Control Measures (BMPs) Fact Sheet

All construction sites, including residential single family home sites, are required to implement appropriate stormwater control measures to prevent potential pollutants from leaving the site, regardless of whether a stormwater permit is required for the site or not. Control measures should be implemented or installed ***before*** any land-disturbing activities begin at the site. Land-disturbing activities include, but are not limited to: clearing, grading, installation or improvement of haul or access roads, excavation, demolition, staging, stockpile and borrow areas. If pollutants, including sediment, leave the site due to failure to implement or install control measures or maintain them in good working order, the City of Cañon City will pursue enforcement actions against the owner or operator of the site. Enforcement actions can include verbal education/warnings, written Notice of Non-Compliance, Stop Work Orders, and/or assessment of fines of $250.00 per day per violation for each day the violation exists.

Control Measures for construction sites can be either non-structural (procedural) or structural in nature. The City of Cañon City ***will not*** specify which control measures must be used on a site; only that control measures must be implemented and maintained to prevent or minimize pollutants leaving the site. It is solely up to the site owner/operator to determine which control measures work best for the site. A guide to common potential pollutants and the control measures which can be used to address them is provided below.

Erosion Control and Sediment

Non-structural control measures:

- Construction Phasing to minimize the amount of exposed or disturbed soil at any given time.
- Protection of Existing Natural Features such as vegetation that will not be disturbed during construction.
- Use of Vegetative Buffers along existing drainages to slow and filter runoff. Buffers may need to be mowed or re-seeded during construction to preserve their integrity.
- Dirt Stockpiles should be stored out of the flow of stormwater through the site or removed completely from small sites. Stockpiles should never be placed in existing drainages, even temporarily. Stockpiles should be covered or temporarily seeded if they will not be disturbed for an extended period of time (14 days or more).
- Stabilize steep slopes as soon as possible by rough grading, terracing, or with structural control measures.
- Stabilize exposed soils as soon as possible by scheduling landscaping or adding mulch until the area can be landscaped.
- Limit vehicle access to site, especially when conditions are wet and muddy.
- Street sweeping on a regular schedule (daily) to remove any sediment tracked onto the pavement. Please keep in mind that once sediment is tracked onto the pavement in the Dawson Ranch, Gold Canon, and Four Mile Ranch subdivisions it is extremely difficult to

remove. It is better to prevent it from being tracked onto the pavement than to try to remove it.

Structural control measures:

- Install sediment control measures along the downhill perimeter of the site and along existing drainages. Silt fence or sediment control logs (wattles) can be appropriate perimeter controls.
- Install inlet protection on any downstream storm drains. The type of inlet protection used will be dependent upon the type of storm drain present. Sediment control logs and silt fence are not appropriate when the storm drain is located on a paved surface such as a street as they cannot be secured. Rock socks are not recommended if the storm drain may be in the flow of traffic.
- Dirt and material stockpiles should be protected from storm run-on by perimeter controls such as rock bags or sediment control logs. Rolled erosion control products or tarps can be used to protect stockpiles from exposure to storm events.
- Steep slopes can be protected using rolled erosion control products, installation of temporary slope drains or diverting stormwater runoff away from the slope until it is stabilized.
- Vehicle Tracking Pads should be used at the site access to remove sediment from vehicle wheels when exiting the site. Tracking pads can be composed of coarse rock or may be a reusable proprietary product such as FODS or mud mats. Rock or FODs are more appropriate for sites with heavy construction equipment entering and leaving the site. Mud mats are more appropriate for sites with low traffic and no heavy equipment. Sediment control logs are not appropriate for vehicle tracking control.

Material and Waste Management

Non-structural control measures:

- Employee training on proper waste disposal, material storage, and spill prevention and response.
- Store materials out of the flow of stormwater through the site.
- Practice good housekeeping daily by picking up trash and loose materials.

Structural control measures:

- Cover materials which may have the potential to leach pollutants when exposed to stormwater.
- Provide secondary containment for all liquids on site or store under cover. Make sure all liquid materials are stored out of the flow of construction traffic.
- Provide a designated concrete and masonry wash-out area. The area can be as simple as a bucket with secondary containment and out of traffic flow or may include a lined depression or reusable tub for larger clean-outs. Clean up spills/leaks immediately.

- Provide a dumpster or trash cans for material wastes and employee trash. Make sure they are emptied on a regular basis.
- Stake port-o-lets to prevent them from potentially tipping and place them out of the flow of traffic and stormwater flow.

Additional control measures, installation and maintenance details can be found in the Urban Storm Drainage Criteria Manual – Volume 3 at https://mhfd.org/resources/criteria-manual/.