

Adams County Erosion Control Plan - General Notes:

- 1 All construction projects, regardless of the size, shall install, maintain and repair stormwater pollution **control measures (CMs)** to effectively minimize erosion, sediment transport, and the release of pollutants related to construction activity. CMs example include: sediment control logs (SCL), silt fence (SF), dikes/swales, sediment traps (ST), inlet protection (IP), outlet protection (OP), check dams (CD), sediment basins (SB), temporary/permanent seeding and mulching (MU), soil roughening, maintaining existing vegetation and protection of trees. CMs must be selected, designed, adequately sized, installed and maintained in accordance with good engineering, hydrologic and pollution control practices. CMs/BMPs installation and maintenance details shall conform to Urban Drainage Flood Control Criteria Manual Volume 3, or the Colorado Department of Transportation (CDOT) Item Code Book. CMs must filter, settle, contain or strain pollutants from stormwater flows in order to prevent bypass of flows without treatment. CMs must be appropriate to treat the runoff from the amount of disturbed area, the expected flow rate, duration, and flow conditions (i.e., sheet or concentrated flow). **CMs/BMPs shall be specified in the SWMP (if applicable), and the locations shown on the EC Plan.**
- 1) Prior to construction, projects disturbing 1 or more acres of land, or any project belonging to a common plan of development disturb 1 or more acres, must obtain:
 - A General **Permit** for Stormwater Discharges associated with Construction Activities, from the Colorado Department of Public Health and Environment, and
 - An Adams County Stormwater Quality Permit within the unincorporated Adams County MS4 Area.
- 2) Permitted projects shall develop a Stormwater Management Plan (**SWMP**), aka Erosion and Sediment Control Plan (ESCP), in compliance with CDPHE minimum requirements. The approved SWMP, including Erosion Control (EC) Plan (Site Map), shall be **kept** on site and **updated** at all times. The **Qualified Stormwater Manager** is responsible for implementing the SWMP and CMs (aka BMPs) during construction.
- 3) Permitted projects shall perform regular **Stormwater Inspections** every 7 calendar days; or every 14 calendar days and within 24 hours after any precipitation or snowmelt event that causes surface erosion. Inspection frequency can be reduced for **Post-Storm Event inspections at Temporarily Idle Sites** and also for **Stormwater Inspections at Completed Sites waiting for final stabilization**. Inspection reports must identify any incidents of non-compliance.
- 4) **Tracking** of dirt onto paved public or private paved roads is not allowed. The use of dirt ramps to enter/exit from an unpaved into a paved area is prohibited. Vehicle tracking controls shall be implemented, otherwise entrance area must drain thru a CM towards the private site.
- 5) **Truck loads** of fill material imported to or cut material exported from the site shall be properly covered to prevent loss of the material during transportation on public ROW. Haul routes must be permitted by the County. No material shall be transported to another site without applicable permits.
- 6) Control measures designed for **concrete washout waste** must be implemented. This includes washout waste discharged to the ground and washout waste from concrete trucks and masonry operations.
- 7) Temporary **CMs/BMPs shall be removed** after the site has reached final stabilization.
- 8) **Dewatering operations** discharging off-site into any waters conveyance systems including wetlands, irrigation ditches, canals, rivers, streams or storm sewer systems, require a State Construction Dewatering Permit.
- 9) Permitted projects shall **keep** the CDPHE's Stormwater Discharge Permit, Stormwater Management Plan (SWMP) and inspection logs available on-site throughout the duration of the project, and for an additional 3 years after permit close-out.
- 10) Permitted landowner and/or contractor shall **close** the State and City/County permit once **final stabilization** is reached. Stormwater inspections shall continue until Inactivation Notice is filed with CDPHE.

Performance Standard Notes:

1. Stormwater runoff from disturbed areas must flow to at least **one (1)** CM to minimize sediment in the discharge. Do not allow **sediment to leave** the site. The best way to prevent sediment or pollutants from entering the storm sewer system is to stabilize the site as quickly as possible, preventing erosion and stopping sediment runoff at its source.

2. **Phase construction to minimize disturbed areas**, including disturbance of steep slopes. (i.e. the entire project site should not be disturbed if construction will only be occurring in one particular section of the site). Limit soil exposure to the shortest possible period of time. Protect natural features and **existing vegetation** whenever possible. Removal of existing vegetation shall be limited to the area required for immediate construction operations. Maintain pre-existing vegetation (or equivalent CMs) for areas within 50 horizontal ft of receiving waters.
3. **Soil compaction** must be minimized for areas where infiltration CMs will occur or where final stabilization will be achieved through vegetative cover.
4. All **soil imported** to or **exported** from the site shall be properly covered to prevent the loss of material during transport.
5. **Dust** emissions resulting from grading activities or wind shall be controlled.
6. **Install construction fence** (orange) to protect wetlands and other sensitive areas and to prevent access, and to delineate the Limits of Construction. Do not use silt fence to protect wetlands since trenching may impact these areas.
7. CMs intended to capture overland, low velocity **sheet flow** at a fairly level grade shall only be installed along contours.
8. Install CMs, such as **check dams**, perpendicular to the **concentrated flows** to reduce flow velocity.
9. Storm drain **inlets** within and adjacent to the construction site must be protected. Any ponding of stormwater around inlet protection must not cause excessive flooding or damage adjacent areas or structures.
10. Install **Vehicle Tracking Control (VTC)** to enter/exit unpaved area. Do not use recycled crushed concrete or asphalt millings for vehicle tracking pads.
11. **Straw bales** shall not be used for primary erosion or sediment control (i.e. straw bales may be used for reinforcement behind another BMP such as silt fence).
12. **Outlets** systems (such as skimmer or perforated riser pipe) shall be installed to withdraw water from or near the surface level when discharging from basins. Water cannot drain from the bottom of the pond.
13. **Temporary stabilization** must be implemented for earth disturbing activities on any portion of the site where land disturbing activities have permanently or temporarily ceased (for more than 14 calendar days). Temporary stabilization methods examples: tarps, soil tackifier, and hydroseed. Temporary stabilization requirement may **exceed** the 14-day schedule when either the function of the specific area requires it to remain disturbed, or, physical characteristics of the terrain and climate prevent stabilization as long as the constraints and alternative schedule is documented on the SWMP, and locations are identified on the EC Plan (site map).
14. Runoff from **stockpile area** must be controlled. Soils that will be stockpiled for more than 30 days shall be protected from wind and water erosion within 14 days of stockpile construction. Install CMs/BMPs 5 ft away from the toe of the stockpile's slope.
15. Water use to clean concrete trucks shall be discharged into a **concrete washout area (CWA)**. The predefined containment area must be identified with a sign, and shall allow the liquids to evaporate or dry out. CWA discharges that may reach groundwater must flow through soil that has buffering capacity prior to reaching groundwater. The concrete washout location shall be not be located in an area where shallow groundwater may be present and would result in buffering capacity not being adequate, such as near natural drainages, springs, or wetlands. In this case, a liner underneath is needed for areas with high groundwater levels. CWA shall not be placed in low areas, ditches or adjacent to state waters. Place CWA 50 ft away from state waters.
16. **Waste**, such as building materials, workers trash and construction debris, must be properly managed to prevent stormwater pollution.
17. Install **stabilized staging area (SSA)** to store materials, construction trailer, etc.
18. If conditions in the field warrant **additional** CMs/BMPs to the ones originally approved on the SWMP or EC Plan (civil drawing), the landowner or contractor shall implement measures determined necessary, as **directed by the County**.
19. Permanent CMs/BMPs for slopes, channels, ditches, or disturbed land area shall be performed immediately after final grading. Consider the use **erosion control blankets** on slopes 3:1 or steeper and areas with **concentrated flows** such as swales, long channels and roadside ditches.
20. The discharge of **sanitary waste** into the storm sewer system is prohibited. Portable toilets must be provided, secured and placed on permeable surfaces, away from the curbside, storm inlets and/or drainage ways.
21. **Remove temporary CMs/BMPs** once final stabilization is reached, unless otherwise authorized.

22. **Final stabilization** must be implemented. Final stabilization is reached when all soil disturbing activities have been completed, and either a uniform vegetative cover has been established with an individual plant density of at least 70% of pre-disturbance levels, or equivalent permanent alternative method has been implemented.
23. Provide **spill prevention** and containment measures for construction materials, waste and fuel storage areas. **Bulk storage** (55 gallons or greater) of petroleum products and liquid chemicals must have secondary containment, or equivalent protection, in order to contain spills and to prevent spilled material from entering state waters.
24. **Report** spills or releases of chemical, oil, petroleum product, sewage, etc., which may reach the storm sewer or enter state waters within **24-hours** from time of discovery. Guidance available at www.cdph.state.co.us/emp/spillsandreleased.htm. State of Colorado Spill-line: 1-877-518-5608. Adams County Stormwater Hotline: 720-523-6400; Public Works 303-453-8787 and the Tri-County Health Department at 303-220-9200.

Maintenance Standard Notes:

1. Maintain and repair CMs according to approved Erosion Control Plan (civil drawing) to assure they continue performing as originally intended.
2. CMs/BMPs requiring maintenance or adjustment shall be **repaired immediately** after observation of the failing BMP.
3. CMs shall be cleaned when sediment levels accumulate to **half the design** unless otherwise specified.
4. SWMP and EC plan shall be continuously **updated** to reflect new or revised CMs/BMPs due to changes in design, construction, operation, or maintenance, to accurately reflect the actual field conditions. A notation shall be made in the SWMP, including date of changes in the field, identification of the CMs removed, modified or added, and the locations of those CMs. Updates must be made within 72-hours following the change.
5. Maintain **Vehicle Tracking Control (VTC)**, if sediment tracking occurs, clean-up immediately. Sweep by hand or the use street sweepers (with vacuum system). Flushing off paved surfaces with water is prohibited.
6. **CWA** must be cleaned once waste accumulation reaches $\frac{2}{3}$ of the wet storage capacity of the structure. Legally disposed of concrete waste. Do not bury on-site.
7. **Clean-up spills** immediately after discovery, or contain until appropriate cleanup methods can be employed. Follow Manufacturer's recommended methods for spill cleanup, along with proper disposal methods. **Records** of spills, leaks, or overflows that result in discharge of pollutants must be documented and maintained.
8. Remove sediment from storm sewer infrastructure (ponds, storm pipes, outlets, inlets, roadside ditches, etc.), and restore volume capacity upon completion of project or prior to initial acceptance of public improvements (if applicable). Do not flush sediment offsite, capture on-site and disposed of at an approved location.

These notes are not intended to be all-inclusive, but to highlight the basic stormwater pollution prevention requirements for construction activities to **comply** with CDPS Stormwater Construction Permit and be in **conformance** with County standards.