BMP: Brush or Rock Filter

OBJECTIVES

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

DESCRIPTION:
A rock filter is made of rock 3/4 - 3" in diameter and placed along a level contour. A brush filter is composed of brush (usually obtained during the site clearing) wrapped in filter cloth and anchored to the toe of the slope. If properly anchored brush or rock filters may be used for sediment trapping and velocity reduction.

APPLICATION:
‣ As check dams across mildly sloped construction roads.
‣ Below the toe of slopes.
‣ Along the site perimeter.
‣ In areas where sheet or rill flow occurs.
‣ Around temporary spoil areas.
‣ At sediment traps or culvert/pipe outlets.

INSTALLATION/APPLICATION CRITERIA:
‣ For rock filter, use larger rock and place in a staked, woven wire sheathing if placed where concentrated flows occur.
‣ Install along a level contour.
‣ Leave area behind berm where runoff can pond and sediment can settle.
‣ Drainage areas should not exceed 5 acres.

LIMITATIONS:
‣ Rock berms may be difficult to remove.
‣ Removal problems limit their usefulness in landscaped areas.
‣ Runoff will pond upstream of the filter, possibly causing flooding if sufficient space does not exist.

MAINTENANCE:
‣ Inspect monthly after each rainfall.
‣ If berm is damaged, reshape and replace lost/dislodged rock.
‣ Remove sediment when depth reaches 1/3 of berm height, or 1 ft.

LEHI

PIONEERING UTAH'S FUTURE

ADAPTED FROM SALT LAKE COUNTY BMP FACT SHEET

TARGETED POLLUTANTS

■ Sediment
☐ Nutrients
☐ Toxic Materials
☐ Oil & Grease
☐ Floatable Materials
☐ Other Waste

■ High Impact
☒ Medium Impact
☐ Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

■ Capital Costs
☒ O&M Costs
☐ Maintenance
☐ Training

■ High ☒ Medium ☐ Low