

SOUTH CAROLINA DEPARTMENT OF
HEALTH AND ENVIRONMENTAL CONTROL



Erosion and Sediment Reduction and Stormwater Management
Regulation 72-101 thru 72-108

June 28, 1985

Bureau of Water

DISCLAIMER

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Regulation Information

The South Carolina Legislature restructured state government in 1994. This restructuring abolished the South Carolina Land Resources Conservation Commission and transferred the implementation of this regulation to the South Carolina Department of Health and Environmental Control. Therefore, where this regulation refers to the SC Land Resources Conservation Commission or the Commission, this is now the SC Department of Health and Environmental Control or DHEC.

Also, the South Carolina Department of Highways and Public Transportation is now the South Carolina Department of Transportation. Therefore, where this regulation refers to the South Carolina Department of Highways and Public Transportation, it is referring to the South Carolina Department of Transportation.

EROSION AND SEDIMENT REDUCTION AND STORMWATER MANAGEMENT REGULATIONS

(Statutory Authority: 1976 Code Sections 48-18-40, 48-18-70)

72-101. Jurisdiction.

These regulations shall apply to all land either owned by the state, a state agency, or quasi-state agency or under the management or control of such entities through right-of-way easements or other agreements between the entities and private landowners, except as exempted by these regulations.

72-102. Purpose.

These regulations set forth requirements for erosion and sediment control and stormwater management measures to be used on state land to prevent damage to land, water and property from erosion, sediment and stormwater.

72-103. Definitions.

As used in these regulations:

- A. "Applicant" means the state agency or quasi-state agency that owns, manages or controls state land that is to be disturbed, or the agent of the agency.
- B. "Commission" means the South Carolina Land Resources Conservation Commission or its agent.
- C. "Construction" means the building or erection of a structure or any land preparation or change for the same.
- D. "Construction site" or "site" means the area of land to be disturbed for the purpose of construction.
- E. "Day" means all calendar days except Saturdays, Sundays and holidays.
- F. "Emergency repairs" means repairs of an unforeseen nature that are necessary to protect property or human health and safety.
- G. "Erosion" means the wearing away of the ground surface by the action of water, wind, gravity or any combination thereof.
- H. "Erosion and sediment control and stormwater management plan" or "plan" Means a description of measures, including a timetable for their installation in relation to the construction schedule, to be used on a particular land area to control erosion, retain sediment on the site and manage stormwater in a manner that neither any on-site nor off-

site damage or problem is caused or increased; the plan to be designed by a registered professional engineer, registered landscape architect or professional soil conservationist.

- I. "Land disturbing activity" means any construction or other land change.
- J. "NOAA" means the National Oceanic and Atmospheric Administration of the United States Department of Commerce.
- K. "Private landowner" means any landowner other than the state, a state agency, quasi-state agency, subdivision of the state, or a federal government agency.
- L. "Professional soil conservationist" means an individual who has successfully completed a four (4) year course of study at an accredited college or university leading to a Bachelor of Science Degree with major study in soil conservation or a closely related agricultural or natural resource field such as agronomy, wildlife biology, agricultural education or agricultural engineering, with a minimum of thirty (30) semester hours (or the equivalent) in agricultural or natural resource subjects, including three (3) semester hours (or the equivalent) in soils, and three (3) years experience in the planning and application of erosion and sediment control measures; the experience having been obtained under the supervision of another professional soil conservationist.
- M. "Registered engineer" means an individual who is registered pursuant to Chapter 21, Title 40, Code of Laws of South Carolina, 1976.
- N. "Registered landscape architect" means an individual who is registered pursuant to Chapter 28, Title 40, Code of Laws of South Carolina, 1976.
- O. "Quasi-state agency" means any entity other than a state agency but having some attributes of a state agency by virtue of the fact that the state has some authority to make rules and regulations by which it is governed. For the purpose of these regulations, the South Carolina Public Service Authority is a quasi-state agency; county and municipal governments and special purpose districts are not quasi-state agencies.
- P. "Sediment" means soil or other earth-like material that has been moved by the force of water, wind, gravity or any combination thereof.
- Q. "State Engineer" means the State Engineer with the Division of General Services or his agent.
- R. "State land" means all land either owned by the state, a state agency or quasi-state agency or under the management or control of such entities through right-of-way easements or other agreements between the entities and private landowners.
- S. "Stormwater" means the direct runoff of water and associated material resulting from precipitation in any form.

- T. "Structure" means anything constructed or erected on or in the ground, or attached to something having a location on or in the ground, including but not limited to buildings, roads, parking lots and utilities.

72-104. Exemptions.

The following are exempted from these regulations:

- A. Land owned by or under the jurisdiction of the South Carolina Department of Highways and Public Transportation.
- B. Forest land owned or managed by the South Carolina Forestry Commission.

72-105. Requirement for erosion and sediment control and stormwater management measures to be used and maintained.

All land disturbing activities on state land under the jurisdiction of these regulations must be performed in a manner that erosion is controlled, sediment is retained on the site and stormwater is managed in a manner that neither any on-site nor off-site damage or problem is caused or increased; and all erosion, sediment and stormwater problems on state land under the jurisdiction of these regulations must be corrected. All erosion and sediment control and stormwater management measures implemented pursuant to these regulations must be maintained in proper functioning condition by the state agency or quasi-state agency that owns, manages or controls the land where the measures are located.

72-106. Land disturbing activities under the jurisdiction of the State Engineer.

- A. No state land may be disturbed for the purpose of any land disturbing activity that is under the jurisdiction of the State Engineer pursuant to the South Carolina Consolidated Procurement Code (Title 11, Chapter 35, Code of Laws of South Carolina, 1976) or otherwise under his jurisdiction, except in accordance with an erosion and sediment control and stormwater management plan approved by the State Engineer. The State Engineer may alter the requirements of this regulation for a land disturbing activity as he deems appropriate, and he may exempt a land disturbing activity from any or all of the requirements if he determines that some or all of the requirements are not applicable, or that the activity will likely cause, increase or result in neither any on-site nor off-site erosion, sediment or stormwater damage or problem; the exemption may include activity that the State Engineer deems adequately controlled by a land management program or other laws and regulations. Emergency repairs may be performed without submitting a plan to the State Engineer; however, the repairs must be performed in a manner consistent with these regulations to the maximum extent feasible.
- B. Administration.
 - (1) The applicant shall submit an erosion and sediment control and stormwater management plan to the State Engineer to be approved before any land disturbing activity begins.

Submittal to the State Engineer shall include, but not be limited to two (2) copies of the plan, specifications and design calculations. When supplemental information is required, the State Engineer shall request the information from the applicant in writing, including the reason(s) for requesting the information.

(2) Approval or disapproval of the plan.

- (a) The plan must be reviewed by the State Engineer. If the plan meets the requirements of these regulations, the State Engineer shall approve the plan and so notify the applicant in writing.
- (b) If the plan does not meet the requirements of these regulations, the State Engineer shall disapprove the plan and so notify the applicant in writing, indicating the reason(s) for disapproval.
- (c) If the plan is disapproved, the applicant shall correct the indicated deficiencies and resubmit the plan to the State Engineer.
- (d) The State Engineer shall either approve or disapprove any submitted or resubmitted plan and so notify the applicant in writing within thirty (30) days from the date of receiving all required information.

C. Responsibility of the applicant.

The applicant is responsible for implementing the plan, maintaining all erosion and sediment control and stormwater management measures in proper functioning condition, and meeting other requirements of these regulations.

D. Inspection and enforcement.

- (1) The State Engineer shall periodically inspect work performed under the plan required by this regulation. In the event the State Engineer finds that the measures in the plan are not adequate to control erosion, retain sediment on the site and manage stormwater in a manner that neither any on-site nor off-site damage or problem is caused or increased, he shall require that necessary additional measures be implemented.
- (2) Upon completion of the land disturbing activity, the State Engineer shall make a final inspection and issue the applicant a letter of satisfactory completion if the work has been completed in accordance with the approved plan.
- (3) In the event the State Engineer finds that the land disturbing activity has not been performed in accordance with the approved plan, he shall issue a written order either directing conformance with the plan, suspending additional work until conformance is achieved, or directing other measures that he deems necessary to control erosion, retain sediment on the site and manage stormwater in a manner that neither any on-site nor off-site damage or problem is caused or increased.

- (4) Complaints from any party must be investigated by the State Engineer.
- (5) The State Engineer shall request legal assistance from the Attorney General's Office upon any unresolved problem resulting from violation of this regulation.

E. Minimum standards and specifications.

- (1) The following standards and specifications must be used as the minimum criteria for the design and implementation of erosion and sediment control and stormwater management measures for construction.
 - (a) Use available soil survey information.
 - (b) Expose the smallest practical area of land for the shortest feasible time during construction.
 - (c) Retain and protect natural vegetation when feasible.
 - (d) Stockpile topsoil and replace on graded areas.
 - (e) Use vegetation, mulch, structural measures and other practices during construction to protect areas subject to erosion, manage stormwater and remove sediment from stormwater leaving the site.
 - (f) Use permanent vegetation, structural measures and other practices to prevent erosion and manage stormwater throughout the life of the facility; install the measures as soon as practical in the construction process.
 - (g) Provide for handling the increased runoff caused by changes in soil and surface conditions.
 - (h) Consider expected future development and conditions in the watershed when designing stormwater management systems.
 - (i) Unless on-site or off-site conditions warrant otherwise, use a twenty-five (25) year storm, as established by NOAA, and the rainfall time distribution that is expected to yield the most stringent design, to design structures, systems and improvements for:
 - 1. temporary erosion and sediment control, and
 - 2. temporary and permanent management of stormwater that originates on-site.
 - (j) Unless on-site or off-site conditions warrant otherwise, use a one hundred (100) year storm, as established by NOAA, and the rainfall time distribution that is expected to yield the most stringent design, to design structures, systems and improvements for:

1. permanent erosion and sediment control and stormwater detention/retention,
 2. management of stormwater that originates outside yet flows through the site, and
 3. locating buildings, utilities and other permanent facilities above the one hundred (100) year flood elevation.
- (k) Use closed storm sewers for stormwater systems receiving runoff from areas less than forty (40) acres. This requirement may be waived when:
1. The required storm sewer pipe size is calculated to exceed thirty (30) inches, or
 2. A natural stream or improved open channel is deemed more desirable, provided it has the capacity to carry the runoff resulting from a twenty-five (25) year storm with the rainfall time distribution that is expected to yield the most stringent design.
- (l) Maintain all temporary and permanent erosion and sediment control and stormwater management measures in proper functioning condition.
- (m) Discharges to stormwater drainage systems may be made only at locations approved by the State Engineer and where applicable, other appropriate authority (-ies); the discharge must be made in a manner that will not cause or increase any damage or problem.
- (n) The State Engineer shall have authority to require detention/retention measures that are adequate to limit the rate of stormwater runoff from the site to the rate that existed prior to the land disturbing activity.
- (2) The State Engineer may alter the minimum standards and specifications in this regulation to accommodate specific conditions of the site and affected areas, or when the standards and specifications are in conflict with other applicable regulations. When a conflict occurs, the most stringent regulations shall apply.
- (3) The State Engineer may alter the minimum standards and specifications in this regulation for other land disturbing activities under his jurisdiction.

F. Plan Requirements.

- (1) For construction, the plan required by this regulation shall follow the requirements of Regulation 19-445.2140 of the South Carolina Consolidated Procurement Code and shall include the following:
 - (a) A vicinity map sufficient to locate the construction site and to show the relationship of the construction site to its general surroundings at a scale of not less than one (1) inch to one (1) mile.

(b) The construction site drawn to a scale of not less than one (1) inch to two hundred (200) feet, and supporting specifications and schedules, showing:

1. the boundary lines of the construction site, including the approximate acreage of the site.
2. existing contours with intervals of not more than ten (10) feet and extending one hundred (100) feet outside the site boundary lines. Indicate any condition beyond this contour that would affect or be affected by stormwater from the site. The existing contour lines outside the site boundary lines may be estimated but shall represent the general topography.
3. a general description of the predominant soil type(s) on the site.
4. proposed physical improvements on the site, including existing structures and future utilization if future construction plans are known.
5. schedule of construction operations, including the anticipated starting and completion dates of each operation; and a timetable of the installation of each erosion and sediment control and stormwater management measure in relation to the construction schedule.
6. specifications for all proposed grading, including finished contours at a five (5) foot interval.
7. a grading and stormwater drainage plan for borrow pits and material processing facilities.
8. all necessary erosion and sediment control measures, designed in accordance with Regulation 72-106 E.
9. all necessary stormwater management measures, designed in accordance with Regulation 72-106 E.
10. specifications for all vegetative measures to be used:
 - a. Designation of area to be vegetated
 - b. Site preparation
 - c. Seed or plant selection and quality
 - d. Seeding rate
 - e. Mulch material and application rate

- f. Fertilizer and lime, including application rates and fertilizer analysis
- 11. any other protective measures to be used during construction and throughout the life of the facility.
- 12. provisions for maintenance of measures in proper functioning condition during construction.
- (c) The name and address of the applicant along with the person(s) or organization(s) involved in planning the project.
- (d) Title, scale, north arrow, date and name of the individual preparing the plan, with seal when applicable.
- (e) Any other reports, data or additional information that the State Engineer may require.
- (f) The following certifications signed by the appropriate individuals:
 - 1. Applicant's Certification: "I hereby certify that all land disturbing activity will be performed pursuant to this plan."
 - 2. Designer's Certification: "I hereby certify that the measures in this plan are designed to control erosion, retain sediment on the site, and manage stormwater in a manner that neither any on-site nor off-site damage or problem is caused or increased, that all structural measures are designed to the minimum standards for health and safety, and that all the provisions of the plan are in compliance with the regulations contained in Chapter 72, Article 2 (Erosion and Sediment Reduction and Stormwater Management Regulations)."
- (2) The State Engineer may alter the plan requirements in this regulation for other land disturbing activities under his jurisdiction.

72-107. Land disturbing activities under the jurisdiction of the Land Resources Conservation Commission.

- A. For the purpose of these regulations, the Land Resources Conservation Commission shall have jurisdiction over all land disturbing activities on state land that are not under the jurisdiction of the State Engineer as provided in Regulation 72-106 A. No state land may be disturbed for any such land disturbing activity except in accordance with an erosion and sediment control and stormwater management plan approved by the Commission. The Commission may alter the requirements of this regulation for a land disturbing activity as it deems appropriate, and it may exempt a land disturbing activity from any or all of the requirements if it determines that some or all of the requirements are not applicable, or that the activity will likely cause, increase or result in neither any on-site nor off-site erosion, sediment or stormwater damage or problem; the exemption may include activity that the

Commission deems adequately controlled by a land management program or other laws and regulations. Emergency repairs may be performed without submitting a plan to the Commission; however, the repairs must be performed in a manner consistent with these regulations to the maximum extent feasible.

B. Administration.

(1) Construction.

The applicant shall submit an erosion and sediment control and stormwater management plan to the Commission to be approved before construction begins. Submittal to the Commission shall include, but not be limited to two (2) copies of the plan, specifications and design calculations. When supplemental information is required, the Commission shall request the information from the applicant in writing, including the reason(s) for requesting the information.

(2) Other land disturbing activities.

- (a) All land disturbing activities not previously addressed in these regulations must be performed in a manner that erosion is controlled, sediment is retained on the site and stormwater is managed in a manner that neither any on-site nor off-site damage or problem is caused or increased.
- (b) The applicant shall submit an erosion and sediment control and stormwater management plan to the Commission to be approved before any land disturbing activity begins. For activity that the Commission determines to be part of or to constitute an existing continuous program, the activity may be conducted without a plan approved by the Commission, provided that the applicant shall submit a plan for the activity to the Commission within six (6) months from the effective date of these regulations. For activity that is begun after six (6) months from the effective date of these regulations that the Commission determines to be part of or to constitute a continuous program, the applicant shall submit a plan to the Commission before the activity is begun.

(3) Approval or disapproval of the plan.

- (a) The plan must be reviewed by the Commission. If the plan meets the requirements of these regulations, the Commission shall approve the plan and so notify the applicant in writing.
- (b) If the plan does not meet the requirements of these regulations, the Commission shall disapprove the plan and so notify the applicant in writing, indicating the reason(s) for disapproval.
- (c) For construction and other land disturbing activity that is not part of or does not constitute a continuous program:

1. If a plan is disapproved, the applicant shall correct the indicated deficiencies and resubmit the plan to the Commission.
2. The Commission shall either approve or disapprove any submitted or resubmitted plan and so notify the applicant in writing within thirty (30) days from the receipt of receiving all required information.

(d) For land disturbing activity that is part of or constitutes a continuous program:

1. If a plan is disapproved, the applicant shall correct the indicated deficiencies and resubmit the plan to the Commission within sixty (60) days from receipt of written notice of disapproval.
2. The Commission shall either approve or disapprove any submitted or resubmitted plan and so notify the applicant in writing within sixty (60) days from the date of receiving all required information.
3. The Commission shall periodically review plans and may require, in writing, revisions to the plans. The revision must be submitted to the Commission within sixty (60) days from receipt of written notification. The review process is the same as for the original plan.

C. Responsibility of the applicant.

The applicant is responsible for implementing the plan, maintaining all erosion and sediment control and stormwater management measures in proper functioning condition, and meeting other requirements of these regulations.

D. Inspection and enforcement.

- (1) The Commission shall periodically inspect work performed under the plan required by this regulation. In the event the Commission finds that the measures in the plan are not adequate to control erosion, retain sediment on the site and manage stormwater in a manner that neither any on-site nor off-site damage or problem is caused or increased, it shall require that necessary additional measures be implemented.
- (2) Upon completion of construction and other land disturbing activity that is not part of or does not constitute a continuous program, the Commission shall make a final inspection and issue the applicant a letter of satisfactory completion if the work has been completed in accordance with the approved plan.
- (3) In the event the Commission finds that any land disturbing activity has not been performed in accordance with the approved plan, the Commission shall issue a written order either directing conformance with the plan, suspending additional work until conformance is achieved, or directing other measures that it deems necessary to control

erosion, retain sediment on the site and manage stormwater in a manner that neither any on-site nor off-site damage or problem is caused or increased.

- (4) Complaints from any party must be investigated by the Commission.
- (5) The Commission shall request legal assistance from the Attorney General's Office upon any unresolved problem resulting from violation of this regulation.

E. Minimum Standards and Plan Requirements.

- (1) For construction and all other land disturbing activity that is not part of or does not constitute a continuous program, erosion and sediment control and stormwater management plans must be prepared and implemented according to Regulations 72-106 E and 72-106 F with the exception that the words "State Engineer" must be replaced by "South Carolina Land Resources Conservation Commission."
- (2) For continuous programs, plans must be prepared and implemented according to erosion and sediment control and stormwater management measures applicable to the land disturbing activities of the programs and according to any specific requirements or conditions set forth by the Commission.

72-108. All erosion, sediment and stormwater problems not addressed by Regulations 72-106 and 72-107.

- A. All erosion, sediment and stormwater problems on state land that are not addressed by Regulations 72-106 and 72-107 must be corrected to control erosion, retain sediment on the land and manage stormwater in a manner that neither any on-site nor off-site damage or problem is caused or increased.

B. Administration.

- (1) The Land Resources Commission shall inspect all state land to identify erosion, sediment and stormwater problems.
- (2) The Commission shall notify in writing the state agency or quasi-state agency that owns or manages the land of the nature and extent of the problem(s).
- (3) Based on the assessment of the problem(s), the commission may submit a plan to the agency to be implemented by the agency, or may require the agency to submit a plan to the Commission for approval, with the Commission providing guidance regarding the nature of the plan to be submitted. Submittal to the Commission shall include, but not be limited to two (2) copies of the plan, specifications and design calculations. When supplemental information for a submitted plan is required, the Commission shall request the information from the agency in writing, including the reason(s) for requesting the information.

- (4) Any agency that is notified by the Commission to submit a plan shall submit the plan to the Commission within six (6) months from receipt of notification.
- (5) Approval or disapproval of the plan.
 - (a) Any plan submitted to the Commission pursuant to this regulation must be reviewed by the Commission. If the plan conforms to the standards in Regulation 72-108 A, the Commission shall approve the plan and so notify the agency in writing.
 - (b) If the plan does not conform to the standards in Regulation 72-108 A, the Commission shall disapprove the plan and so notify the agency in writing, indicating the reason(s) for disapproval.
 - (c) If the plan is disapproved, the agency shall correct the indicated deficiencies and resubmit the plan to the Commission within sixty (60) days from receipt of written notice of disapproval.
 - (d) The Commission shall either approve or disapprove any submitted or resubmitted plan and so notify the owner or manager of the land within sixty (60) days from the date of receiving all required information.

C. Responsibility of the state agency or quasi-state agency.

The state agency or quasi-state agency that owns or manages the land is responsible for implementing the plan, maintaining all erosion and sediment control and stormwater management measures in proper functioning condition, and meeting other requirements of these regulations.

E. Inspection and enforcement.

- (1) The Commission shall periodically inspect work performed under the plan required by this regulation. In the event the Commission finds that the measures in the plan are not adequate to control erosion, retain sediment on the land and manage stormwater in a manner that neither any on-site nor off-site damage or problem is caused or increased, it shall require that necessary additional measures be implemented.
- (2) Upon completion of such work, the Commission shall make a final inspection and issue the agency a letter of satisfactory completion if the work has been completed in accordance with the plan.
- (3) In the event the Commission finds that work has not been performed in accordance with the plan, the Commission shall issue a written order either directing conformance with the plan or directing other measures that it deems necessary to control erosion, retain sediment on the site and manage stormwater in a manner that neither any on-site nor off-site damage or problem is caused or increased.

- (4) Complaints from any party must be investigated by the Commission.
- (5) The Commission shall request legal assistance from the Attorney General's Office upon any unresolved problem resulting from violation of this regulation.