractors.

APPLICATIONS:

► This technique is applicable to all types of sites.

INSTALLATION/APPLICATION CRITERIA:

- ▶ Store dry and wet materials under cover, away from drainage areas.
- Avoid mixing excess amounts of fresh concrete or cement on-site.
- ▶ Perform washout of concrete trucks off-site or in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams
- Do not allow excess concrete to be dumped on-site, except in designated areas.
- When washing concrete to remove fine particles and expose the aggregate, avoid creating runoff by draining the water within a bermed or level area. (See Earth Berm Barrier information sheet.)
- Train employees and subcontractors in proper concrete waste management.

LIMITATIONS:

▶ Off-site washout of concrete wastes may not always be possible.

MAINTENANCE:

- Inspect subcontractors to ensure that concrete wastes are being properly managed.
- ▶ If using a temporary pit, dispose hardened concrete on a regular basis.

WEBER COUNTY

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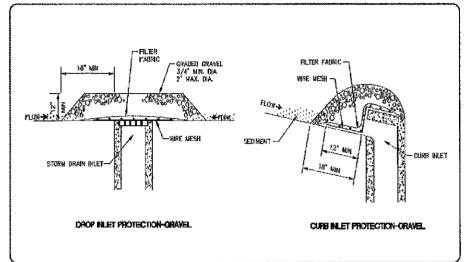
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TARGETED POLLUTANTS

- □ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
 -⊡--Floatable-Materials-
- ☑ Other Construction Waste
- High Impact
- ☑ Medium Impact
- Low or Unknown Impact

- ☐ Capital Costs
- ☐ O&M Costs
- ☑ Training
- High
- Medium
- □ Low

BMP: Inlet Protection - Gravel



DESCRIPTION:

Placement of gravel filter over inlet to storm drains to filter storm water runoff.

APPLICATION:

 Construct at inlets in paved or unpaved areas where upgradient area is to be disturbed by construction activities.

INSTALLATION/APPLICATION CRITERIA:

- Place wire mesh (with ½ inch openings) over the inlet grate extending one foot past the grate in all directions.
- ► Place filter fabric over the mesh. Filter fabric should be selected based on soil type.
- ► Place graded gravel, to a minimum depth of 12-inches, over the filter fabric and extending 18-inches past the grate in all directions.

LIMITATIONS:

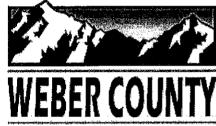
- Recommended for maximum drainage area of one acre.
- Excess flows may bypass the inlet requiring down gradient controls.
- Ponding will occur at inlet.

MAINTENANCE: - -

- Inspect inlet protection after every large storm event and at a minimum of once monthly.
- ▶ Remove sediment accumulated when it reaches 4-inches in depth.
- Replace filter fabric and clean or replace gravel if clogging is apparent.

OBJECTIVES

- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☑ Control Site Perimeter



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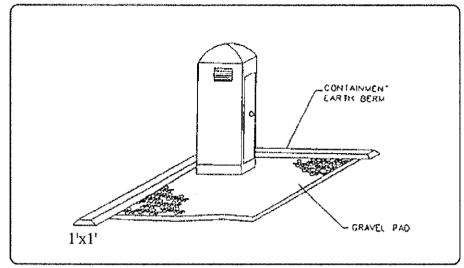
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TARGETED POLLUTANTS

- Sediment
- □ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ---Floatable Materials-
- □ Other Waste
- High Impact
- Medium Impact
 - Low or Unknown Impact

- ☑ Capital Costs
- ☐ O&M Costs
- Maintenance
- ☐ Training
- High
- ☑ Medium
- ☐ Low

BMP: Portable Toilets



DESCRIPTION:

Temporary on-site sanitary facilities for construction personnel.

APPLICATION:

 All sites with no permanent sanitary facilities or where permanent facility is too far from activities.

INSTALLATION/APPLICATION CRITERIA:

- Locate portable toilets in convenient locations throughout the site.
- Prepare level, gravel surface and provide clear access to the toilets for servicing and for on-site personnel.
- ► Construct earth berm perimeter (See Earth Berm Barrier Information Sheet), control for spill/protection leak.

LIMITATIONS:

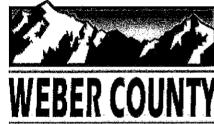
No limitations.

MAINTENANCE:

- ► Portable toilets should be maintained in good working order by licensed service with daily observation for leak detection.
- Regular waste collection should be arranged with licensed service.
- All waste should be deposited in sanitary sewer system for treatment with appropriate agency approval.

OBJECTIVES

- ☑ Housekeeping Practices
- ☑ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion



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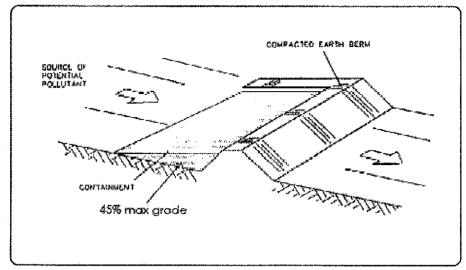
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TARGETED POLLUTANTS

- ☐ Sediment
- □ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- Other Construction Waste
- High Impact
- ☑ Medium Impact
 - Low or Unknown Impact

- ☑ Capital Costs
- ☑ O&M Costs
- ☑ Maintenance
- ☐ Training
- High
- Medium
- ☐ Low

BMP: Earth Berm Barrier



OBJECTIVES

- Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- □ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☑ Control Site Perimeter
- ☐ Control Internal Erosion

DESCRIPTION:

A temporary containment control constructed of compacted soil,

APPLICATION:

- ► Construct around waste and materials storage area.
- Construct around staging and maintenance areas.
- Construct around vehicle parking and servicing areas.

INSTALLATION/APPLICATION CRITERIA:

- Construct an earthen berm down hill of the area to be controlled. The berm should surround fueling facilities and maintenance areas on three sides to provide containment.
- Berm needs to be a minimum of 1 foot tall by 1 foot wide and be compacted by earth moving equipment.

LIMITATIONS:

- Not effective on steep slopes.
- ▶ Limits access to controlled area.
- ▶ Personnel need to quickly respond to spills with remedial actions.

MAINTENANCE:

- Observe daily for any non-stormwater discharge.
- Look for runoff bypassing ends of berms or undercutting berms.
- Repair or replace damaged areas of the berm and remove accumulated sediment.
- Recompact soil around berm as necessary to prevent piping.

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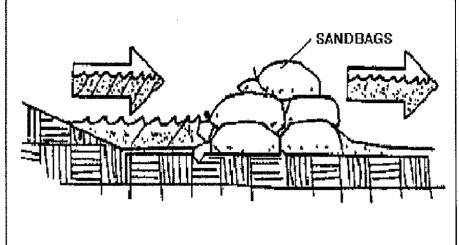
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TARGETED POLLUTANTS

- □ Sediment
- □ Nutrients
- Toxic Materials
- □ Oil & Grease
- Floatable Materials
- ☐ Other Construction Waste
- High Impact
- ☑ Medium Impact
- ☐ Low or Unknown Impact

- Capital Costs
- □ O&M Costs
- ☑ Maintenance
- □ Training
- High
- ☑ Medium
- □ Low

BMP: Sand Bag Barrier



OBJECTIVES

- □ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- Protect Slopes/Channels
- ☑ Control Internal Erosion

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DESCRIPTION:

Stacking sand bags along a level contour creates a barrier which detains sediment laden water, ponding water upstream of the barrier and promoting sedimentation.

APPLICATION:

- Along the perimeter of the site.
- May be used in drainage areas up to 5 acres.
- Along streams and channels
- Across swales with small catchments.
- Around temporary spoil areas.
- ▶ Below the toe of a cleared slope.

INSTALLATION/APPLICATION CRITERIA:

- Install along a level contour.
- ▶ Base of sand bag barrier should be at least 48 inches wide.
- ▶ Height of sand bag barrier should be at least 18 inches high.
- ▶ 4 inch PVC pipe may be installed between the top layers of sand bags to drain large flood flows.
- Provide area behind barrier for runoff to pond and sediment to settle.
- Place below the toe of a slope.

LIMITATIONS:

- ▶ Sand bags are more expensive than other barriers, but also more durable.
- Burlap should not be used.

MAINTENANCE:

- ► Inspect after each rain.
- Reshape or replace damaged sand bags immediately.
- Replace sediment when it reaches six inches in depth.

TARGETED POLLUTANTS

- Sediment
- □ Nutrients
- ☐ Toxic Materials
- □ Oil & Grease
- ⊟ Floatable Materials =
- □ Other Waste
- High Impact
- Medium Impact
 - Low or Unknown Impact

- Capital Costs
- ☐ O&M Costs
- □ Maintenance
- □ Training
- **■** High
- Medium
- ☐ Low