

Stabilization – How Thoughts are Changing



NORTH DAKOTA
DEPARTMENT *of* HEALTH

Dallas Grossman

Division of Water Quality

701.328.5242

Background

- The North Dakota Department of Health's 2009 construction general permit requires timely stabilization for certain portions of a construction site where activities have been completed or temporarily ceased
- The proposed permit (2014) will include even more timely stabilization requirements for almost all areas of a construction site

So what is stabilization?

Stabilization

“Stabilized” means the exposed ground surface has been covered by appropriate materials such as mulch, staked sod, riprap, wood fiber blanket, or other material that prevents erosion from occurring. Grass seeding alone is not stabilization.

Stabilization

“Temporary Erosion Protection” means methods employed to prevent erosion. Examples of temporary cover include; straw, wood fiber blanket, wood chips, and erosion netting.

Stabilization

“Permanent Cover” means final stabilization. Examples include grass, gravel, asphalt, and concrete.

Current Permit Requirements

- From the North Dakota Department of Health 2009 construction general permit:
 - Temporary erosion protection or permanent cover must be provided for exposed soil areas where activities have been completed or temporarily ceased

Current Permit Requirements

- From the North Dakota Department of Health 2009 construction general permit:
 - For areas with a continuous positive slope within 200 feet of a surface water, temporary erosion protection or permanent cover must be applied within 21 days of completing or ceasing earth moving activities

Current Permit Requirements

- From the North Dakota Department of Health 2009 construction general permit:
 - The normal wetted perimeter of any ditch that drains water from a construction site, or diverts water around a site, must be stabilized at least 200 feet from the property edge or point of discharge to any surface water
 - Stabilization should be completed within 24 hours of connecting to a surface water

Current Permit Requirements

- From the North Dakota Department of Health 2009 construction general permit:
 - The site must be inspected once every 14 calendar days and after every 1/2-inch or more rain event
 - Completed areas that have been stabilized but do not meet 70% vegetative cover may be inspected once per month
 - Inspections may be suspended for areas that meet final stabilization

Possible Permit Changes

- From the U.S. Environmental Protection Agency 2012 construction general permit:
 - Maintain natural buffers near surface waters
 - Stabilize soil stockpiles, protect from wind

Possible Permit Changes

- From the U.S. Environmental Protection Agency 2012 construction general permit:
 - Deadlines to initiate stabilization
 - Initiate stabilization immediately whenever earth-disturbing activities have permanently or temporarily ceased

Possible Permit Changes

- From the U.S. Environmental Protection Agency 2012 construction general permit:
 - Permanently ceased: Clearing and excavation where permanent structures will be located has been completed

Possible Permit Changes

- From the U.S. Environmental Protection Agency 2012 construction general permit:
 - Temporarily ceased: Clearing, grading and excavation will not resume for a period of 14 or more calendar days but will resume in the future
 - The 14 day period begins as soon as you know work on a portion will be temporarily ceased

Possible Permit Changes

- From the U.S. Environmental Protection Agency 2012 construction general permit:
 - Deadlines for completing stabilization
 - As soon as practicable, but no more than 14 calendar days after initiation

Possible Permit Changes

- From the U.S. Environmental Protection Agency 2012 construction general permit:
 - Exceptions for semi-arid areas
 - Immediately initiate stabilization, and within 14 calendar days, complete the installation of non-vegetative stabilization measures to prevent erosion
 - As soon as practicable, complete activities to initially seed or plant the area to be stabilized

Possible Permit Changes

- From the U.S. Environmental Protection Agency 2012 construction general permit:
 - Exceptions for semi-arid areas
 - If construction is occurring during the seasonally dry period, indicate the begin and end dates of the dry period, and the schedule for initiating and completing vegetative stabilization

Possible Permit Changes

- From the U.S. Environmental Protection Agency 2012 construction general permit:
 - For sites discharging to sediment or nutrient-impaired water, stabilization activities must be completed within 7 calendar days

Strategy

- How will work progress throughout the project?
- How will seasonal changes affect the project?
- How will cost be spread?
 - Stabilization
 - Mobilization
 - Inspection
 - Maintenance
 - Clean-up/Recovery

Stabilization

- What is the basic idea?
 - Limit area of disturbance
 - Stabilize areas where construction has temporarily or permanently ceased

Stabilization

- Why is stabilization important?
 - Relying solely on perimeter and sediment controls during construction is not enough
 - Perimeter and sediment controls require inspection and maintenance
 - Stabilized areas move towards the end goal of the construction general permit...achieving “final stabilization”

Stabilization

- Helps control wind erosion and dust issues
 - Occurs during the seasonally dry period of the year
 - Large idle sites (e.g., developments, large commercial or industrial sites/developments)
 - Due to lack of stabilization

Stabilization Methods

- Straw mulch
- Hydromulch
- Erosion control blanket
- Riprap
- Gabions
- Geotextiles
- Glue
- Tarping

Stabilization Methods

- Select the right seed mix
- Check soil health



NORTH DAKOTA
DEPARTMENT *of* HEALTH

Questions or Comments?

Dallas Grossman

Division of Water Quality

701.328.5242

dgrossma@nd.gov