

**DIVISION IX
SOIL EROSION AND SEDIMENTATION
CONTROL**

**CHAPTER 45
SOIL EROSION AND SEDIMENTATION CONTROL**

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NOTE: These regulations were filed with the Legislative Secretary on August 2, 1985. Authority cited their formulation: Public Law 17-75. These regulations have been renumbered by the Compiler. Original numerical designations are to be found in brackets [] following section titles.

§45101. General Provisions of the Regulations. (1)
Authority. The Authority for these regulations is 10 GCA , Chapter 47, §§ 47101-47112, "Water Pollution Control Act."

(2) **Purpose.** Whereas soil erosion and sedimentation resulting from the construction of subdivisions, industrial and commercial developments, and highways can affect the purity of streams and marine waters on Guam and thereby cause unreasonable damage to fish and marine life in general; and, whereas, the pollution of streams and marine waters must be controlled to ensure a reasonably clean environment for the People of Guam; and, whereas, the Guam Environmental Protection Agency has been vested with the responsibility to maintain at all times a high quality of environment to guarantee an enjoyable life for all people at present and in the future, and, whereas, the environmental degradation of the quality of land, water and air by any pollutants, including all physical, chemical and biological agents, should not be allowed; and, whereas, the Guam Environmental Protection Agency has been vested with the responsibility to conserve water resources and to protect, maintain and improve the quality and potability thereof; it is declared to be the purpose of these rules to control accelerated soil erosion and the resulting sedimentation of the waters of the territory.

(3) **Definitions:**

Administrator: The Administrator of the Guam Environmental Protection Agency or his authorized representative.

Agency: The Guam Environmental Protection Agency.

Board: Board of Directors, Guam Environmental Protection Agency.

Building permit: The official document issued by the Building Official, Government of Guam, authorizing specific construction activities.

Clearing: The removal of vegetation, structures or other objects as an item of construction or agricultural use.

Clearing and grading permit: An official document issued by the Building Official, Government of Guam, authorizing specified earth-moving operations. Such a permit requires the approval of the Director of Land Management and of the Administrator, Guam Environmental Protection Agency, unless otherwise exempted by prevailing regulations, before issuance by the Building Official.

Earth-moving operations: Alterations to the existing topography. Also see clearing, grading, filling and excavating.

Erosion: (1) The wearing away of the land surface by running water, wind, or other geological agents. (2) Detachment and movement of soil or rock fragments by water, wind or gravity.

Erosion Control Plan: A plan for the control of soil erosion and sedimentation resulting from earth-moving operations. An approved Erosion Control Plan meets the requirements of the Territory's "Soil Erosion and Sedimentation Control Regulations," as promulgated by the Guam Environmental Protection Agency.

Excavating: Lowering the existing ground elevation by earth-moving operations.

Filling: Raising the existing ground elevation by earth-moving operations.

Grading: Establishing a topographical profile by earth-moving operations involving cuts and fills or other earthwork.

House pad: The compacted land area on which a dwelling structure is to be built.

Permit: An official document or certificate issued by the Building Official, Government of Guam, authorizing the performance of a specified activity.

Permittee: The recipient of an approved permit issued by the Building Official, Government of Guam.

Person: Any individual, partnership, firm, association, municipality, public or private corporation, subdivision or agency of the Territory of Guam or the Federal Government, trust, estate or any other legal entity.

Runoff: Water from rain or irrigation that flows over the ground surface and returns to streams. It can collect pollutants from air or land and carry them to the receiving waters. Also, that part of the precipitation which runs off the surface of a drainage area and reaches a stream, body of water, drain, or sewer.

Sediments: Mineral or organic solid materials that are being transported or have been moved from their site of origin by wind or water, and have come to rest on the earth's surface, either above or below sea level.

Sedimentation: The depositing of sediments.

Soil: (1) The unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium of the growth of land plants. (2) The unconsolidated mineral matter on the surface of the earth that has been subjected to and influenced by genetic and environmental factors of parent material, climate (including moisture and temperature effects), macro- and micro-organisms, and topography, all acting over a period of time and producing a product - soil - that differs from the material from which it is derived in many physical, chemical, biological, and morphological properties and characteristics.

Soil erodibility factor (k): A measure of the susceptibility of soil particles to detachment and transport by rainfall and runoff.

Stormwater runoff: Rain that is not absorbed when it comes in contact with the soil. This runoff may carry soil with it.

Temporary stabilization: Protecting soil from excessive erosion for a short period of time. Usually,

temporary stabilization is designed to last for less than one year.

Territory: The territory of Guam, U.S.A.

Uniform Building Code (UBC): The most recent edition of minimum standards to safeguard life or limb, health, property, and the public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures within Guam, as published by the International Conference of Building Officials.

Waters of the Territory: All shore waters surrounding Guam, streams, lakes, wells, springs, irrigation systems, marshes, watercourses, waterways, drainage systems and other bodies of water, surface and underground, natural or artificial, publicly or privately owned.

(4) **Applicability.** These regulations apply to all clearing, grading, filling, excavating, or other earth-moving operations on Guam which require a permit as provided for in Title XXXII, (as amended) Guam Code of Guam. Such applicable clearing or earth-moving operations include those performed by the Government of Guam and by federal agencies on Guam. The Administrator shall review every application for a permit for earth-moving operations in order to determine applicability or exemption, as provided for in Section I, Subsection E., below.

(5) **Exemptions:**

(a) The following earth-moving activities and operations are exempt from these regulations except in cases where the Administrator, in his discretion, determines that these regulation shall apply.

1. Grading in an isolated, self contained area, provided there is no apparent danger of erosion.

2. An excavation for basements, footings, retaining walls or other structures which are authorized by a valid building permit. Such exemption shall not include any excavation where dewatering is undertaken, nor any fill made with the excavated material, nor any unsupported excavation of more than five feet deep which is excavated after the completion of such structures.

3. Cemetery graves.
4. Refuse disposal sites which are controlled by other regulations.
5. Excavations for wells, tunnels or utilities.
6. Exploratory excavations for wells or for the purpose of soils testing.
7. Any excavation which is less than two feet in depth or which creates a cut slope less than five feet in height and no steeper than a slope ratio of 1-1/2 horizontal to 1 vertical.
8. Any fill which is less than one foot in height and placed on undisturbed terrain with existing topography of a ratio less than five horizontal to 1 vertical and which does not obstruct a drainage course.
9. Field plowing or re-clearing for agricultural purposes provided these operations are performed in accordance with the guidelines and standards of Resource Management Systems, as approved by Guam's Soil and Water Conservation Districts; except that initial field plowing or clearing for agricultural purposes must be performed in accordance with an approved USDA Soil Conservation Service "Conservation Plan."
10. Clearing, grading and filling for the purpose of constructing a house pad and driveway for a one- or two-family residence, unless site conditions resulting from such earth-moving activities would indicate a potential erosion problem.

(b) A clearing, grading, filling, excavating or other earth-moving activity may be exempted from these regulations by the Administrator if, in his discretion, he determines in writing that the scope, size or timely necessity of such earth-moving activity does not require compliance with these regulations.

§45102. General Requirements. (1) Erosion Control Plan.

(a) All clearing, grading, filling, excavating and other earth-moving operations shall proceed only in accordance with an Erosion Control Plan which is duly approved by the Agency.

(b) Such Erosion Control Plan shall be prepared in accordance with the requirements set forth in Section III of these regulations.

(c) An Erosion Control Plan shall be a prerequisite of all permits issued by the Building Official, Department of Public Works, for clearing, grading, filling, excavation or other earth-moving operations not otherwise exempted by these regulations. Additional, no permit shall be issued if earth-moving operations cause pollution to the waters of the Territory, as defined by the Guam Water Pollution Control Act and the current water quality standards, unless an Environmental Protection Plan has been approved by the Agency.

(d) An approved Erosion Control Plan does not abrogate a permittee's responsibility to comply with all other applicable Territorial and federal laws and regulations.

(2) Agency Approval of Erosion Control Plans

(a) Two copies of a proposed Erosion Control Plan shall be submitted to the Agency. Such Plan copies shall accompany the permit for earth-moving operations.

(b) The Agency shall have ten working days to approve or disapprove such Plan.

(c) The approval or disapproval by the Agency shall be in writing. Approval of the Plan may be contingent upon specified conditions or requirements for implementing the Plan. Disapproval of the Plan shall set forth all the reasons for such disapproval.

(3) Compliance.

(a) All clearing, grading, filling, excavating and other earth-moving operations, except as provided for under Section II, Subsection C-2, below, or as otherwise excepted from these regulations, must proceed in accordance with a duly approved Erosion Control Plan.

(b) Earth-moving operations in progress, other than quarrying, shall comply with these regulations within seven calendar days of the effective date of these regulations. Quarrying operations shall comply with these regulations within 30 calendar days of the effective date of the regulations.

§45103. Requirements of an Erosion Control Plan. (1)
Planning Policies for Control of Erosion and Sedimentation.

(a) All earth-moving operations in the territory shall be conducted in a manner that prevents accelerated land erosion, transportation of sediment to and along waterways, and siltation of rivers, estuaries and marine waters.

(b) The area affected by earth-moving operations at any one time during construction shall be kept to a minimum by either selective clearing, incremental phases of development or other effective means.

(c) All earth-moving operations shall be scheduled, to the most practicable extent possible, during periods of expected low rainfall.

(d) No graded area shall remain in an unstabilized condition for longer than authorized by its approved Erosion Control Plan.

(e) In the event that earth-moving operations are discontinued to delayed, graded areas shall receive interim, temporary cover, which is acceptable to the Agency, so as to protect the graded areas from erosion.

(f) All areas disturbed by earth-moving operations, including slopes, channels, ditches, and banks, must be stabilized as soon as possible after the final grade has been established.

(g) Stormwater runoff from areas disturbed by earth-moving operations shall be collected and diverted to facilities for removal of sediment prior to discharge to any surface or marine waters of the territory.

(h) All procedures and facilities which are authorized by an Erosion Control Plan and which are necessary to protect areas from erosion during the stabilization period shall be properly maintained until such stabilization is complete.

(2) General Requirements of the Plan.

(a) **Description of the Project.** The plan shall include a brief, narrative description of the proposed project. Sketches, photographs and construction drawings may be used to supplement this description.

(b) **Project Site Plan.** A project site plan shall include the data listing in this Subsection. Plan sheet size shall not be smaller than 18" x 24" and not larger than 30" x 42". Plan sheet sizes shall not vary.

1. Project site vicinity map and north arrow.
2. Existing land uses and structures.
3. Existing vegetation.
4. Existing topography at contour intervals of not greater than ten feet.
5. Grading plan at contour intervals of not greater than five feet which extend beyond the project site limits so as to adequately depict the offsite drainage pattern for purposes of assessing any erosion of its deposition onto other properties.
6. Soil classification by USDA's Soil Conservation Service "Soil Taxonomy Classification System."
7. Soil erodibility factor.
8. Soil permeability and percolation rates.
9. Type and extent of outcroppings.
10. Depth of topsoil.
11. Dimensions and flow of rivers and streams located on or nearby the project site.
12. Locations of springs and wells.
13. Natural drainage depressions, basins and sinks.
14. Floodplains on the project site and downstream locations which will undergo changes due to the proposed earth-moving operations.
15. Condition of marine waters and reef flats which receive stormwater runoff, either directly or indirectly, from the project site.
16. Scale of no smaller than 1" = 50 feet or 1" = 5 meters.

(c) **Construction Schedule.** Construction increments shall be described and also identified on

the project site plan. Completion dates for each construction increment shall be indicated.

(d) **Stormwater Drainage System.** The proposed, permanent stormwater drainage system shall be depicted, including the dimensions, alignments and elevations of all structures as well as the anticipated volume and velocity of the stormwater.

(e) Erosion and Sedimentation Control Measures.

1. The Erosion Control Plan shall specify the types, dimensions and locations of all temporary and permanent structures, measures (including vegetation), and equipment proposed for controlling erosion and sedimentation. Such Plan shall encompass the disposal of excavated materials and cleared vegetation.

2. In conjunction with the project construction schedule, the Plan shall indicate the construction sequence of erosion and sedimentation control measures. Sediment control structures for natural waterways shall be scheduled for installation prior to earth-moving operations. Stabilization of streambanks shall be scheduled, whenever possible, during periods of expected low rainfall.

3. Stabilization of all affected streams, waterways and drainage ways shall be defined, including both temporary and permanent measures and specifications.

4. Temporary stabilization measures shall be defined for implementation in the event that delays occur during earth-moving operations and until such time that permanent stabilization measures are in place.

(f) **Maintenance Procedures.** A maintenance program shall be established for erosion and sedimentation control structures and facilities. Such program shall include periodic inspection of the facilities, removing and disposing of sediment materials from the control structures and specific assignment of the maintenance responsibilities.

(g) **Certification.** The Plan shall be stamped and signed by a professional civil engineer holding current registration in the territory. This requirement may be waived on a case-by-case basis by the Administrator.

§45104. Enforcement. (1) Whenever the Agency has reason to believe that a violation of any Section of these regulations has occurred, it may cause written notice to be served upon the alleged violator or violators. The notice shall specify the provision of these regulations alleged to be violated, and the facts alleged to constitute a violation thereof, and may include an order that necessary corrective action be taken within a specified time. Any such order shall become final unless, no later than ten (10) days after the date the notice and order are served, the person or persons named therein request in writing a hearing before the Agency. Upon such a request, the Agency shall hold a hearing. In lieu of an order, the Agency may require that the alleged violator or violators appear before the Agency for a hearing at a time and place specified in the notice and answer the charges complained of, or the Agency may initiate action pursuant to Section V of the regulations.

(2) If, after a hearing held pursuant to Subsection A of this Section, the Agency finds that a violation or violations have occurred, it shall affirm or modify the order previously issued or issue an appropriate order or orders for the prevention, abatement or control of the erosion or sedimentation involved or for the taking of such other corrective action as may be appropriate. If, after hearing on an order contained in a notice, the Agency finds that no violation has occurred or is occurring, it shall rescind the order. Any order issued as part of a notice or after hearing may prescribe the date or dates by which the violation or violations shall cease and may prescribe timetables for necessary action in preventing, abating or controlling the pollution.

(3) No later than ten (10) days after the issuance of the final order of the Agency, an appeal to the Superior Court of Guam may be made against any decision of the Agency by any person who is or may be adversely affected thereby.

(4) Nothing in these regulations shall prevent the Agency from making efforts to obtain voluntary compliance through warning, conference or any other appropriate means.

(5) In connection with any hearing held pursuant to this Section, the Agency, or its designate, shall have power to administer oaths, examine witnesses and issue notices of hearings and subpoenas requiring the testimony of

witnesses and the production of evidence to matters involved in the hearing.

§45105. Penalties. (1) Any person who violates any provision of these regulations shall be guilty of violation and subject on account thereof to a fine of not to exceed One Thousand Dollars (\$1,000). Each day of violation shall constitute a separate offense.

(2) Action pursuant to Subsection A of this Section shall not be a bar to enforcement of these regulations by injunction or other appropriate remedy; and the Board shall have power to institute and maintain in the name of this territory any and all such enforcement proceedings. Such proceedings shall be conducted in and by the Superior Court of Guam.

(3) Nothing in these regulations shall be construed to abridge, limit, impair, create, enlarge or otherwise affect substantively or procedurally the right of any person to damages or other relief on account of injury to persons or property and to maintain any action or other appropriate proceedings therefor.