CARL T.C. GUTIERREZ
GOVERNOR OF GUAM

JUL 10 2000

OFFICE OF THE LEGISLATIVE SECRETARY
ACKNOWLEDGMENT RECEIPT
Received By
Time 10:34am
Date 7·10·00

The Honorable Joanne M. S. Brown
Legislative Secretary
I Mina'Bente Singko na Liheslaturan Guåhan
Twenty-Fifth Guam Legislature
Suite 200
130 Aspinal Street
Hagåtña, Guam 96910

Dear Legislative Secretary Brown:

Enclosed please find Substitute Bill No. 392 (LS), "AN ACT TO *AMEND* THE GUAM ENVIRONMENTAL PROTECTION AGENCY GUAM SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS", which was **signed** into law **Public Law No. 25-152.**

The original of the attached rules and regulations concerning soil erosion and sedimentation controls were developed by the Guam Environmental Protection Agency and transmitted to i Liheslatura on January 25, 2000. The originally transmitted rules and regulations already went into effect on July 5, 2000, which is 90 days plus 3 legislative days after transmittal to i Liheslatura. Usually, a day that a session is held that contains only a speech is not counted as a legislative day, however, bills were passed on July 5 and would convert the session to a "session day" counted for purposes of the time period required.

The attached version of the rules and regulations has been reviewed by the Guam Environmental Protection Agency, however, and the attached version has been approved. For this reason, this legislation has been signed.

Very truly yours,

Carl T. C. Gutierrez
I Maga'Lahen Guåhan
Governor of Guam

Attachment: copy attached for signed bill or overridden bill
original attached for vetoed bill

cc: The Honorable Antonio R. Unpingco
Speaker

0011

MINA'BENTE SINGKO NA LIHESLATURAN GUAHAN
2000 (SECOND) Regular Session

CERTIFICATION OF PASSAGE OF AN ACT TO *I MAGA'LAHEN GUAHAN*

This is to certify that Substitute Bill No. 392 (LS) "AN ACT TO *AMEND* THE GUAM ENVIRONMENTAL PROTECTION AGENCY GUAM SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS," was on the 23rd day of June 2000, duly and regularly passed.

ANTONIO R. UNPINGCO
Speaker

Attested:

JOANNE M.S. BROWN
Senator and Legislative Secretary

This Act was received by *I Maga'lahen Guahan* this 29th day of June, 2000, at 4:00 o'clock P.M.

Assistant Staff Officer
Maga'lahi's Office

APPROVED:

CARL T. C. GUTIERREZ
I Maga'lahen Guahan

Date: 7-10-00

Public Law No. 25-152

MINA'BENTE SINGKO NA LIHESLATURAN GUÅHAN
2000 (SECOND) Regular Session

Bill No. 392 (LS)
As substituted by the Committee
on Natural Resources.

Introduced by: J. M.S. Brown
K. S. Moylan
C. A. Leon Guerrero
F. B. Aguon, Jr.
E. C. Bermudes
A. C. Blaz
E. B. Calvo
M. G. Camacho
Mark Forbes
L. F. Kasperbauer
A. C. Lamorena, V
V. C. Pangelinan
J. C. Salas
S. A. Sanchez, II
A. R. Unpingco

AN ACT TO *AMEND* THE GUAM ENVIRONMENTAL PROTECTION AGENCY GUAM SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS.

BE IT ENACTED BY THE PEOPLE OF GUAM:

Section 1. Legislative Findings and Intent. In accordance with the Administrative Adjudication Law, §9303 *et seq.* of Title 5 of the Guam Code Annotated, as amended by Public Law Number 24-27, on December 10, 1997, the Guam Environmental Protection Agency ("GEPA") transmitted on January 25,

2000 to *I Liheslaturan Guåhan*, the "Guam Environmental Protection Agency Guam Soil Erosion and Sedimentation Control Regulations," which were adopted on April 24, 2000. *I Liheslaturan Guåhan* wishes to amend the rules and regulations as proposed by GEPA to further strengthen its implementation.

Section 2. Approval of GEPA Regulations. *I Liheslaturan Guåhan* hereby approves the GEPA rules and regulations, **Exhibit A**, entitled, "Guam Environmental Protection Agency Guam Soil Erosion and Sedimentation Control Regulations."

Section 3. Severability. *If* any provision of this Law or its application to any person or circumstance is found to be invalid or contrary to law, such invalidity shall *not* affect other provisions or applications of this Law which can be given effect without the invalid provisions or application, and to this end the provisions of this Law are severable.

Section 4. Effective Date. Effective date of this Act shall be on October 1, 2000.

EXHIBIT A

GUAM SOIL EROSION AND SEDIMENT CONTROL REGULATIONS

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GUAM SOIL EROSION AND SEDIMENT CONTROL REGULATIONS

Section 10100. Authority.

10 GCA Chapter 47 - "Water Pollution Control Act."

Section 10101. General Provisions: Purpose, Scope, Applicability and Exemptions.

A. Purpose.

Whereas soil erosion and sedimentation resulting from the construction of sub-divisions, industrial and commercial developments, highways and other activities requiring excavation and filling can affect the purity of wetlands, streams and marine waters on Guam and thereby may cause unreasonable damage to aquatic and marine life in general; and whereas, the pollution of wetlands, 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 surface and groundwater resources and to protect, maintain and improve the quality and potability thereof; it is declared that the purpose of these regulations is to control accelerated soil erosion, thereby preventing the pollution of Guam's waters from fertilizers, pesticides, sediments and other polluting substances carried by sediment, and to protect property and to promote the public health, safety and welfare by regulating grading, clearing, grubbing and stockpiling, and by setting minimum standards for erosion and sedimentation control for the island of Guam.

It is also the purpose of these regulations to manage nonpoint source pollution consistent with the latest "Guam Nonpoint Source Program", the "Guam Erosion & Sedimentation Manual" guidelines and recommendations, the comprehensive approach set forth in Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990, "Protecting Coastal Waters", codified as 16 U.S.C. §1455(b), and the "Guidance Specifying Management

Measures for Sources of Nonpoint Pollution in Coastal Waters" (EPA/840-B-92-002, dated January 1993) issued under the authority of Section 6217(g) of the Coastal Zone Act Reauthorization Amendments of 1990 recommendations.

B. Scope.

The provisions of these regulations impose requirements on those earth-moving activities which create accelerated erosion or a danger of accelerated erosion and which require planning and implementation of effective soil conservation measures. These regulations set forth requirements for the control of grading, clearing and grubbing, and stockpiling, set limits for erosion and sedimentation, establish administrative procedures and minimum requirements for issuance of permits and provide for the enforcement of such rules and regulations.

C. Applicability.

These regulations apply to all clearing, grubbing, grading, embankment or filling, excavating, stockpiling or other earth-moving operations on Guam which require a permit as provided for in 21 Guam Code Annotated, Chapter 66 (as amended). Such applicable clearing or earth-moving operations include those performed by private and governmental sectors, including, the government of Guam and 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, Sub-Section D, below.

D. Exemptions.

An application for a clearing, grubbing, grading, embankment or filling, excavating or other earth-moving activity shall be submitted to the Agency for review, and approved before the activity is started. The following earth-moving activities may be exempted from these regulations if the Administrator, in writing, determines that the scope or size of the activity will not create either an erosion or other hazard to surface or marine waters of Guam:

1. Clearing, grading and filling for the purpose of constructing a house, pad or driveway for a one-or two-family residence;

2. Grading in an isolated, self contained area;

3. An excavation for basements, footings, retaining walls or other structures which are authorized by a valid building permit. Such exemptions shall not include any excavation where dewatering is undertaken, any fill is made with the excavated material, or any unsupported excavation of more than five (5) feet deep is excavated after the completion of such structures.

4. Clearing & grubbing individual cemetery graves or plots without using heavy equipment.

5. Excavations for wells, tunnels or utilities, which are permitted under different rules & regulations.

6. Exploratory excavations for wells or for the purpose of soils testing, provided that no clearing and grubbing or grading is to be performed.

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 for coralline type soil and 3:1 slope for clay type soil, provided that all slopes and open areas are stabilized and vegetated.

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 (5) horizontal to one (1) vertical and which does not obstruct a drainage course, provided the area of the property does not exceed five thousand (5,000) sq. ft. and open areas are properly stabilized and vegetated.

9. Field plowing and normal tilling operations, or clearing land for agricultural purposes provided these activities or operations do not cause sediment and runoff water to move beyond the edge of the farm boundaries and degrade the water quality of the receiving water bodies. Initial field plowing or clearing land for agricultural purposes must be performed in accordance with the implementation of a conservation management system that meets minimum standards contained in the U.S. Field Office Technical Guides and approved by either the appropriate Soil and Water Conservation District created by 5 GCA Chapter 63, in accordance with an approved USDA Soil Conservation Service "Conservation Plan" or the Director of the Guam Department of Agriculture.

10. Clearing and grubbing of land for the purpose of making topographic surveys, and hand clearing of trails for survey lines and for access for soil exploration equipment.

E. Certain Rules of Word Usage.

1. Words used in the present tense include the future tense, and the singular includes the plural unless the context clearly indicates the contrary.

2. The term "shall" is always mandatory and not discretionary; and the word

"may" is permissive.

3. A word or term not interpreted or defined by this article shall be used with a meaning of common or standard utilization.

Section 10102. Definitions.

A. Meanings of words and terms. The following words and terms, when used in these regulations, shall have the following meanings, unless the context clearly indicates otherwise:

1. Accelerated erosion: The removal of the surface of the land through the combined action of man's activities and natural processes at a rate greater than would occur because of the natural process alone.

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

3. Agency: The Guam Environmental Protection Agency (GEPA).

4. Board: Board of Directors, Guam Environmental Protection Agency.

5. Building pad: The compacted land area on which a structure is to be built.

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

7. Channel: A natural stream that conveys water; a ditch excavated for the flow of water.

8. Check dam: A structure used to reduce or prevent excessive erosion by reduction of velocities in water courses.

9. Chutes/flumes: -Channels of concrete or comparable material that are used to conduct storm runoff down slopes where concentrated runoff would cause slope erosion.

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

11. Clearing and grubbing: The removal of vegetation, including trees, timber, shrubbery, and plants, when said vegetation is dislodged or uprooted from the

surface of the ground.

12. Compaction: The densification of a fill by mechanical means.

13. Crimping: A method used to secure fiber mulches. The operation is performed by a crimping machine which partially punches the mulch into the soil.

14. Deflection Structures: Stones, or concrete or wooden groins placed in a river or stream at an angle outward from the shore in a downstream direction to deflect the current away from a critical area of the bank.

15. Denuded: Bare; naked; stripped.

16. Developer: Any person who is engaged in land development.

17. Dissipate: To scatter; disperse; cause to vanish.

18. Diversion: To change the accustomed course of all or part of a stream or of sheet runoff.

19. Diversion dike: A temporary ridge of soil constructed at the top of a cut or fill slope to divert overland flow from small area away from unstabilized slopes.

20. Diversion ditch: A ditch constructed to channel stream or sheet runoff into desired directions, and may also be referred to as Interceptor Channel.

21. Diversion terrace: A channel or dike constructed up slope of an area for the purpose of diverting storm water runoff.

22. Earth material: Any rock, coral, sand, gravel, natural soil or fill /or any combination thereof.

23. Earth-moving operations: Human caused alterations to the existing topography. Any construction or other activity which disturbs the surface of the land including, but not limited to, clearing, grading, excavation, embankment, construction, and development, subdivision development, mineral extraction, sand mining, and the moving, depositing or storing of soil, rock or earth.

24. Embankment: A placement of soil, rock, or other material by man.

25. Engineer: A person duly registered as a professional civil and/or structural engineer on Guam.

26. Engineer's Soils Report: A report on soils conditions prepared by a professional engineer qualified in the practice of civil and/or structural engineering.

27. Environmental Impact Statement: A comprehensive and systematic assessment of environmental impacts which would likely result from a human activity

or action. Its purpose is to provide, in part, a basis for making decisions which will affect the human condition as well as the purely biological or natural conditions of our environment. It should provide a reasonable set of alternatives and a preferred option which appropriately balances various environmental concerns, including financial, social or cultural concerns. The assessment should rely on proven assessment methods both scientific and political.

28. Environmental Protection Plan: A document describing, for a proposed development, the methods/equipment selected for use, expected environmental problems during and after construction, and methods and equipment chosen to avoid, mitigate or control potential adverse effects on the environment.

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

30. Erosion check: A slit trench filled with porous matter that is oriented perpendicular to the direction of flow in a ditch or swale to prevent the formation of rills and gullies.

31. Erosion and sediment control: The control of solid material, both mineral and organic, during an earth-moving operation, intended to prevent its transport out of the operation area by means of air, water, or gravity.

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

33. Excavation or cut: A cavity formed by digging, cutting, quarrying, uncovering, displacing or relocating soil or rock.

34. Existing grade: The grade prior to grading.

35. Fill: A placement of soil, rock, or other material by man to raise the existing ground elevation.

36. Finish grade: The final grade of the site which conforms to the approved plan.

37. Grading: Establishing a topographical profile by earth-moving operations involving cuts and fills or excavation or other earth work activities.

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

39. Interceptor channel: A channel or dike constructed across a slope for the purpose of intercepting storm water, reducing the velocity of flow, and diverting it to outlets where it can be disposed.

40. Interceptor dike: A temporary ridge of compacted soil across a graded right-of-way that is not subject to vehicular traffic, designed to intercept and divert storm runoff to temporary outlets where it can be disposed of with minimal erosion.

41. Intermittent stream: A stream or portion of a stream that flows only in direct response to precipitation and receives little or no water from springs other sources.

42. Jute Netting: A heavy woven jute mesh laid directly over seedbeds to minimize soil erosion in critical areas until vegetation can become firmly established. Due to its thick fibrous composition, it also functions as a mulch to conserve soil moisture, insulate against solar insulation, dissipate energy from falling raindrops and reduce erosion caused by overland flow.

43. Key: A designed compacted fill placed in an earthen trench excavated beneath the toe of a proposed fill slope.

44. Land developer: Any person who is engaged in land development.

45. Land development: The constructing, installing, placing, planting, or building of surface structures, utility lines, shopping centers and malls, golf courses, apartment complexes, schools, roads, highways, parking areas, or any other similar activity.

46. Level spreader: An outlet constructed at zero grade across a slope to collect concentrated runoff and covert it into sheet flow with non-erosive velocities onto areas stabilized by existing vegetation.

47. Mulch: A natural or artificial layer of plant residue (fiber mulches) other materials, such as sand or paper, on the soil surface.

48. Mulch blanket: Blanket type materials used in the establishment of vegetation on swales, ditches and steep slopes where fiber mulch products do not provide sufficient levels of protection during germination and early growth.

49. Netting: A method of securing fiber mulches through the use of jute, plastic, paper or fiberglass nets on steep exposed slopes where crimping is not possible and tacking will not perform satisfactorily.

50. Outcrop: To come to, or be exposed on the surface.

51. Permeability: The property of a porous material which permits the passage or seepage of fluids, such as water for example, or air through its interconnection voids.

52. Permeable: Having a texture through which water can move.

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

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

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

56. pH: A numerical measure of the acidity or hydrogen ion activity of a soil. (The neutral point is pH = 7.0. All pH values below 7.0 are acid and all above 7.0 are alkaline).

57. Right-of-way: Right of passage over another person's land; a route that is lawful to use; a strip of land acquired for transport or utility construction.

58. Riprap: Broken rock, cobbles or boulders placed on earth surfaces such as the face of a dam or the bank of a stream, for protection against the action of water or waves; also applied to brush or pole mattresses, or brush and stone, or other similar materials used for soil erosion control.

59. Rough grade: The stage at which the grade approximately conforms to the approved plan.

60. Runoff: Water from rain or irrigation that flows over the ground to surface, marine or ground waters. 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.

61. Sandbag sediment barrier: Temporary barriers or diversions that are constructed of sandbags.

62. Sectional down drain: A prefabricated sectional conduit of half-round, bituminized fiber pipe or other material used to conduct storm runoff from one elevation to another without erosion of slope.

63. Sedimentation: The depositing of sediments.

64. Sediment retention basin: A temporary dam or basin, or a combination of both, that will trap and store sediment produced on exposed areas and delivered to the structure by storm runoff.

65. Sediments: Mineral or organic solid materials that settle to the bottom of water.

66. Site: The spacial location, under the same ownership, of an actual or planned structure or structures, or earth-moving activity.

67. Slope: An inclined ground surface, the inclination of which is expressed as a ratio of horizontal distance to vertical distance.

68. Soil: The unconsolidated mineral and organic material found on the earth's upper layer, that may be dug or plowed and in which plants can grow.

69. Soil engineering: The application of the principles of soil mechanics in the investigation, evaluation and design of civil works involving the use of earth materials, and the inspection and/or testing of the construction thereof.

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

71. Soil slopes: All denuded cut, fill or natural soil constituted slopes.

72. Stabilization: The proper placing, grading and/or covering of soil, rock or earth to insure its resistance to erosion, sliding, or other movements.

73. Stockpiling: Temporary open storage of earth materials upon any premises where a grading permit has been issued for the purpose of using the materials at some other premises at a future time.

74. Storm water management: The practice of using detention measure to reduce the impact of minor storms which cause accelerated erosion of stream channels and drainage ways (not to be confused with control of flood flows).

75. Storm water runoff: Rain that is not absorbed when it comes in contact with the soil and thus runs down hill into waters of Guam. This runoff may carry soil with it.

76. Strip planting: The planting of strips of wet soil tolerant, high erosion resistant vegetation in the critical area near the waterline of a major waterway, and the planting of conventional robust rooted grasses and legumes above the critical zone.

77. Subdivision: The division, re-division or change of lot lines of a lot, tract, or parcel of land for the purpose of leasing, transferring ownership, or development, either immediately or in the future.

78. Tacking: A method of securing mulches by the application of an asphalt or chemical binder which binds the individual fibers together to form a resistant blanket.

79. 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.

80. Terrace: A relatively level step constructed in the face of a grade slope surface for drainage and maintenance purposes.

81. Territory: The Island of Guam, United States of America.

82. Tetrahedron: Solid figure with four (4) triangular surfaces.

83. Uniform Building Code (UBC): The most recent edition of minimum standards to safeguard life or limb, health, property and 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.

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

85. Watershed: For any river, stream or other water body, the drainage area that contributes water to that water body.

86. Watershed divide: The line that follows the ridges or summits forming the exterior boundary of a drainage basin and separates one drainage basin from another.

87. Waterway: A natural course or constructed channel for the flow of water.

Section 10103. Permit Issuance and Denials.

A. Permits Required.

1. Unless exempted, no person shall commence or perform any grading, clearing, grubbing, embankment, filling, excavation or other earth-moving activity without a grading permit;

2. Unless exempted, no person shall commence or perform any stockpiling without a stockpiling permit.

B. Permit Application Process. An applicant shall obtain the required application from the Building Permit Section, Department of Public Works located at the One-Stop Permit Center, and shall complete and submit the application to the One-Stop Permit Center for review and approval of all concerned agencies, including the Guam Environmental Protection Agency.

C. Permit Application Contents.

1. A description of the proposed activity, including its purpose, proof of land ownership (title, deed or authorized letter) and other pertinent information as may be required by the Administrator.

2. A vicinity map or plan of the site indicating:

a. Site information. The location, including names and locations of streets, roadways, and right-of-ways; property line locations, dimensions and azimuths, easements and setbacks of property; the location of any utility and utility lines, buildings, structures and improvements on or within 100 feet of the site; prominent visible rock out-cropping; elevations, dimensions, location, extent and slopes of all proposed earth-moving activities shown by contours and/or other means; the area in square feet of the land to be affected; and the quantities of excavation and fill involved.

b. Water course information. Locations, dimensions and flow of springs, rivers, wetlands, wells and streams; natural drainage depressions, basins and sinks; flood plains on the project site and downstream locations which will undergo changes due to the proposed earth-moving operations; and existing and proposed water quality monitoring stations located on or nearby the project site.

c. Vegetation information. Location and type of existing trees with a diameter of 12 inches and greater.

3. Required maps will be prepared and signed by a licensed land surveyor. Grading plans and specifications will be prepared and signed by an engineer. Required maps should conform to the latest Zoning Code of Guam's Land Use Plan and subdivision law. The scale shall be no smaller than 1 inch = 50 feet or 1 inch = 5

meters.

4. An application for a stockpiling permit shall include: a plot plan showing the property boundaries; easements, setbacks, and location of the proposed stockpiles; quantities; height of stockpile; the kind/source of the material to be stockpiled; expected life of the stockpile, and any other information required by the Administrator to control dust, drainage or sedimentation problems. Where stockpiling is for the purpose of surcharging to stabilize or consolidate an area, the permittee shall submit an engineer's soil report which shall include data on the effect such surcharging will have on adjacent buildings or structures.

5. Required Plans.

a. Erosion and Sediment Control Plan; This plan is required for clearing, grading, grubbing, embankment or filling, excavation or other earth-moving operations not otherwise exempted by these regulations.

b. Storm Water Runoff Drainage System Plan. This plan, in addition to the Erosion and Sediment Control Plan, is required when the area to be graded is more than five thousand (5,000) square feet or a proposed cut or fill is greater than five (5) feet in height.

c. Both the Erosion and Sediment Control and Storm Water Runoff Drainage Systems Plans shall:

i. be prepared and signed by an engineer in accordance with these regulations, and the best management practices (BMP) guidance manual or other application of BMPs; and

ii. show the method to be used for controlling erosion and disposal of storm water runoff prior to and post construction, including drainage devices such as terraces, berms, ditches culverts, subsurface drains, sedimentation basins, and the estimated runoff quantities of the areas served by each drain and drainage structure.

d. Environmental Protection Plan will be required depending on the intensity and scope of the project. This plan will describe the methods and equipment to be used on site: expected or anticipated environmental problems during and after construction: and the methods and equipment that may be used to avoid, mitigate or control potential adverse effects on the environment.

6. When a proposed cut or fill is greater than five (5) feet or the proposed grading is on land with slopes exceeding five percent (5%), or when any fill is to be placed in a gully, or when the fill material will be a highly plastic clay, the applicant shall submit to the Administrator for the Agency's evaluation and review, an engineer's soils report signed by an engineer and approved by the owner. The soils report shall include data regarding the nature of the distribution and engineering characteristics of existing soils, and the subsurface conditions at the site. It shall recommend the limits for the proposed grading, the fill material to be used, the geotechnical calculations for the cut or fill area, and the manner of placing, including the heights and slopes of cut and fill sections.

7. When an activity or project is located within an environmentally sensitive area (e.g.; areas that affect seashore, rivers and streams, wetlands, critical habitats, and aquifers), an Environmental Impact Assessment (EIA) must be submitted, unless the Administrator determines in writing that the activity is exempted from EIA requirements.

8. If wetlands exist on the property to be cleared and grubbed, graded or used for stockpiling of earth materials, the wetlands must be identified with both field markings and by mapping on the site and/or grading plan(s). Wetlands cannot be cleared, grubbed, graded or otherwise be used as a stockpiling site without first obtaining both a valid Guam Wetland Development Permit and a U.S. Army Corps of Engineers Section 404 fill or discharge permit.

9. The Administrator may require that wetlands, on the property to be cleared, grubbed or used for stockpiling of earth materials, be officially delineated, in whole or in part, when conditions such as slope, soil stability, proximity of work or other performance related conditions warrant an official delineation. Individuals required to delineate wetlands in accordance with this provision shall apply the mapping requirements of the Guam Environmental Protection Agency Wetlands Mapping Policy, revised November 9, 1995.

10. Other permits, plans or approvals associated with and issued for the proposed project shall be submitted with the permit application. Activities described in the permit application shall be consistent with these permits, plans or approvals. Such documents include, but are not limited to:

a. Any required conditional use seashore clearance, wetland, Section 401 WQC, Section 404 permits (CWA), and planned development approvals, height variances, plan review use approvals, or re-zoning under the Guam Zoning Regulations;

b. Sub-division approvals, when an application includes the grading of a development that is to be subdivided, pursuant to the Guam Subdivision Rules and Regulations;

c. Conditional use approvals from Territorial Land Use Commission, when the area to be graded or excavated will be used as quarry, and extracted materials used to fill a different area or sold as a fill material by the owner.

D. Permit Conditions.

1. No permit for earth-moving operations will be issued that will cause erosion and sediment loads or cause pollution to the waters of Guam, as defined by the latest Guam Water Pollution Control Act and the Water Quality Standards, unless an Environmental Protection Plan and an Erosion and Sediment Control Plan have been approved by the Agency.

2. The Administrator may attach such conditions as may be reasonably necessary to ensure that any grading work is for a use or structure permitted in accordance with zoning requirements, and to prevent creation of a nuisance or hazard to public or private property, health or welfare. Such conditions may include but are not limited to:

a. improvements of any existing grading to bring it up to the standards of these regulations;

b. requirements for fencing of excavation or fill to minimize hazards;

c. requirements for retaining walls or other earth retention structures to prevent loss of, support to, erosion of, and interference with natural drainage patterns on adjacent properties;

d. requirements involving clean-up of an area; and

e. limitations on the months, days and hours of permitted work.

3. The issuance of a grading permit shall constitute an authorization to do only that work which is described in the permit and in the plans and specifications approved by the Administrator.

4. Permits issued under these regulations shall not relieve the permittee of the responsibility for securing permits or approvals for work to be done which is regulated by any federal laws or other laws of Guam, or by department, or division of the governing agencies of the government of Guam.

5. Permits issued under these regulations shall be consistent with other permits, plans or approvals associated with the proposed project.

6. Where any operations are delayed for any reason, a revised work schedule shall be submitted to the Administrator which describes any required modifications to the temporary storm water drainage system and to the Erosion and Sediment Control Plan, and other information the Administrator may require.

7. A copy of the permit, plans and specifications for grading, clearing & grubbing, or stockpiling shall be maintained at the job-site during the progress of the work.

E. Permit Denials.

The Administrator shall deny a clearing and grubbing, grading or stockpiling permit if there is reasonable cause for concern that the work as proposed by the applicant may present a risk or endangerment to public health or the environment. Factors to be considered in determining probability of dangerous conditions include, but are not limited to:

1. possible saturation of ground by rain;

2. dangerous geological conditions or flood hazards;

3. undesirable surface water runoff; and

4. subsurface conditions such as the stratification and faulting of rock, nature and type of soil or rock.

Section 10104. Erosion and Sediment Control Plans.

A. General Requirements.

1. All earth-moving activities on Guam shall be conducted in such a way as to prevent accelerated erosion and the resulting sedimentation. To accomplish this all persons engaged in earth-moving activities shall design, implement, and maintain erosion and sediment control measures which effectively prevent accelerated erosion and sedimentation. These erosion and sediment measures must be as set forth in Erosion and Sediment Control Plans submitted, reviewed and approved by GEPA.

2. All clearing, grading, embankment or filling, excavating and other earth-

moving operations shall proceed only in accordance with an Erosion and Sediment Control Plan, prepared in accordance with the requirements set forth in these regulations, and duly approved by the Agency.

3. An approved Erosion and Sediment Control Plan does not abrogate a permittee's responsibility to comply with all other applicable Guam and federal laws and regulations.

B. Agency approval of Erosion and Sediment Control Plans.

1. Four (4) copies of a proposed Erosion and Sediment Control Plan shall be submitted to the Agency with the permit application for earth-moving operations.

2. The Agency shall have thirty (30) working days to approve or disapprove of such plan.

C. Compliance.

1. All clearing, grading, embankment or filling, excavating and other earth-moving operations, except those otherwise exempted from these regulations by the Administrator, must proceed in accordance with a duly approved Erosion and Sediment Control Plan.

2. Earth-moving operations in progress, other than quarrying, shall comply with these regulations within fifteen (15) calendar days of the effective date of these regulations. Quarrying operations shall comply with these regulations within thirty (30) calendar days of the effective date of these regulations.

Section 10105. Erosion and Sediment Control Plans and Measures.

A. General policies for Erosion and Sediment Control.

1. All earth-moving operations on Guam shall be conducted in a manner that prevents accelerated land erosion, transportation of sediment to and along highways, or siltation of rivers, estuaries and marine waters.

2. The area affected by earth-moving operations shall be kept to a minimum by either selective clearing, increment phases of development or other effective means. The Erosion and Sediment Control Plan must contain measures that ensure that each phase of any proposed large development affects less than twenty (20) acres.

3. All earth-moving operations shall be scheduled during periods of expected low rainfall.

4. Any earth-moving operations authorized under these regulations shall be

performed so as not to violate applicable provisions of the latest Guam Water Quality Standards.

5. No person shall perform any earth-moving operation so as to cause falling rocks, soil or debris in any form to fall, slide or flow onto adjoining properties or waters of Guam.

6. All work areas shall be maintained so as to minimize dust which may cause a nuisance or hazard to others, and in conformance with the Guam Air Pollution Control Standards and regulations.

7. Where construction equipment will make frequent crossings of a natural drainage course, plans shall provide for temporary culverts or bridge structures to be installed. The required clearances from concerned agencies shall be obtained before any construction of temporary crossing access begins.

8. The erosion and sediment control measures set forth in this Section are required, unless the Erosion and Sediment Control Plan shows that the alteration of these measures and facilities or inclusion of other measures and facilities will better prevent accelerated erosion and sedimentation.

B. Required contents of Erosion and Sediment Control Plans.

1. Description of the Project.

The plan shall include a detailed narrative description, with photographs and construction drawings, of the proposed project.

2. Project Site Plan.

a. The necessary information is that which is required in Section 10103.C. Permit Application Contents. Plan sheet size shall not be smaller that eighteen (18) inches x twenty-four (24) inches and not larger than thirty (30) inches x forty-two (42) inches. Plan sheet sizes shall not vary.

b. Soil description including: soil classification by USDA Natural Resources Conservation Service "Soil Taxonomy Classification System"; soil erodibility factor; soil permeability and percolation rates; type and extent of out-croppings; depth of soil; capability for establishing vegetation; and coefficient of runoff.

c. Evaluation of subsurface information. Subsurface investigations shall consist of drilling, excavations, or observations of naturally exposed soil

and bedrock exposures at sufficient intervals and depths to indicate the type of material or condition to be encountered at final grading. The person or firm making the investigation shall submit a written report of their findings and recommendations. This information is required where the stability will be lessened by proposed grading or filling, where any other weaknesses are found, or where any of the following conditions are discovered or proposed:

i. At locations where a fill slope is to be placed above or a cut slope;

ii. At proposed cuts exceeding fifteen (15) feet in height unless in competent rock as determined by an engineer;

iii. At locations of proposed fills exceeding fifteen (15) feet in height;

iv. Where sides of hill fills are to be placed on existing slopes steeper than fifteen percent (15%);

v. Wherever groundwater from either the grading project or adjoining properties is likely to reduce stability;

vi. At zones of trapped water or high water table; or

vii. Where the topography is indicative of landslides, as determined by an engineer.

d. Site Assessment. Consider the detrimental effects of construction of the site as it pertains to: erosion and loss of sediments; slope stability; water quality; plant communities; wildlife and aquatic life; and condition of marine waters and reef flats which will receive storm water runoff, either directly or indirectly, from the project site.

3. Grading Plan.

It is the purpose of this paragraph to ensure that minimum grading is performed and that natural contours and topography will be retained wherever feasible.

a. Grading shall be designed and implemented so as to blend in with the surrounding area.

b. All grading plans and specifications shall show, using contours, cross sections, spot elevations or other means, the condition of the land before and after grading.

c. The grading plan shall provide information regarding the location and source of imported fill material, and the location for disposal of excess excavation material.

d. Where a grading activity is to occur in increments or phases, the plan shall also include the plan for future site development and the proposed grading of future increments.

4. Construction Schedule.

a. Construction increments shall be described in detail and identified on the project plan.

b. The schedule will indicate completion dates for each construction increment and the construction sequence of erosion and sediment control measures. Each increment phase of work shall have an approved Environmental Protection Plan and Soil Erosion and Sedimentation Control Plan from the Agency.

c. The Agency shall check the adequacy of the schedule with respect to short term and long term erosion anticipated on the project site. The construction schedule shall be checked to ensure prompt establishment of protective vegetation with full recognition of climatic and other factors that influence its establishment.

5. Storm water Drainage System and Control of Site Water Runoff.

a. The proposed temporary and permanent, natural and man-made, storm water drainage systems shall be depicted in detail in the drawing plans, including, but not limited to, dimensions, alignments and elevations of all structures as well as the anticipated volume and velocity of the storm water. Design calculations for the drainage systems and siltation basins, best management practices, and other pertinent structures, shall be submitted. The following shall also be provided:

i. The runoff to be expected during and after the proposed development;

ii. The size of drainage areas above cuts and slopes;

iii. Estimate soil loss volume;

iv. The methods for trapping sediments, reducing erosion of

drainage ways, and for controlling the collection and discharge of storm water during and after construction.

v. The method and schedule of construction of waterway crossings. Sediment control structures for natural waterways shall be scheduled for installation prior to any earth-moving operations.

b. Adequate provisions shall be made to prevent surface waters from damaging the cut face of an excavation or the sloped surfaces of a fill. Positive drainage shall be provided to prevent the accumulation or retention of surface water in pits, gullies, holes or similar depressions. All drainage facilities shall be designed to carry surface water runoff to a storm drain that will discharge to a catchment facility within the project site. The Administrator may require such drainage structures and pipes to be constructed or installed, which in his opinion, are necessary to prevent erosion damage and to adequately carry off surface waters. The flow of any existing and known natural underground drainage shall not be impeded or changed so as to cause damage to adjoining property.

c. During construction, all storm sewer inlets shall be protected with silt traps.

d. If a project to be developed is covered under the Federal Storm Water Regulations (40 CFR Parts 122 & 123), a notice of intent to discharge storm water to surface and marine waters of Guam must be submitted to US Environmental Protection Agency and a copy furnished GEPA. An NPDES permit which authorizes the discharge must also be secured.

e. Structural measures such as berms, dikes, traps, basins, shall be installed prior to any other grading, clearing, or disturbance of the existing surface of the site.

f. Diversion Terraces.

i. Diversion terraces shall be constructed up-grade of a project area to convey runoff around the project area. For temporary diversions, the channel shall have capacity to convey 1.6 cubic feet per second per acre of land tributary to it. For permanent diversions, the channel shall have capacity to convey 2.75 cubic feet per second per

acre of land tributary to it.

ii. Diversion terraces shall be grassed or lined with erosion resistant material to prevent accelerated erosion within the channel.

iii. Outlet structures shall be designed to maintain a discharge velocity of less than 2.0 feet per second and all areas affected by the construction activity shall be stabilized before the outlet structures shall be used.

g. Interceptor Channels.

i. Interceptor channels may be used within the project area to reduce the velocity of the flow and thus prevent accelerated erosion.

ii. Water collected by interceptor channels shall be conveyed to sedimentation basins or to vegetated areas but not directly to streams.

iii. Outlets to vegetated areas shall be designed to maintain an outlet velocity of less than 2.0 feet per second. Outlet structures shall be screened to lower the amount of suspended solids in the discharge water.

h. Channels of Conveyance.

All channels used to convey water through a project area shall be designed to have a velocity of less than 1.5 feet per second. Where this is not possible, the channel shall be grassed or lined with erosion resistant material.

i. Sedimentation Basins.

i. The basin shall be cleaned when the storage capacity of the basin is reduced to five thousand (5,000) cubic feet per acre of project area tributary to the basin.

ii. Water from a sedimentation basin shall not be discharged to a natural waterway. Designs of sediment basins must provide for enough storage to give time for runoff water to be leached into the ground.

iii. Outlets of sedimentation basins shall be screened and designed in a manner which does not discourage regular maintenance.

iv. Sedimentation basins shall be structurally sound and properly secured to protect them from unauthorized acts of third party activities.

6. Cut and fill.

a. The conditions of the following subsections may be modified by the Administrator based on a supportive engineer's soils report, and receipt of approvals from the owner and concerned agencies:

i. Height. Where a cut or fill is greater than fifteen (15) feet in height, terraces, or benches shall be constructed at vertical intervals of fifteen (15) feet except where only one bench is required, the single bench shall be constructed at the midpoint. The minimum width of such terraces or benches shall be at least eighteen (18) feet and provided with drainage provisions to control erosion on the slope and face and bench surface.

ii. Cut Slopes. Under the following conditions, no cut may be steeper in slope than the ratio of its horizontal to its vertical distance as shown below:

(a) 2 horizontal to 1 vertical in unweathered rock or mudrock;

(b) 2 horizontal to 1 vertical in decomposed rock; or

(c) 2 horizontal to 1 vertical in soils of low plasticity for cuts of any height in highly plastic soils. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

iii. Fill slopes shall not be steeper than the ratio 3 horizontal to 1 vertical except that fill using highly plastic clays shall have slopes specifically recommended in the engineer's soils report signed by a professional civil engineer, and approved by the owner. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

b. Fill material shall be selected to meet the requirements and conditions of the particular fill for which it is to be used. The fill material shall not contain vegetation or organic matter. Where rocks, concrete, or similar materials of greater than eight (8) inches in diameter are incorporated into the fill, they shall be placed in accordance with the recommendation of the professional civil engineer.

c. Before placing fill or stockpiling, the natural ground surface shall be prepared by removing the vegetation and, shall be notched by a series of benches and/or subsurface drains installed.

d. No fill shall be placed over any waters of Guam (e.g.; spring, marsh, wetlands), refuse dumps, or soft, soggy or springy foundations. The plan must highlight possible wetland characteristics on the site and adjacent properties.

e. Fill materials shall be spread and compacted in a series of eight (8) inch to ten (10) inch layers, unless otherwise recommended by the professional civil engineer. For slopes, the fill shall be compacted to ninety five percent (95%) maximum density as determined by the most recent ASTM Soil Compaction Test D1557. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

f. Distance from property line. The following requirements may be modified by the Administrator when cuts or fills are supported by retaining walls or when the permittee submits an engineer's soils report stating that the soil conditions will permit a lesser horizontal distance without causing damage or danger to the adjoining property. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability. The horizontal distance from the top of a cut slope or the bottom of a fill slope to the adjoining property line shall not be less than as follows:

Heights of cut or fill	Distance from property line (in feet)
Zero feet to 4 feet	4
More than 4 feet to 10 feet	6
More than 10 feet to 15 feet	8
More than 15 feet	10

7. Maintenance Procedures.

a. A maintenance program for the erosion and sedimentation control structures and facilities shall be established. The program shall include, but not be limited to, a schedule for inspecting the facilities and for removing and disposing of sediment materials from the control structures, or project area, and specific duties of the designated maintenance personnel.

b. If the original owner has sold the property, the subsequent owner shall be responsible for maintaining the permanent measures that have been installed on the property.

8. Disposal of Spoil Materials.

The information concerning the disposal of spoil materials shall include the following: type of spoil material; location of disposal area; method for processing and disposing of spoil materials; procedures for preventing soil loss to adjacent watercourses; and, if intending to burn spoil materials, burning procedures for combustible spoil material. Burning requires a permit from the Guam Fire Department.

9. Stockpiles.

The following information shall be provided: source of stockpile material; location, slope, and height of stockpile; duration that the material is to be stockpiled; provisions to prevent erosion and sediment loss from rain and wind action; plan for removing stockpiles at project completion.

10. Stabilization of Affected Areas.

a. Stabilization of slopes, channels, ditches, berms, diversions, silt dams, or any disturbed areas shall begin as soon as possible and no later than thirty (30) calendar days after the final grade or final earth-moving activities has been completed.

b. Electric power, and telephone trenches are to be stabilized as soon as possible and no later than thirty (30) days after backfill

c. Stabilization of stream banks shall be scheduled during periods of expected low rainfall.

d. Where it is not possible to permanently stabilize a disturbed area immediately after the final earth-moving has been completed or where the activity ceases for more than thirty (30) calendar days, interim or temporary stabilization measures shall promptly be implemented and enforced.

e. Any disturbed area not paved, sodded or built shall be seeded and mulched with vegetative cover appropriate to the soil type, as recommended by an engineer, or the condition of the area based on soil test analysis done by a laboratory. This condition does not prohibit the use of matting, gabion, armor coating on erodible surfaces or other type of vegetative cover that will minimize erosion.

f. All structural sediment control measures are to remain in place until permission for their removal has been obtained from the Agency.

11. Protection and Removal of Native Vegetation.

a. In order to protect native vegetation from construction impacts, the

following information shall be provided: location and description of native vegetation whose root zone will be affected by compaction, fills, trenches, and changes in the groundwater table; measures which will prevent conditions damaging to vegetation; and criteria used to determine removal;

b. Whenever feasible, natural vegetation should be retained. If their removal is necessitated, they shall not be stored or deposited along banks of streams, rivers or natural water courses after being uprooted, or displaced from the ground by excavation, clearing or grubbing. Removed vegetation shall be disposed of at a disposal site approved by the Administrator, and removed from the site within a reasonable time, not to exceed one (1) month from date of removal.

12. Establishment of Vegetation.

a. Where the establishment of vegetation is required on slopes of cut and fill, graded areas, and watercourses, etc., the following information shall be provided:

i. Location and areas to be vegetated;

ii. An indication of whether vegetation is to be temporary or permanent;

iii. Type and quantity of seeds or plants;

iv. Ground conditions, including: soil surface condition, pH, permeability, size distribution, slope angle, slope length, and aspect, nutrients;

v. Type and quantity of mulch;

vi. Type and quantity of fertilizer;

vii. Method and schedule of seeding, mulching, planting, and fertilizing;

viii. Irrigation schedule.

b. The plan shall provide for the revisiting of the location every three (3) months to verify that vegetation has been successfully established. If not successful the site must be revegetated until the area is successfully revegetated.

13. Certification. The Plan shall be stamped and signed an engineer.

Section 10106. Special Requirements.

A. Protection of adjoining properties.

Any person performing or causing to be performed any excavation or fill shall, at his own expense, provide the necessary means to prevent the movement of earth to

the adjoining properties, and to maintain the existing natural grade of adjoining properties.

B. Protection of public utilities.

Any person performing or causing to be performed any excavation or fill shall be responsible for the maintenance or restoration of street pavements, sidewalks and curbs, and improvements of public utilities which may be affected. Such maintenance shall be in accordance with the requirements of the Department of Public Works, government of Guam agencies and affected public utilities. At cuts fronting any street, a suitable and adequate barrier shall be installed to provide protection to the public.

C. Removal of silt or other debris.

Any person depositing or causing to be deposited, any silt or debris in ditches, water courses, drainage facilities, and public roadways, shall remove such silt or other debris. In case such person shall fail, neglect or refuse to comply with the provisions of this Section within forty-eight (48) hours after written notice served upon him, either by mail or by personal service, the Administrator may proceed to remove the silt and other debris or to take any other action he deems appropriate. The costs incurred for any action taken by the Administrator shall be payable by such person.

D. Safety precautions.

At any stage of the grading, grubbing, or stockpiling, if the Administrator finds that further work as authorized by an existing permit is likely to create soil erosion problems or to endanger life, limb or property, he may require safety precautions. These precautions may include but are not limited to: flattening exposed slopes; constructing additional silting or sediment basins, providing drainage facilities or benches; removing rocks, boulders, debris and other dangerous objects which, if dislodged, are likely to cause injury or damage; or constructing fences or other suitable protective barriers.

E. Creation of individual building sites.

Hillside lots shall be graded in such a manner that any parcels which may be created, including all separate building sites which may be contained within said parcels, can be satisfactorily graded and developed as individual building sites.

F. Protection of Sink Holes.

Earth-moving operations shall not be performed in sink holes or in such close

proximity as to threaten their viability, function or the conveyance of surface water into such features unless specifically authorized by the administrator. In the event a developer proposes to modify or use a sinkhole, an environmental and hydrogeologic assessment must be performed to ensure adverse affects will not result, including but not limited to the displacement of groundwater, interference with well production, significant changes to groundwater recharge, flooding, or the threat or introduction of any pollutant to groundwater, regardless of zone or category.

Section 10107 Project Completion.

A. Products to be submitted.

1. As-built/graded plan, prepared by an engineer or land surveyor, upon completion of an earth-moving operation covering an area of greater than one (1) acre;

2. Soils report, when earth-moving operations involve cuts or fills for which an engineer's soils report is required. The report shall contain:

a. A description of materials used in the fill and its moisture content at the time of compaction;

b. The procedures used in depositing and compacting the fill;

3. A description of the preparation of the original ground surface before making the fill, but not limited to benching and subsurface drainage;

4. A plan or tabulation showing the general location and elevation of compaction tests made in the fill together with a tabulation of relative compaction densities obtained at each location, the location of sub-drains, and other pertinent features of the fill necessary for its stability; and

5. Certification that the work was done in conformity with these regulations, the approved plans and specifications, and the engineer's soils report.

B. Final inspection and approval.

The permittee or his agent shall notify the Administrator or his representative when the earth-moving operation is ready for final inspection. Final approval shall not be given until all approved work has been completed. Final approval shall be dependent on installation of all drainage structures and their protective devices, establishment of a healthy vegetation growth in conformance with the approved plans and specifications, and submittal of any required reports.

Section 10108. Permit Fees.

A. Applicability.

All applicants (e.g.; private individuals, federal agencies, and government of Guam agencies or departments, including autonomous and semi-autonomous agencies) for earth-moving operations permits, shall pay required permit fees.

B. Grading permits.

1. Before issuing a grading permit clearance, the Administrator shall collect site grading plan review fees based on the volume of excavation or fill measured in place according to the following schedules:

TABLE A - GRADING PLAN REVIEW FEES

50 cubic yards or less	No Fee
51 to 100 cubic yards	$15.00
101 to 1,000 cubic yards	$22.50
1,001 to 10,000 cubic yards	$30.00
10,001 to 100,000 cubic yards	$30.00 for the first 10,000 cubic yards, plus $15.00 for each additional 10,000 cubic yards or fraction thereof.
100,001 to 200,000 cubic yards	$165.00 for the first 100,000 cubic yards, plus $9.00 for each additional 10,000 cubic yards or fraction thereof.
200,001 cubic yards or more	$225.00 for the first 200,000 cubic yards, $4.50 for each additional 10,000 cubic yards or fraction thereof.

2. The fee for a grading permit authorizing additional work to that under a valid permit shall be the difference between the fee paid for the original permit and the fee shown for the entire project.

C. Fees for additional plan reviews.

Additional plan reviews required for any changes, additions or revisions to approved plans are Thirty Dollars ($30.00) per hour, or the total hourly cost to the jurisdiction, whichever is the greatest. This cost shall include those associated with supervision, overhead, equipment, hourly wages and fringe benefits of the employees involved.

D. Clearing and grubbing permits.

Before issuing a clearing and grubbing permit clearance, the Administrator shall collect a clearance fee of Twenty Dollars ($20.00) for clearing & grubbing areas greater than fifteen thousand (15,000) square feet plus Two Dollars ($2.00) per each additional one thousand (1,000) square feet or fraction thereof. No fee shall be charged for clearing and grubbing less than fifteen thousand (15,000) square feet.

E. Stockpiling permits.

Before issuing a stockpiling permit clearance, the Administrator shall collect a permit clearance fee of Seven Dollars and fifty cents ($7.50) for stockpiling in excess of the one hundred (100) cubic yards, plus One Dollar and fifty cents ($1.50) for each additional one hundred (100) cubic yards or fraction thereof.

F. Work occurring without a permit.

Where work for which a permit is required by these regulations has commenced or has been accomplished without a permit, a permit shall be obtained, and two times the fees specified above shall be assessed, provided that such work complies with or may be made to comply with the requirements of these regulations. If the grading/clearing/stockpiling/ grubbing work accomplished or commenced cannot be made to comply with the provisions of these regulations, the person or persons responsible for the initiation or accomplishment of such grading work shall restore the land to its original condition and shall obtain a certificate of completion thereof from the Administrator. Notwithstanding the above, the person or persons responsible for such grading/clearing/grubbing/stockpiling shall be deemed to have violated the provisions of these regulations by performing such activity(ies) without a permit.

G. Water Protection Fund.

All permit fees, monetary charges, fines, and penalties assessed, collected or received by GEPA pursuant to this regulation and other regulations promulgated under the Water Pollution Control Act, as well as contributions and assets made for the purpose of improving

water quality or preventing water pollution shall be deposited into the Water Protection Fund. The Water Protection Fund shall be established as separate and apart from any other funds of the government of Guam, and shall be administered by the Administrator. Independent records and accounts shall be maintained in connection therewith. The funds shall be used for the administration and implementation and enforcement of the Water Pollution Control Act and regulations promulgated from said Act, for educational programs and grants for research and development, advertisement promotions, and inspections of facilities to prevent or minimize erosion that contributes to pollution of the waters.

Section 10109. Permit Expiration.

A. Grading, clearing and grubbing and stockpiling permits.

All grading, clearing and grubbing or stockpiling permits shall expire and become null and void under the following circumstances:

1. If permitted work is not started within one hundred eighty(180) calendar days after the date of issuance of the permit; or

2. If work is suspended or abandoned any time after the work is commenced for a minimum period of sixty (60) days; or

3. If work is continued without interruption for one (1) year, beginning with the date of issuance of the permit, or is completed within the time frame provided in the approved permit application, whichever comes first.

B. Stockpiling permits.

Every stockpiling permit shall expire and become null and void one (1) year after the date of issuance. Prior to the expiration of the stockpile permit, all stockpiled material temporarily stored on the premises shall be removed from the premises or used on the premises as fill material under a grading permit for fill.

C. Permit expiration.

Once a permit has expired, the owner/applicant shall pay the required fees and obtain a new permit pursuant to these regulations, before beginning new work. If the owner begins work without obtaining a new permit, the owner shall pay the necessary penalty fees pursuant to these regulations.

Section 10110. Stop Work Order.

A. Unacceptable conditions.

Whenever the Administrator determines that any permitted clearing &

grubbing, grading, or stockpiling is or may become unstable or dangerous, endangers property, adversely affects the safety, use, or stability of a public way or drainage channel, or results in a violation of the Guam Water Quality Standards, the owner of the property, or other person or agent in control of the property, on receipt of notice in writing from the Administrator, shall abate the danger, implement necessary corrective measures, and shall conform with the requirements of these regulations. The Administrator, or his authorized representative, shall have the authority to enter the property and investigate, and enforce the provisions of this Section. A hearing will be held as required under 10 GCA Section 47109.

B. Stop work order procedures.

If the Administrator determines that the work must stop due to unstable or dangerous conditions, the Administrator shall issue a stop work order to the owner/contractor of the property and transmit a copy of the order to the Department of Public Works Building Permit Section. Both GEPA and the Department of Public Works shall jointly enforce the stop work order.

C. Work occurring without a permit.

Notwithstanding the above, if an earth-moving operation is occurring without a valid permit the Agency can order the operation to immediately cease and either require the violator to obtain an after the fact permit, or if the operation cannot be permitted, to have the violator take corrective measures to return the land to its previous condition.

Section 10111. Suspension or revocation of Permit.

A. Criteria for suspending or revoking permits. The Administrator shall, in writing, suspend or revoke a permit issued under the provisions of these regulations whenever: the permit has been issued on the basis of incorrect information supplied by the permittee; existing site conditions are found not to be in accordance with the terms and conditions of the permit; it is determined that the permittee has not complied with a provision of any other applicable law, ordinance rule or regulation of Guam; the clearing and grubbing, grading or stockpiling discloses conditions that are objectionable or unsafe; or an immediate danger exists in a downstream/adjacent area.

B. Process for recommencing work. When a permit has been suspended the permittee may submit details and proposals for compliance with the provisions of these regulations, and any other applicable laws, rules or regulations of

Guam. Upon approval of such plans and proposals by the Administrator, the Administrator shall authorize the permittee, in writing, to proceed with the work.

C. Non-compliance. Non-compliance with the correction notice or stop work order issued for the construction of the sediment and erosion control practices, and/or the construction of storm water management facilities may result in the revocation of the issued permit.

Section 10112. Inspections.

A. Access to the site.

Each permit issued under these regulations shall be deemed to include the right of the Administrator or his authorized representative to enter at reasonable time upon any property to inspect the clearing and grubbing, grading, or stockpiling operations. Such inspections may take place before, during and after any earth change activity for which a permit has been issued to ensure that control measures are properly installed or performed and maintained at the expense of the applicant.

Section 10113. Enforcement.

A. Corrective Measures.

If the Agency determines that a person is conducting operations which are causing or are likely to cause pollution, the Administrator may order the owner or operation to take corrective measures needed to prevent or cease the pollution.

B. Stop Work Order.

If the operation is causing or is likely to cause alteration of physical, chemical, or biological properties to the waters of Guam, resulting from sediment, deposition presenting an imminent and substantial danger to the public health, safety or welfare, or the health of animals, fish or aquatic life, to a public water supply or to other reasonable uses of water, the Administrator can issue an order requiring the cessation of relevant activities and implementation of corrective measures. In emergency situation, any order issued by the Administrator shall become final no later than twenty-four (24) hours after the date of the notice and order served.

C. Voluntary compliance.

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

D. Permit violations.

Whenever the Agency has reason to believe that a violation of any Section of these regulations has occurred, it shall 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 fifteen (15) days after the date of the notice and order 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 shall require that the alleged violator or violators appear before the Agency for a time and place specified in the notice and answer the charges complained of, or the Agency may initiate action pursuant to Section 10114 of these regulations.

E. Corrective actions from Hearing.

If, after a hearing is held pursuant to 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 soil erosion.

F. Court Appeal.

No later than fifteen (15) 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.

G. Corporate Liability.

(a) A corporation may be found liable or convicted for (1) any violation or offense committed in furtherance of its affairs on the basis of conduct performed, authorized, requested, commanded or recklessly tolerated by (A) the board of directors; (B) a managerial agent acting in the scope of his employment; or (C) any other person

for whose conduct the statute defining the violation or offense provides responsibility; (2) failure to perform a duty imposed by law; (3) any violation or offense committed by an agent of the corporation acting in the scope of his employment in furtherance of its affairs.

(b) As used in this Section, managerial agent means an agent of the corporation having duties of such responsibility that his conduct may fairly be found to represent the policy of the corporation.

H. Emergency Procedures.

1. Any other provisions of law to the contrary notwithstanding, if the Administrator finds that a generalized condition of pollution exists, and that it creates an emergency requiring immediate action to protect the intended uses of the water as designated in the Standards of Water Quality for Waters of Guam, or to protect human health or safety, the Administrator, with the concurrence of *I Maga'lahi*, shall order persons causing or contributing to the pollution to reduce or discontinue immediately the pollutants, and such order shall fix a place and time, not later than twenty-four (24) hours thereafter, for a hearing to be held before the Agency. Not more than twenty-four (24) hours after the commencement of such hearing, and without adjournment thereof, the Agency shall affirm, modify or set aside the order of the Administrator.

2. In the absence of a generalized condition of pollution of the type referred to in Subsection (1), but if the Administrator finds that pollutants from the operation of one or more polluting sources is causing imminent danger to the intended uses of the water as designated in the Standards of Water Quality for Waters of Guam or is causing imminent danger to human health or safety, he may order the person or persons responsible for the operation or operations in question to reduce or discontinue pollutants immediately, without regard to the provision of Subsection (a) of §47109, Chapter 47, 10 GCA of this Act. In such event, the requirements for hearing and affirmance, modification or setting aside of orders set forth in Subsection (1) of this Section apply.

Section 10114. Penalties, Liability, and Severability Clause.

A. Penalties.

(a) **Field citations** - Any person violating the Water Pollution Control Act or these regulations may be served by the officer or inspector with a pollution citation.

Water Pollution citation violations shall be settled by amount of no less than One Hundred Fifty Dollars ($150.00) per violation and not more than Three Thousand Dollars ($3,000.00) per violation. Cost to take corrective action and community service in lieu of all or a portion of the fine may be accepted by the Board. The Agency will establish a scale amount to assist in determining the penalty amount for settlement. The Board must hold a public hearing to establish and notify the public of the monetary citation fines under this subsection before fines can be imposed. The citation will provide that the violator can request a hearing with the Guam Environmental Protection Agency Board of Directors (the "Board"). The Board can impose a fine up to Three Thousand Dollars ($3,000.00) per violation noted in the citation. Costs of corrective action and community service in lieu of all or a portion of the fine may be accepted by the Board. Fines imposed and collected under this Section will be deposited into the Water Protection Fund. Judicial review may be had of any Board decision by any party affected adversely by it. If the Board decision is not in accordance with law or not supported by substantial evidence, the Court shall remand the Board to take action according to law or the evidence.

(b) **Administrative** - Whenever on the basis of any information available the Administrator reasonably determines that any person has violated the provisions of this rules and regulations or a lawful order, or has violated any permit condition or limitation, the Administrator may assess a civil penalty that may not exceed Ten Thousand Dollars ($10,000.00) per day per violation that the violation continues, except that the maximum amount of any civil penalty under this Section shall not exceed One Hundred Twenty-five Thousand Dollars ($125,000.00).

(1) Before issuing an order assessing a civil penalty, the Administrator shall give to the person to be assessed such penalty, written notice of the Administrator's proposal to issue such order and the opportunity to request, within thirty (30) days of the date the notice is received by such person, a hearing on the proposed order. Hearing will be conducted as provided under the Administrative Adjudication Law (AAL). In lieu of an order, the Agency may require that 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 10114 of this regulations.

(a) If, after a hearing held pursuant to the AAL, the Board 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 pollution or discharges involved or for the taking of such other correction action as may be appropriate.

(b) If, after hearing on an order contained in a notice, the Board finds that no violation has occurred or is occurring, it shall rescind the order.

(c) 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 may prescribe timetables for the necessary action in preventing, abating or controlling the pollution or discharge.

(2) In determining the amount of any penalty assessed, the Administrator shall take into account the nature, circumstances, extent and gravity of the violation or violations and with respect to the violator, ability to pay, any prior history of such violations, the degree of culpability, economic benefit or savings if any resulting from the violation, and such other matters as justice may require.

(3) If any person fails to pay an assessment of a civil penalty after the order making the assessment has become final, or after a Court in an action has entered a final judgment in favor of the Administrator, the Administrator shall request the Attorney General to bring a civil action to recover the amount assessed. In such an action, the validity, amount, and appropriateness of such penalty shall not be subject to review.

(4) The Administrator may settle, modify or release, with or without conditions, any administrative penalty which may be imposed under this Section.

B. Liability.

The provisions of these regulations shall not be construed to relieve or alleviate the liability of any person for damages resulting from performing, or causing to be performed, by grading, grubbing or stock-piling operation. The government of Guam, GEPA, its officers and employees shall be free from any liability, cost or damage which may accrue from any grading, grubbing or stockpiling or any work connected therewith, authorized by these regulations.

C. Severability Clause.

If any provisions of these rules, or its application to any person or circumstances, is held invalid, the application of such provision to other persons or circumstances, and the remainder of these rules, shall not be affected thereby.

COPY

MINA' BENTE SINGKO NA LIHESLATURAN GUÅHAN
TWENTY-FIFTH GUAM LEGISLATURE
155 Hesler Street, Hagåtña, Guam 96910

June 29, 2000

RECEIVED
JUN 29 2000
GOVERNOR'S OFFICE
CENTRAL FILES

The Honorable Carl T.C. Gutierrez
I Maga'lahen Guåhan
Ufisinan I Maga'lahi
Hagåtña, Guam 96910

Dear *Maga'lahi* Gutierrez:

Transmitted herewith are Substitute Bill Nos. 281(COR) & 392(LS) which were passed by *I Mina'Bente Singko Na Liheslaturan Guåhan* on June 23, 2000.

Sincerely,

JOANNE M.S. BROWN
Senator and Legislative Secretary

Enclosure

MINA'BENTE SINGKO NA LIHESLATURAN GUAHAN
2000 (SECOND) Regular Session

CERTIFICATION OF PASSAGE OF AN ACT TO *I MAGA'LAHEN GUAHAN*

This is to certify that Substitute Bill No. 392 (LS) "AN ACT TO *AMEND* THE GUAM ENVIRONMENTAL PROTECTION AGENCY GUAM SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS," was on the 23rd day of June 2000, duly and regularly passed.

ANTONIO R. UNPINGCO
Speaker

Attested:

JOANNE M.S. BROWN
Senator and Legislative Secretary

This Act was received by *I Maga'lahen Guahan* this 29th day of June, 2000, at 4:84 o'clock P.M.

Assistant Staff Officer
Maga'lahi's Office

APPROVED:

CARL T. C. GUTIERREZ
I Maga'lahen Guahan

Date: _____

Public Law No. _____

MINA'BENTE SINGKO NA LIHESLATURAN GUÅHAN
2000 (SECOND) Regular Session

Bill No. 392 (LS)
As substituted by the Committee
on Natural Resources.

Introduced by: J. M.S. Brown
K. S. Moylan
C. A. Leon Guerrero
F. B. Aguon, Jr.
E. C. Bermudes
A. C. Blaz
E. B. Calvo
M. G. Camacho
Mark Forbes
L. F. Kasperbauer
A. C. Lamorena, V
V. C. Pangelinan
J. C. Salas
S. A. Sanchez, II
A. R. Unpingco

AN ACT TO *AMEND* THE GUAM ENVIRONMENTAL PROTECTION AGENCY GUAM SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS.

BE IT ENACTED BY THE PEOPLE OF GUAM:

Section 1. Legislative Findings and Intent. In accordance with the Administrative Adjudication Law, §9303 *et seq.* of Title 5 of the Guam Code Annotated, as amended by Public Law Number 24-27, on December 10, 1997, the Guam Environmental Protection Agency ("GEPA") transmitted on January 25,

2000 to *I Liheslaturan Guåhan*, the "Guam Environmental Protection Agency Guam Soil Erosion and Sedimentation Control Regulations," which were adopted on April 24, 2000. *I Liheslaturan Guåhan* wishes to amend the rules and regulations as proposed by GEPA to further strengthen its implementation.

Section 2. Approval of GEPA Regulations. *I Liheslaturan Guåhan* hereby approves the GEPA rules and regulations, **Exhibit A**, entitled, "Guam Environmental Protection Agency Guam Soil Erosion and Sedimentation Control Regulations."

Section 3. Severability. *If* any provision of this Law or its application to any person or circumstance is found to be invalid or contrary to law, such invalidity shall *not* affect other provisions or applications of this Law which can be given effect without the invalid provisions or application, and to this end the provisions of this Law are severable.

Section 4. Effective Date. Effective date of this Act shall be on October 1, 2000.

EXHIBIT A

GUAM SOIL EROSION AND SEDIMENT CONTROL REGULATIONS

TABLE OF CONTENTS

"may" is permissive.

3. A word or term not interpreted or defined by this article shall be used with a meaning of common or standard utilization.

Section 10102. Definitions.

A. Meanings of words and terms. The following words and terms, when used in these regulations, shall have the following meanings, unless the context clearly indicates otherwise:

1. Accelerated erosion: The removal of the surface of the land through the combined action of man's activities and natural processes at a rate greater than would occur because of the natural process alone.

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

3. Agency: The Guam Environmental Protection Agency (GEPA).

4. Board: Board of Directors, Guam Environmental Protection Agency.

5. Building pad: The compacted land area on which a structure is to be built.

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

7. Channel: A natural stream that conveys water; a ditch excavated for the flow of water.

8. Check dam: A structure used to reduce or prevent excessive erosion by reduction of velocities in water courses.

9. Chutes/flumes: -Channels of concrete or comparable material that are used to conduct storm runoff down slopes where concentrated runoff would cause slope erosion.

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

11. Clearing and grubbing: The removal of vegetation, including trees, timber, shrubbery, and plants, when said vegetation is dislodged or uprooted from the

surface of the ground.

12. Compaction: The densification of a fill by mechanical means.

13. Crimping: A method used to secure fiber mulches. The operation is performed by a crimping machine which partially punches the mulch into the soil.

14. Deflection Structures: Stones, or concrete or wooden groins placed in a river or stream at an angle outward from the shore in a downstream direction to deflect the current away from a critical area of the bank.

15. Denuded: Bare; naked; stripped.

16. Developer: Any person who is engaged in land development.

17. Dissipate: To scatter; disperse; cause to vanish.

18. Diversion: To change the accustomed course of all or part of a stream or of sheet runoff.

19. Diversion dike: A temporary ridge of soil constructed at the top of a cut or fill slope to divert overland flow from small area away from unstabilized slopes.

20. Diversion ditch: A ditch constructed to channel stream or sheet runoff into desired directions, and may also be referred to as Interceptor Channel.

21. Diversion terrace: A channel or dike constructed up slope of an area for the purpose of diverting storm water runoff.

22. Earth material: Any rock, coral, sand, gravel, natural soil or fill /or any combination thereof.

23. Earth-moving operations: Human caused alterations to the existing topography. Any construction or other activity which disturbs the surface of the land including, but not limited to, clearing, grading, excavation, embankment, construction, and development, subdivision development, mineral extraction, sand mining, and the moving, depositing or storing of soil, rock or earth.

24. Embankment: A placement of soil, rock, or other material by man.

25. Engineer: A person duly registered as a professional civil and/or structural engineer on Guam.

26. Engineer's Soils Report: A report on soils conditions prepared by a professional engineer qualified in the practice of civil and/or structural engineering.

27. Environmental Impact Statement: A comprehensive and systematic assessment of environmental impacts which would likely result from a human activity

or action. Its purpose is to provide, in part, a basis for making decisions which will affect the human condition as well as the purely biological or natural conditions of our environment. It should provide a reasonable set of alternatives and a preferred option which appropriately balances various environmental concerns, including financial, social or cultural concerns. The assessment should rely on proven assessment methods both scientific and political.

28. Environmental Protection Plan: A document describing, for a proposed development, the methods/equipment selected for use, expected environmental problems during and after construction, and methods and equipment chosen to avoid, mitigate or control potential adverse effects on the environment.

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

30. Erosion check: A slit trench filled with porous matter that is oriented perpendicular to the direction of flow in a ditch or swale to prevent the formation of rills and gullies.

31. Erosion and sediment control: The control of solid material, both mineral and organic, during an earth-moving operation, intended to prevent its transport out of the operation area by means of air, water, or gravity.

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

33. Excavation or cut: A cavity formed by digging, cutting, quarrying, uncovering, displacing or relocating soil or rock.

34. Existing grade: The grade prior to grading.

35. Fill: A placement of soil, rock, or other material by man to raise the existing ground elevation.

36. Finish grade: The final grade of the site which conforms to the approved plan.

37. Grading: Establishing a topographical profile by earth-moving operations involving cuts and fills or excavation or other earth work activities.

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

39. Interceptor channel: A channel or dike constructed across a slope for the purpose of intercepting storm water, reducing the velocity of flow, and diverting it to outlets where it can be disposed.

40. Interceptor dike: A temporary ridge of compacted soil across a graded right-of-way that is not subject to vehicular traffic, designed to intercept and divert storm runoff to temporary outlets where it can be disposed of with minimal erosion.

41. Intermittent stream: A stream or portion of a stream that flows only in direct response to precipitation and receives little or no water from springs other sources.

42. Jute Netting: A heavy woven jute mesh laid directly over seedbeds to minimize soil erosion in critical areas until vegetation can become firmly established. Due to its thick fibrous composition, it also functions as a mulch to conserve soil moisture, insulate against solar insulation, dissipate energy from falling raindrops and reduce erosion caused by overland flow.

43. Key: A designed compacted fill placed in an earthen trench excavated beneath the toe of a proposed fill slope.

44. Land developer: Any person who is engaged in land development.

45. Land development: The constructing, installing, placing, planting, or building of surface structures, utility lines, shopping centers and malls, golf courses, apartment complexes, schools, roads, highways, parking areas, or any other similar activity.

46. Level spreader: An outlet constructed at zero grade across a slope to collect concentrated runoff and covert it into sheet flow with non-erosive velocities onto areas stabilized by existing vegetation.

47. Mulch: A natural or artificial layer of plant residue (fiber mulches) other materials, such as sand or paper, on the soil surface.

48. Mulch blanket: Blanket type materials used in the establishment of vegetation on swales, ditches and steep slopes where fiber mulch products do not provide sufficient levels of protection during germination and early growth.

49. Netting: A method of securing fiber mulches through the use of jute, plastic, paper or fiberglass nets on steep exposed slopes where crimping is not possible and tacking will not perform satisfactorily.

50. Outcrop: To come to, or be exposed on the surface.

51. Permeability: The property of a porous material which permits the passage or seepage of fluids, such as water for example, or air through its interconnection voids.

52. Permeable: Having a texture through which water can move.

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

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

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

56. pH: A numerical measure of the acidity or hydrogen ion activity of a soil. (The neutral point is pH = 7.0. All pH values below 7.0 are acid and all above 7.0 are alkaline).

57. Right-of-way: Right of passage over another person's land; a route that is lawful to use; a strip of land acquired for transport or utility construction.

58. Riprap: Broken rock, cobbles or boulders placed on earth surfaces such as the face of a dam or the bank of a stream, for protection against the action of water or waves; also applied to brush or pole mattresses, or brush and stone, or other similar materials used for soil erosion control.

59. Rough grade: The stage at which the grade approximately conforms to the approved plan.

60. Runoff: Water from rain or irrigation that flows over the ground to surface, marine or ground waters. 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.

61. Sandbag sediment barrier: Temporary barriers or diversions that are constructed of sandbags.

62. Sectional down drain: A prefabricated sectional conduit of half-round, bituminized fiber pipe or other material used to conduct storm runoff from one elevation to another without erosion of slope.

63. Sedimentation: The depositing of sediments.

64. Sediment retention basin: A temporary dam or basin, or a combination of both, that will trap and store sediment produced on exposed areas and delivered to the structure by storm runoff.

65. Sediments: Mineral or organic solid materials that settle to the bottom of water.

66. Site: The spacial location, under the same ownership, of an actual or planned structure or structures, or earth-moving activity.

67. Slope: An inclined ground surface, the inclination of which is expressed as a ratio of horizontal distance to vertical distance.

68. Soil: The unconsolidated mineral and organic material found on the earth's upper layer, that may be dug or plowed and in which plants can grow.

69. Soil engineering: The application of the principles of soil mechanics in the investigation, evaluation and design of civil works involving the use of earth materials, and the inspection and/or testing of the construction thereof.

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

71. Soil slopes: All denuded cut, fill or natural soil constituted slopes.

72. Stabilization: The proper placing, grading and/or covering of soil, rock or earth to insure its resistance to erosion, sliding, or other movements.

73. Stockpiling: Temporary open storage of earth materials upon any premises where a grading permit has been issued for the purpose of using the materials at some other premises at a future time.

74. Storm water management: The practice of using detention measure to reduce the impact of minor storms which cause accelerated erosion of stream channels and drainage ways (not to be confused with control of flood flows).

75. Storm water runoff: Rain that is not absorbed when it comes in contact with the soil and thus runs down hill into waters of Guam. This runoff may carry soil with it.

76. Strip planting: The planting of strips of wet soil tolerant, high erosion resistant vegetation in the critical area near the waterline of a major waterway, and the planting of conventional robust rooted grasses and legumes above the critical zone.

77. Subdivision: The division, re-division or change of lot lines of a lot, tract, or parcel of land for the purpose of leasing, transferring ownership, or development, either immediately or in the future.

78. Tacking: A method of securing mulches by the application of an asphalt or chemical binder which binds the individual fibers together to form a resistant blanket.

79. 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.

80. Terrace: A relatively level step constructed in the face of a grade slope surface for drainage and maintenance purposes.

81. Territory: The Island of Guam, United States of America.

82. Tetrahedron: Solid figure with four (4) triangular surfaces.

83. Uniform Building Code (UBC): The most recent edition of minimum standards to safeguard life or limb, health, property and 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.

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

85. Watershed: For any river, stream or other water body, the drainage area that contributes water to that water body.

86. Watershed divide: The line that follows the ridges or summits forming the exterior boundary of a drainage basin and separates one drainage basin from another.

87. Waterway: A natural course or constructed channel for the flow of water.

Section 10103. Permit Issuance and Denials.

A. *Permits Required.*

1. Unless exempted, no person shall commence or perform any grading, clearing, grubbing, embankment, filling, excavation or other earth-moving activity without a grading permit;

2. Unless exempted, no person shall commence or perform any stockpiling without a stockpiling permit.

B. Permit Application Process. An applicant shall obtain the required application from the Building Permit Section, Department of Public Works located at the One-Stop Permit Center, and shall complete and submit the application to the One-Stop Permit Center for review and approval of all concerned agencies, including the Guam Environmental Protection Agency.

C. Permit Application Contents.

1. A description of the proposed activity, including its purpose, proof of land ownership (title, deed or authorized letter) and other pertinent information as may be required by the Administrator.

2. A vicinity map or plan of the site indicating:

a. Site information. The location, including names and locations of streets, roadways, and right-of-ways; property line locations, dimensions and azimuths, easements and setbacks of property; the location of any utility and utility lines, buildings, structures and improvements on or within 100 feet of the site; prominent visible rock out-cropping; elevations, dimensions, location, extent and slopes of all proposed earth-moving activities shown by contours and/or other means; the area in square feet of the land to be affected; and the quantities of excavation and fill involved.

b. Water course information. Locations, dimensions and flow of springs, rivers, wetlands, wells and streams; natural drainage depressions, basins and sinks; flood plains on the project site and downstream locations which will undergo changes due to the proposed earth-moving operations; and existing and proposed water quality monitoring stations located on or nearby the project site.

c. Vegetation information. Location and type of existing trees with a diameter of 12 inches and greater.

3. Required maps will be prepared and signed by a licensed land surveyor. Grading plans and specifications will be prepared and signed by an engineer. Required maps should conform to the latest Zoning Code of Guam's Land Use Plan and subdivision law. The scale shall be no smaller than 1 inch = 50 feet or 1 inch = 5

meters.

4. An application for a stockpiling permit shall include: a plot plan showing the property boundaries; easements, setbacks, and location of the proposed stockpiles; quantities; height of stockpile; the kind/source of the material to be stockpiled; expected life of the stockpile, and any other information required by the Administrator to control dust, drainage or sedimentation problems. Where stockpiling is for the purpose of surcharging to stabilize or consolidate an area, the permittee shall submit an engineer's soil report which shall include data on the effect such surcharging will have on adjacent buildings or structures.

5. Required Plans.

a. Erosion and Sediment Control Plan; This plan is required for clearing, grading, grubbing, embankment or filling, excavation or other earth-moving operations not otherwise exempted by these regulations.

b. Storm Water Runoff Drainage System Plan. This plan, in addition to the Erosion and Sediment Control Plan, is required when the area to be graded is more than five thousand (5,000) square feet or a proposed cut or fill is greater than five (5) feet in height.

c. Both the Erosion and Sediment Control and Storm Water Runoff Drainage Systems Plans shall:

i. be prepared and signed by an engineer in accordance with these regulations, and the best management practices (BMP) guidance manual or other application of BMPs; and

ii. show the method to be used for controlling erosion and disposal of storm water runoff prior to and post construction, including drainage devices such as terraces, berms, ditches culverts, subsurface drains, sedimentation basins, and the estimated runoff quantities of the areas served by each drain and drainage structure.

d. Environmental Protection Plan will be required depending on the intensity and scope of the project. This plan will describe the methods and equipment to be used on site: expected or anticipated environmental problems during and after construction: and the methods and equipment that may be used to avoid, mitigate or control potential adverse effects on the environment.

6. When a proposed cut or fill is greater than five (5) feet or the proposed grading is on land with slopes exceeding five percent (5%), or when any fill is to be placed in a gully, or when the fill material will be a highly plastic clay, the applicant shall submit to the Administrator for the Agency's evaluation and review, an engineer's soils report signed by an engineer and approved by the owner. The soils report shall include data regarding the nature of the distribution and engineering characteristics of existing soils, and the subsurface conditions at the site. It shall recommend the limits for the proposed grading, the fill material to be used, the geotechnical calculations for the cut or fill area, and the manner of placing, including the heights and slopes of cut and fill sections.

7. When an activity or project is located within an environmentally sensitive area (e.g.; areas that affect seashore, rivers and streams, wetlands, critical habitats, and aquifers), an Environmental Impact Assessment (EIA) must be submitted, unless the Administrator determines in writing that the activity is exempted from EIA requirements.

8. If wetlands exist on the property to be cleared and grubbed, graded or used for stockpiling of earth materials, the wetlands must be identified with both field markings and by mapping on the site and/or grading plan(s). Wetlands cannot be cleared, grubbed, graded or otherwise be used as a stockpiling site without first obtaining both a valid Guam Wetland Development Permit and a U.S. Army Corps of Engineers Section 404 fill or discharge permit.

9. The Administrator may require that wetlands, on the property to be cleared, grubbed or used for stockpiling of earth materials, be officially delineated, in whole or in part, when conditions such as slope, soil stability, proximity of work or other performance related conditions warrant an official delineation. Individuals required to delineate wetlands in accordance with this provision shall apply the mapping requirements of the Guam Environmental Protection Agency Wetlands Mapping Policy, revised November 9, 1995.

10. Other permits, plans or approvals associated with and issued for the proposed project shall be submitted with the permit application. Activities described in the permit application shall be consistent with these permits, plans or approvals. Such documents include, but are not limited to:

a. Any required conditional use seashore clearance, wetland, Section 401 WQC, Section 404 permits (CWA), and planned development approvals, height variances, plan review use approvals, or re-zoning under the Guam Zoning Regulations;

b. Sub-division approvals, when an application includes the grading of a development that is to be subdivided, pursuant to the Guam Subdivision Rules and Regulations;

c. Conditional use approvals from Territorial Land Use Commission, when the area to be graded or excavated will be used as quarry, and extracted materials used to fill a different area or sold as a fill material by the owner.

D. Permit Conditions.

1. No permit for earth-moving operations will be issued that will cause erosion and sediment loads or cause pollution to the waters of Guam, as defined by the latest Guam Water Pollution Control Act and the Water Quality Standards, unless an Environmental Protection Plan and an Erosion and Sediment Control Plan have been approved by the Agency.

2. The Administrator may attach such conditions as may be reasonably necessary to ensure that any grading work is for a use or structure permitted in accordance with zoning requirements, and to prevent creation of a nuisance or hazard to public or private property, health or welfare. Such conditions may include but are not limited to:

a. improvements of any existing grading to bring it up to the standards of these regulations;

b. requirements for fencing of excavation or fill to minimize hazards;

c. requirements for retaining walls or other earth retention structures to prevent loss of, support to, erosion of, and interference with natural drainage patterns on adjacent properties;

d. requirements involving clean-up of an area; and

e. limitations on the months, days and hours of permitted work.

3. The issuance of a grading permit shall constitute an authorization to do only that work which is described in the permit and in the plans and specifications approved by the Administrator.

4. Permits issued under these regulations shall not relieve the permittee of the responsibility for securing permits or approvals for work to be done which is regulated by any federal laws or other laws of Guam, or by department, or division of the governing agencies of the government of Guam.

5. Permits issued under these regulations shall be consistent with other permits, plans or approvals associated with the proposed project.

6. Where any operations are delayed for any reason, a revised work schedule shall be submitted to the Administrator which describes any required modifications to the temporary storm water drainage system and to the Erosion and Sediment Control Plan, and other information the Administrator may require.

7. A copy of the permit, plans and specifications for grading, clearing & grubbing, or stockpiling shall be maintained at the job-site during the progress of the work.

E. Permit Denials.

The Administrator shall deny a clearing and grubbing, grading or stockpiling permit if there is reasonable cause for concern that the work as proposed by the applicant may present a risk or endangerment to public health or the environment. Factors to be considered in determining probability of dangerous conditions include, but are not limited to:

1. possible saturation of ground by rain;

2. dangerous geological conditions or flood hazards;

3. undesirable surface water runoff; and

4. subsurface conditions such as the stratification and faulting of rock, nature and type of soil or rock.

Section 10104. Erosion and Sediment Control Plans.

A. General Requirements.

1. All earth-moving activities on Guam shall be conducted in such a way as to prevent accelerated erosion and the resulting sedimentation. To accomplish this all persons engaged in earth-moving activities shall design, implement, and maintain erosion and sediment control measures which effectively prevent accelerated erosion and sedimentation. These erosion and sediment measures must be as set forth in Erosion and Sediment Control Plans submitted, reviewed and approved by GEPA.

2. All clearing, grading, embankment or filling, excavating and other earth-

moving operations shall proceed only in accordance with an Erosion and Sediment Control Plan, prepared in accordance with the requirements set forth in these regulations, and duly approved by the Agency.

3. An approved Erosion and Sediment Control Plan does not abrogate a permittee's responsibility to comply with all other applicable Guam and federal laws and regulations.

B. Agency approval of Erosion and Sediment Control Plans.

1. Four (4) copies of a proposed Erosion and Sediment Control Plan shall be submitted to the Agency with the permit application for earth-moving operations.

2. The Agency shall have thirty (30) working days to approve or disapprove of such plan.

C. Compliance.

1. All clearing, grading, embankment or filling, excavating and other earth-moving operations, except those otherwise exempted from these regulations by the Administrator, must proceed in accordance with a duly approved Erosion and Sediment Control Plan.

2. Earth-moving operations in progress, other than quarrying, shall comply with these regulations within fifteen (15) calendar days of the effective date of these regulations. Quarrying operations shall comply with these regulations within thirty (30) calendar days of the effective date of these regulations.

Section 10105. Erosion and Sediment Control Plans and Measures.

A. General policies for Erosion and Sediment Control.

1. All earth-moving operations on Guam shall be conducted in a manner that prevents accelerated land erosion, transportation of sediment to and along highways, or siltation of rivers, estuaries and marine waters.

2. The area affected by earth-moving operations shall be kept to a minimum by either selective clearing, increment phases of development or other effective means. The Erosion and Sediment Control Plan must contain measures that ensure that each phase of any proposed large development affects less than twenty (20) acres.

3. All earth-moving operations shall be scheduled during periods of expected low rainfall.

4. Any earth-moving operations authorized under these regulations shall be

performed so as not to violate applicable provisions of the latest Guam Water Quality Standards.

5. No person shall perform any earth-moving operation so as to cause falling rocks, soil or debris in any form to fall, slide or flow onto adjoining properties or waters of Guam.

6. All work areas shall be maintained so as to minimize dust which may cause a nuisance or hazard to others, and in conformance with the Guam Air Pollution Control Standards and regulations.

7. Where construction equipment will make frequent crossings of a natural drainage course, plans shall provide for temporary culverts or bridge structures to be installed. The required clearances from concerned agencies shall be obtained before any construction of temporary crossing access begins.

8. The erosion and sediment control measures set forth in this Section are required, unless the Erosion and Sediment Control Plan shows that the alteration of these measures and facilities or inclusion of other measures and facilities will better prevent accelerated erosion and sedimentation.

B. Required contents of Erosion and Sediment Control Plans.

1. *Description of the Project.*

The plan shall include a detailed narrative description, with photographs and construction drawings, of the proposed project.

2. Project Site Plan.

a. The necessary information is that which is required in Section 10103.C. Permit Application Contents. Plan sheet size shall not be smaller that eighteen (18) inches x twenty-four (24) inches and not larger than thirty (30) inches x forty-two (42) inches. Plan sheet sizes shall not vary.

b. Soil description including: soil classification by USDA Natural Resources Conservation Service "Soil Taxonomy Classification System"; soil erodibility factor; soil permeability and percolation rates; type and extent of out-croppings; depth of soil; capability for establishing vegetation; and coefficient of runoff.

c. Evaluation of subsurface information. Subsurface investigations shall consist of drilling, excavations, or observations of naturally exposed soil

and bedrock exposures at sufficient intervals and depths to indicate the type of material or condition to be encountered at final grading. The person or firm making the investigation shall submit a written report of their findings and recommendations. This information is required where the stability will be lessened by proposed grading or filling, where any other weaknesses are found, or where any of the following conditions are discovered or proposed:

i. At locations where a fill slope is to be placed above or a cut slope;

ii. At proposed cuts exceeding fifteen (15) feet in height unless in competent rock as determined by an engineer;

iii. At locations of proposed fills exceeding fifteen (15) feet in height;

iv. Where sides of hill fills are to be placed on existing slopes steeper than fifteen percent (15%);

v. Wherever groundwater from either the grading project or adjoining properties is likely to reduce stability;

vi. At zones of trapped water or high water table; or

vii. Where the topography is indicative of landslides, as determined by an engineer.

d. Site Assessment. Consider the detrimental effects of construction of the site as it pertains to: erosion and loss of sediments; slope stability; water quality; plant communities; wildlife and aquatic life; and condition of marine waters and reef flats which will receive storm water runoff, either directly or indirectly, from the project site.

3. *Grading Plan.*

It is the purpose of this paragraph to ensure that minimum grading is performed and that natural contours and topography will be retained wherever feasible.

a. Grading shall be designed and implemented so as to blend in with the surrounding area.

b. All grading plans and specifications shall show, using contours, cross sections, spot elevations or other means, the condition of the land before and after grading.

c. The grading plan shall provide information regarding the location and source of imported fill material, and the location for disposal of excess excavation material.

d. Where a grading activity is to occur in increments or phases, the plan shall also include the plan for future site development and the proposed grading of future increments.

4. Construction Schedule.

a. Construction increments shall be described in detail and identified on the project plan.

b. The schedule will indicate completion dates for each construction increment and the construction sequence of erosion and sediment control measures. Each increment phase of work shall have an approved Environmental Protection Plan and Soil Erosion and Sedimentation Control Plan from the Agency.

c. The Agency shall check the adequacy of the schedule with respect to short term and long term erosion anticipated on the project site. The construction schedule shall be checked to ensure prompt establishment of protective vegetation with full recognition of climatic and other factors that influence its establishment.

5. Storm water Drainage System and Control of Site Water Runoff.

a. The proposed temporary and permanent, natural and man-made, storm water drainage systems shall be depicted in detail in the drawing plans, including, but not limited to, dimensions, alignments and elevations of all structures as well as the anticipated volume and velocity of the storm water. Design calculations for the drainage systems and siltation basins, best management practices, and other pertinent structures, shall be submitted. The following shall also be provided:

i. The runoff to be expected during and after the proposed development;

ii. The size of drainage areas above cuts and slopes;

iii. Estimate soil loss volume;

iv. The methods for trapping sediments, reducing erosion of

drainage ways, and for controlling the collection and discharge of storm water during and after construction.

v. The method and schedule of construction of waterway crossings. Sediment control structures for natural waterways shall be scheduled for installation prior to any earth-moving operations.

b. Adequate provisions shall be made to prevent surface waters from damaging the cut face of an excavation or the sloped surfaces of a fill. Positive drainage shall be provided to prevent the accumulation or retention of surface water in pits, gullies, holes or similar depressions. All drainage facilities shall be designed to carry surface water runoff to a storm drain that will discharge to a catchment facility within the project site. The Administrator may require such drainage structures and pipes to be constructed or installed, which in his opinion, are necessary to prevent erosion damage and to adequately carry off surface waters. The flow of any existing and known natural underground drainage shall not be impeded or changed so as to cause damage to adjoining property.

c. During construction, all storm sewer inlets shall be protected with silt traps.

d. If a project to be developed is covered under the Federal Storm Water Regulations (40 CFR Parts 122 & 123), a notice of intent to discharge storm water to surface and marine waters of Guam must be submitted to US Environmental Protection Agency and a copy furnished GEPA. An NPDES permit which authorizes the discharge must also be secured.

e. Structural measures such as berms, dikes, traps, basins, shall be installed prior to any other grading, clearing, or disturbance of the existing surface of the site.

f. Diversion Terraces.

i. Diversion terraces shall be constructed up-grade of a project area to convey runoff around the project area. For temporary diversions, the channel shall have capacity to convey 1.6 cubic feet per second per acre of land tributary to it. For permanent diversions, the channel shall have capacity to convey 2.75 cubic feet per second per

acre of land tributary to it.

ii. Diversion terraces shall be grassed or lined with erosion resistant material to prevent accelerated erosion within the channel.

iii. Outlet structures shall be designed to maintain a discharge velocity of less than 2.0 feet per second and all areas affected by the construction activity shall be stabilized before the outlet structures shall be used.

g. Interceptor Channels.

i. Interceptor channels may be used within the project area to reduce the velocity of the flow and thus prevent accelerated erosion.

ii. Water collected by interceptor channels shall be conveyed to sedimentation basins or to vegetated areas but not directly to streams.

iii. Outlets to vegetated areas shall be designed to maintain an outlet velocity of less than 2.0 feet per second. Outlet structures shall be screened to lower the amount of suspended solids in the discharge water.

h. Channels of Conveyance.

All channels used to convey water through a project area shall be designed to have a velocity of less than 1.5 feet per second. Where this is not possible, the channel shall be grassed or lined with erosion resistant material.

i. Sedimentation Basins.

i. The basin shall be cleaned when the storage capacity of the basin is reduced to five thousand (5,000) cubic feet per acre of project area tributary to the basin.

ii. Water from a sedimentation basin shall not be discharged to a natural waterway. Designs of sediment basins must provide for enough storage to give time for runoff water to be leached into the ground.

iii. Outlets of sedimentation basins shall be screened and designed in a manner which does not discourage regular maintenance.

iv. Sedimentation basins shall be structurally sound and properly secured to protect them from unauthorized acts of third party activities.

6. Cut and fill.

a. The conditions of the following subsections may be modified by the Administrator based on a supportive engineer's soils report, and receipt of approvals from the owner and concerned agencies:

i. Height. Where a cut or fill is greater than fifteen (15) feet in height, terraces, or benches shall be constructed at vertical intervals of fifteen (15) feet except where only one bench is required, the single bench shall be constructed at the midpoint. The minimum width of such terraces or benches shall be at least eighteen (18) feet and provided with drainage provisions to control erosion on the slope and face and bench surface.

ii. Cut Slopes. Under the following conditions, no cut may be steeper in slope than the ratio of its horizontal to its vertical distance as shown below:

(a) 2 horizontal to 1 vertical in unweathered rock or mudrock;

(b) 2 horizontal to 1 vertical in decomposed rock; or

(c) 2 horizontal to 1 vertical in soils of low plasticity for cuts of any height in highly plastic soils. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

iii. Fill slopes shall not be steeper than the ratio 3 horizontal to 1 vertical except that fill using highly plastic clays shall have slopes specifically recommended in the engineer's soils report signed by a professional civil engineer, and approved by the owner. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

b. Fill material shall be selected to meet the requirements and conditions of the particular fill for which it is to be used. The fill material shall not contain vegetation or organic matter. Where rocks, concrete, or similar materials of greater than eight (8) inches in diameter are incorporated into the fill, they shall be placed in accordance with the recommendation of the professional civil engineer.

c. Before placing fill or stockpiling, the natural ground surface shall be prepared by removing the vegetation and, shall be notched by a series of benches and/or subsurface drains installed.

d. No fill shall be placed over any waters of Guam (e.g.; spring, marsh, wetlands), refuse dumps, or soft, soggy or springy foundations. The plan must highlight possible wetland characteristics on the site and adjacent properties.

e. Fill materials shall be spread and compacted in a series of eight (8) inch to ten (10) inch layers, unless otherwise recommended by the professional civil engineer. For slopes, the fill shall be compacted to ninety five percent (95%) maximum density as determined by the most recent ASTM Soil Compaction Test D1557. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

f. Distance from property line. The following requirements may be modified by the Administrator when cuts or fills are supported by retaining walls or when the permittee submits an engineer's soils report stating that the soil conditions will permit a lesser horizontal distance without causing damage or danger to the adjoining property. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability. The horizontal distance from the top of a cut slope or the bottom of a fill slope to the adjoining property line shall not be less than as follows:

Heights of cut or fill	Distance from property line (in feet)
Zero feet to 4 feet	4
More than 4 feet to 10 feet	6
More than 10 feet to 15 feet	8
More than 15 feet	10

7. Maintenance Procedures.

a. A maintenance program for the erosion and sedimentation control structures and facilities shall be established. The program shall include, but not be limited to, a schedule for inspecting the facilities and for removing and disposing of sediment materials from the control structures, or project area, and specific duties of the designated maintenance personnel.

b. If the original owner has sold the property, the subsequent owner shall be responsible for maintaining the permanent measures that have been installed on the property.

8. Disposal of Spoil Materials.

The information concerning the disposal of spoil materials shall include the following: type of spoil material; location of disposal area; method for processing and disposing of spoil materials; procedures for preventing soil loss to adjacent watercourses; and, if intending to burn spoil materials, burning procedures for combustible spoil material. Burning requires a permit from the Guam Fire Department.

9. Stockpiles.

The following information shall be provided: source of stockpile material; location, slope, and height of stockpile; duration that the material is to be stockpiled; provisions to prevent erosion and sediment loss from rain and wind action; plan for removing stockpiles at project completion.

10. Stabilization of Affected Areas.

a. Stabilization of slopes, channels, ditches, berms, diversions, silt dams, or any disturbed areas shall begin as soon as possible and no later than thirty (30) calendar days after the final grade or final earth-moving activities has been completed.

b. Electric power, and telephone trenches are to be stabilized as soon as possible and no later than thirty (30) days after backfill

c. Stabilization of stream banks shall be scheduled during periods of expected low rainfall.

d. Where it is not possible to permanently stabilize a disturbed area immediately after the final earth-moving has been completed or where the activity ceases for more than thirty (30) calendar days, interim or temporary stabilization measures shall promptly be implemented and enforced.

e. Any disturbed area not paved, sodded or built shall be seeded and mulched with vegetative cover appropriate to the soil type, as recommended by an engineer, or the condition of the area based on soil test analysis done by a laboratory. This condition does not prohibit the use of matting, gabion, armor coating on erodible surfaces or other type of vegetative cover that will minimize erosion.

f. All structural sediment control measures are to remain in place until permission for their removal has been obtained from the Agency.

11. Protection and Removal of Native Vegetation.

a. In order to protect native vegetation from construction impacts, the

following information shall be provided: location and description of native vegetation whose root zone will be affected by compaction, fills, trenches, and changes in the groundwater table; measures which will prevent conditions damaging to vegetation; and criteria used to determine removal;

b. Whenever feasible, natural vegetation should be retained. If their removal is necessitated, they shall not be stored or deposited along banks of streams, rivers or natural water courses after being uprooted, or displaced from the ground by excavation, clearing or grubbing. Removed vegetation shall be disposed of at a disposal site approved by the Administrator, and removed from the site within a reasonable time, not to exceed one (1) month from date of removal.

12. Establishment of Vegetation.

a. Where the establishment of vegetation is required on slopes of cut and fill, graded areas, and watercourses, etc., the following information shall be provided:

i. Location and areas to be vegetated;

ii. An indication of whether vegetation is to be temporary or permanent;

iii. Type and quantity of seeds or plants;

iv. Ground conditions, including: soil surface condition, pH, permeability, size distribution, slope angle, slope length, and aspect, nutrients;

v. Type and quantity of mulch;

vi. Type and quantity of fertilizer;

vii. Method and schedule of seeding, mulching, planting, and fertilizing;

viii. Irrigation schedule.

b. The plan shall provide for the revisiting of the location every three (3) months to verify that vegetation has been successfully established. If not successful the site must be revegetated until the area is successfully revegetated.

13. Certification. The Plan shall be stamped and signed an engineer.

Section 10106. Special Requirements.

A. Protection of adjoining properties.

Any person performing or causing to be performed any excavation or fill shall, at his own expense, provide the necessary means to prevent the movement of earth to

the adjoining properties, and to maintain the existing natural grade of adjoining properties.

B. Protection of public utilities.

Any person performing or causing to be performed any excavation or fill shall be responsible for the maintenance or restoration of street pavements, sidewalks and curbs, and improvements of public utilities which may be affected. Such maintenance shall be in accordance with the requirements of the Department of Public Works, government of Guam agencies and affected public utilities. At cuts fronting any street, a suitable and adequate barrier shall be installed to provide protection to the public.

C. Removal of silt or other debris.

Any person depositing or causing to be deposited, any silt or debris in ditches, water courses, drainage facilities, and public roadways, shall remove such silt or other debris. In case such person shall fail, neglect or refuse to comply with the provisions of this Section within forty-eight (48) hours after written notice served upon him, either by mail or by personal service, the Administrator may proceed to remove the silt and other debris or to take any other action he deems appropriate. The costs incurred for any action taken by the Administrator shall be payable by such person.

D. Safety precautions.

At any stage of the grading, grubbing, or stockpiling, if the Administrator finds that further work as authorized by an existing permit is likely to create soil erosion problems or to endanger life, limb or property, he may require safety precautions. These precautions may include but are not limited to: flattening exposed slopes; constructing additional silting or sediment basins, providing drainage facilities or benches; removing rocks, boulders, debris and other dangerous objects which, if dislodged, are likely to cause injury or damage; or constructing fences or other suitable protective barriers.

E. Creation of individual building sites.

Hillside lots shall be graded in such a manner that any parcels which may be created, including all separate building sites which may be contained within said parcels, can be satisfactorily graded and developed as individual building sites.

F. Protection of Sink Holes.

Earth-moving operations shall not be performed in sink holes or in such close

proximity as to threaten their viability, function or the conveyance of surface water into such features unless specifically authorized by the administrator. In the event a developer proposes to modify or use a sinkhole, an environmental and hydrogeologic assessment must be performed to ensure adverse affects will not result, including but not limited to the displacement of groundwater, interference with well production, significant changes to groundwater recharge, flooding, or the threat or introduction of any pollutant to groundwater, regardless of zone or category.

Section 10107 Project Completion.

A. Products to be submitted.

1. As-built/graded plan, prepared by an engineer or land surveyor, upon completion of an earth-moving operation covering an area of greater than one (1) acre;

2. Soils report, when earth-moving operations involve cuts or fills for which an engineer's soils report is required. The report shall contain:

a. A description of materials used in the fill and its moisture content at the time of compaction;

b. The procedures used in depositing and compacting the fill;

3. A description of the preparation of the original ground surface before making the fill, but not limited to benching and subsurface drainage;

4. A plan or tabulation showing the general location and elevation of compaction tests made in the fill together with a tabulation of relative compaction densities obtained at each location, the location of sub-drains, and other pertinent features of the fill necessary for its stability; and

5. Certification that the work was done in conformity with these regulations, the approved plans and specifications, and the engineer's soils report.

B. Final inspection and approval.

The permittee or his agent shall notify the Administrator or his representative when the earth-moving operation is ready for final inspection. Final approval shall not be given until all approved work has been completed. Final approval shall be dependent on installation of all drainage structures and their protective devices, establishment of a healthy vegetation growth in conformance with the approved plans and specifications, and submittal of any required reports.

Section 10108. Permit Fees.

A. Applicability.

All applicants (e.g.; private individuals, federal agencies, and government of Guam agencies or departments, including autonomous and semi-autonomous agencies) for earth-moving operations permits, shall pay required permit fees.

B. Grading permits.

1. Before issuing a grading permit clearance, the Administrator shall collect site grading plan review fees based on the volume of excavation or fill measured in place according to the following schedules:

TABLE A - GRADING PLAN REVIEW FEES

50 cubic yards or less	No Fee
51 to 100 cubic yards	$15.00
101 to 1,000 cubic yards	$22.50
1,001 to 10,000 cubic yards	$30.00
10,001 to 100,000 cubic yards	$30.00 for the first 10,000 cubic yards, plus $15.00 for each additional 10,000 cubic yards or fraction thereof.
100,001 to 200,000 cubic yards	$165.00 for the first 100,000 cubic yards, plus $9.00 for each additional 10,000 cubic yards or fraction thereof.
200,001 cubic yards or more	$225.00 for the first 200,000 cubic yards, $4.50 for each additional 10,000 cubic yards or fraction thereof.

2. The fee for a grading permit authorizing additional work to that under a valid permit shall be the difference between the fee paid for the original permit and the fee shown for the entire project.

C. Fees for additional plan reviews.

Additional plan reviews required for any changes, additions or revisions to approved plans are Thirty Dollars ($30.00) per hour, or the total hourly cost to the jurisdiction, whichever is the greatest. This cost shall include those associated with supervision, overhead, equipment, hourly wages and fringe benefits of the employees involved.

D. Clearing and grubbing permits.

Before issuing a clearing and grubbing permit clearance, the Administrator shall collect a clearance fee of Twenty Dollars ($20.00) for clearing & grubbing areas greater than fifteen thousand (15,000) square feet plus Two Dollars ($2.00) per each additional one thousand (1,000) square feet or fraction thereof. No fee shall be charged for clearing and grubbing less than fifteen thousand (15,000) square feet.

E. Stockpiling permits.

Before issuing a stockpiling permit clearance, the Administrator shall collect a permit clearance fee of Seven Dollars and fifty cents ($7.50) for stockpiling in excess of the one hundred (100) cubic yards, plus One Dollar and fifty cents ($1.50) for each additional one hundred (100) cubic yards or fraction thereof.

F. Work occurring without a permit.

Where work for which a permit is required by these regulations has commenced or has been accomplished without a permit, a permit shall be obtained, and two times the fees specified above shall be assessed, provided that such work complies with or may be made to comply with the requirements of these regulations. If the grading/clearing/stockpiling/ grubbing work accomplished or commenced cannot be made to comply with the provisions of these regulations, the person or persons responsible for the initiation or accomplishment of such grading work shall restore the land to its original condition and shall obtain a certificate of completion thereof from the Administrator. Notwithstanding the above, the person or persons responsible for such grading/clearing/grubbing/stockpiling shall be deemed to have violated the provisions of these regulations by performing such activity(ies) without a permit.

G. Water Protection Fund.

All permit fees, monetary charges, fines, and penalties assessed, collected or received by GEPA pursuant to this regulation and other regulations promulgated under the Water Pollution Control Act, as well as contributions and assets made for the purpose of improving

grubbing, grading, or stockpiling is or may become unstable or dangerous, endangers property, adversely affects the safety, use, or stability of a public way or drainage channel, or results in a violation of the Guam Water Quality Standards, the owner of the property, or other person or agent in control of the property, on receipt of notice in writing from the Administrator, shall abate the danger, implement necessary corrective measures, and shall conform with the requirements of these regulations. The Administrator, or his authorized representative, shall have the authority to enter the property and investigate, and enforce the provisions of this Section. A hearing will be held as required under 10 GCA Section 47109.

B. Stop work order procedures.

If the Administrator determines that the work must stop due to unstable or dangerous conditions, the Administrator shall issue a stop work order to the owner/contractor of the property and transmit a copy of the order to the Department of Public Works Building Permit Section. Both GEPA and the Department of Public Works shall jointly enforce the stop work order.

C. Work occurring without a permit.

Notwithstanding the above, if an earth-moving operation is occurring without a valid permit the Agency can order the operation to immediately cease and either require the violator to obtain an after the fact permit, or if the operation cannot be permitted, to have the violator take corrective measures to return the land to its previous condition.

Section 10111. Suspension or revocation of Permit.

A. Criteria for suspending or revoking permits. The Administrator shall, in writing, suspend or revoke a permit issued under the provisions of these regulations whenever: the permit has been issued on the basis of incorrect information supplied by the permittee; existing site conditions are found not to be in accordance with the terms and conditions of the permit; it is determined that the permittee has not complied with a provision of any other applicable law, ordinance rule or regulation of Guam; the clearing and grubbing, grading or stockpiling discloses conditions that are objectionable or unsafe; or an immediate danger exists in a downstream/adjacent area.

B. Process for recommencing work. When a permit has been suspended the permittee may submit details and proposals for compliance with the provisions of these regulations, and any other applicable laws, rules or regulations of

Guam. Upon approval of such plans and proposals by the Administrator, the Administrator shall authorize the permittee, in writing, to proceed with the work.

C. Non-compliance. Non-compliance with the correction notice or stop work order issued for the construction of the sediment and erosion control practices, and/or the construction of storm water management facilities may result in the revocation of the issued permit.

Section 10112. Inspections.

A. Access to the site.

Each permit issued under these regulations shall be deemed to include the right of the Administrator or his authorized representative to enter at reasonable time upon any property to inspect the clearing and grubbing, grading, or stockpiling operations. Such inspections may take place before, during and after any earth change activity for which a permit has been issued to ensure that control measures are properly installed or performed and maintained at the expense of the applicant.

Section 10113. *Enforcement.*

A. Corrective Measures.

If the Agency determines that a person is conducting operations which are causing or are likely to cause pollution, the Administrator may order the owner or operation to take corrective measures needed to prevent or cease the pollution.

B. Stop Work Order.

If the operation is causing or is likely to cause alteration of physical, chemical, or biological properties to the waters of Guam, resulting from sediment, deposition presenting an imminent and substantial danger to the public health, safety or welfare, or the health of animals, fish or aquatic life, to a public water supply or to other reasonable uses of water, the Administrator can issue an order requiring the cessation of relevant activities and implementation of corrective measures. In emergency situation, any order issued by the Administrator shall become final no later than twenty-four (24) hours after the date of the notice and order served.

C. Voluntary compliance.

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

D. Permit violations.

Whenever the Agency has reason to believe that a violation of any Section of these regulations has occurred, it shall 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 fifteen (15) days after the date of the notice and order 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 shall require that the alleged violator or violators appear before the Agency for a time and place specified in the notice and answer the charges complained of, or the Agency may initiate action pursuant to Section 10114 of these regulations.

E. Corrective actions from Hearing.

If, after a hearing is held pursuant to 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 soil erosion.

F. Court Appeal.

No later than fifteen (15) 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.

G. Corporate Liability.

(a) A corporation may be found liable or convicted for (1) any violation or offense committed in furtherance of its affairs on the basis of conduct performed, authorized, requested, commanded or recklessly tolerated by (A) the board of directors; (B) a managerial agent acting in the scope of his employment; or (C) any other person

for whose conduct the statute defining the violation or offense provides responsibility; (2) failure to perform a duty imposed by law; (3) any violation or offense committed by an agent of the corporation acting in the scope of his employment in furtherance of its affairs.

(b) As used in this Section, managerial agent means an agent of the corporation having duties of such responsibility that his conduct may fairly be found to represent the policy of the corporation.

H. Emergency Procedures.

1. Any other provisions of law to the contrary notwithstanding, if the Administrator finds that a generalized condition of pollution exists, and that it creates an emergency requiring immediate action to protect the intended uses of the water as designated in the Standards of Water Quality for Waters of Guam, or to protect human health or safety, the Administrator, with the concurrence of *I Maga'lahi*, shall order persons causing or contributing to the pollution to reduce or discontinue immediately the pollutants, and such order shall fix a place and time, not later than twenty-four (24) hours thereafter, for a hearing to be held before the Agency. Not more than twenty-four (24) hours after the commencement of such hearing, and without adjournment thereof, the Agency shall affirm, modify or set aside the order of the Administrator.

2. In the absence of a generalized condition of pollution of the type referred to in Subsection (1), but if the Administrator finds that pollutants from the operation of one or more polluting sources is causing imminent danger to the intended uses of the water as designated in the Standards of Water Quality for Waters of Guam or is causing imminent danger to human health or safety, he may order the person or persons responsible for the operation or operations in question to reduce or discontinue pollutants immediately, without regard to the provision of Subsection (a) of §47109, Chapter 47, 10 GCA of this Act. In such event, the requirements for hearing and affirmance, modification or setting aside of orders set forth in Subsection (1) of this Section apply.

Section 10114. Penalties, Liability, and Severability Clause.

A. Penalties.

(a) **Field citations** - Any person violating the Water Pollution Control Act or these regulations may be served by the officer or inspector with a pollution citation.

Water Pollution citation violations shall be settled by amount of no less than One Hundred Fifty Dollars ($150.00) per violation and not more than Three Thousand Dollars ($3,000.00) per violation. Cost to take corrective action and community service in lieu of all or a portion of the fine may be accepted by the Board. The Agency will establish a scale amount to assist in determining the penalty amount for settlement. The Board must hold a public hearing to establish and notify the public of the monetary citation fines under this subsection before fines can be imposed. The citation will provide that the violator can request a hearing with the Guam Environmental Protection Agency Board of Directors (the "Board"). The Board can impose a fine up to Three Thousand Dollars ($3,000.00) per violation noted in the citation. Costs of corrective action and community service in lieu of all or a portion of the fine may be accepted by the Board. Fines imposed and collected under this Section will be deposited into the Water Protection Fund. Judicial review may be had of any Board decision by any party affected adversely by it. If the Board decision is not in accordance with law or not supported by substantial evidence, the Court shall remand the Board to take action according to law or the evidence.

(b) **Administrative** - Whenever on the basis of any information available the Administrator reasonably determines that any person has violated the provisions of this rules and regulations or a lawful order, or has violated any permit condition or limitation, the Administrator may assess a civil penalty that may not exceed Ten Thousand Dollars ($10,000.00) per day per violation that the violation continues, except that the maximum amount of any civil penalty under this Section shall not exceed One Hundred Twenty-five Thousand Dollars ($125,000.00).

(1) Before issuing an order assessing a civil penalty, the Administrator shall give to the person to be assessed such penalty, written notice of the Administrator's proposal to issue such order and the opportunity to request, within thirty (30) days of the date the notice is received by such person, a hearing on the proposed order. Hearing will be conducted as provided under the Administrative Adjudication Law (AAL). In lieu of an order, the Agency may require that 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 10114 of this regulations.

(a) If, after a hearing held pursuant to the AAL, the Board 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 pollution or discharges involved or for the taking of such other correction action as may be appropriate.

(b) If, after hearing on an order contained in a notice, the Board finds that no violation has occurred or is occurring, it shall rescind the order.

(c) 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 may prescribe timetables for the necessary action in preventing, abating or controlling the pollution or discharge.

(2) In determining the amount of any penalty assessed, the Administrator shall take into account the nature, circumstances, extent and gravity of the violation or violations and with respect to the violator, ability to pay, any prior history of such violations, the degree of culpability, economic benefit or savings if any resulting from the violation, and such other matters as justice may require.

(3) If any person fails to pay an assessment of a civil penalty after the order making the assessment has become final, or after a Court in an action has entered a final judgment in favor of the Administrator, the Administrator shall request the Attorney General to bring a civil action to recover the amount assessed. In such an action, the validity, amount, and appropriateness of such penalty shall not be subject to review.

(4) The Administrator may settle, modify or release, with or without conditions, any administrative penalty which may be imposed under this Section.

B. Liability.

The provisions of these regulations shall not be construed to relieve or alleviate the liability of any person for damages resulting from performing, or causing to be performed, by grading, grubbing or stock-piling operation. The government of Guam, GEPA, its officers and employees shall be free from any liability, cost or damage which may accrue from any grading, grubbing or stockpiling or any work connected therewith, authorized by these regulations.

C. Severability Clause.

If any provisions of these rules, or its application to any person or circumstances, is held invalid, the application of such provision to other persons or circumstances, and the remainder of these rules, shall not be affected thereby.

Office of Senator

Joanne M. Salas Brown

MINA' BENTE SINGKO NA LIHESLATURAN GUÅHAN

June 9, 2000

The Honorable Antonio R. Unpingco
Speaker
Mina' Bente Singko Na Liheslaturan Guahan
155 Hesler Street
Hagatna, Guam 96910

Dear Speaker Unpingco:

The Committee on Natural Resources to which was referred **Bill No. 392: AN ACT TO APPROVE THE GUAM ENVIRONMENTAL PROTECTION AGENCY (GEPA) GUAM SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS** wishes to report back to *I Liheslaturan Guahan* its recommendation **TO PASS as substituted.**

The voting sheet is as follows:

TO PASS	8
NOT TO PASS	0
ABSTAIN	0
PLACE IN INACTIVE FILE	0

Copies of the Committee Report and other pertinent documents are enclosed.
Thank you for your attention to this matter.

Sincerely,

JOANNE M.S. BROWN
Senator and Chairperson
Committee on Natural Resources

Enclosures

Legislative Secretary Chairperson, Committee on Natural Resources
Suite 200 • 130 Aspinall Street • Hagåtña, Guam 96910 Phone: 472-3450 • Fax: 472-4090

Office of Senator

Joanne M. Salas Brown

MINA' BENTE SINGKO NA LIHESLATURAN GUÅHAN

June 8, 2000

MEMORANDUM

To: Committee Members

From: Chairperson, Committee on Natural Resources

Subject: **Bill No. 392: AN ACT TO APPROVE THE GUAM ENVIRONMENTAL PROTECTION AGENCY (GEPA) GUAM SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS. (As substituted)**

Transmitted herewith for your consideration and action is the Committee Report on Bill No. 392 as substituted. Please indicate your choice on the attached Voting Sheet and return the documents to my office for transmittal to the other members.

Should you have any questions on the narrative report or the accompanying documents, please do not hesitate to contact my office at 472-3450/1.

Your attention and cooperation on this matter is greatly appreciated.

JOANNE M.S. BROWN

Attachments

Legislative Secretary Chairperson, Committee on Natural Resources
Suite 200 • 130 Aspinall Street • Hagåtña, Guam 96910 Phone: 472-3450 • Fax: 472-4090

MINA' BENTE SINGKO NA LIHESLATURAN GUAHAN

Committee on Natural Resources
Joanne M.S. Brown
Chairperson

VOTING SHEET

Committee Report on

BILL NO. 392 (LS): AN ACT TO APPROVE THE GUAM ENVIRONMENTAL PROTECTION AGENCY (GEPA) GUAM SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS. (As Substituted)

COMMITTEE MEMBERS	TO PASS	NOT TO PASS	TO ABSTAIN	PLACE IN INACTIVE FILE	SIGNATURE
Joanne M.S. Brown Chairperson	✓				
A.C. Lamorena, V Vice Chairman	✓				
L. Kasperbauer Member	✓				
S. Sanchez, II Member	✓				
C. Leon Guerrero Member					
M. Forbes Member	✓				
K. Moylan Member	✓				
V. Pangelinan Member					
M. Camacho Member	✓				
J. Salas Member	✓				
F. Aguon, Jr. Member					
A.R. Unpingco Speaker Ex-Officio Member					

Committee on Natural Resources
Senator Joanne M. S. Brown, Chairperson

Tuesday, March 7, 2000
9:00 a.m.

COMMITTEE REPORT

The Committee on Natural Resources held a confirmation hearing on the appointments of Mr. Alfred P. Benavente, Acting Member of the Guam Waterworks Authority, Board of Directors and Mr. Greg S. Kalbaugh, Acting Member of the Guam Environmental Protection Agency, Board of Directors. A Public Hearing also took place with regard to Bill No. 392 (LS)-An Act to Establish the Guam Environmental Protection Agency (GEPA) Guam Soil Erosion and Sedimentation Control Regulations. The confirmation and public hearings took place on Tuesday, March 7, 2000, 9:00 a.m. at the Legislative Public Hearing room. The Senators and Committee Members who were present were:

Senator Joanne M. S. Brown, Chairperson
Senator Carlotta Leon Guerrero
Senator John Salas
Senator Alberto Lamorena V

Senator Joanne Brown commenced the Public Hearing on the appointments of Mr. Alfred Benavente to the Board of Guam Waterworks Authority and Mr. Greg S. Kalbaugh to the Board of Directors of Guam Environmental Protection Agency (GEPA). Immediately following Mr. Kalbaugh's confirmation hearing, she proceeded to hear the testimonies presented regarding Bill No. 392. Mr. Jesus Salas, Administrator of GEPA began his testimony.

Mr. Jesus Salas, for the record, stated his name and thanked the Committee for inviting him to testify on Bill No. 392. Please see Mr. Salas' written testimony, for your easy reference, which is attached to this report.

Mr. Randy Sablan, also from GEPA, testified on the following:

- He would like to add a section on Protection of Sink Holes. Please see Section 10106. Special Requirements on the Protection of Sink Holes, which he submitted and is attached to this report.
- In the past, sink holes, have been identified as environmentally sensitive areas, but under Water Quality Standard, sink holes are identified as "a water of the territory." "However, there is not a lot of substantive language in the statute or regulation with regard to this issue, so there should be something there in the regulations," according to Mr. Sablan.
- Developers do not recognize sink holes and thus, are difficult to identify. They do, however, accept and convey large amounts of water to the aquifer. Sometimes when clearing is occurring, we may not know that a sink hole exists in a large property.
- Sink holes can be altered and may have multiple uses, mainly to convey storm water, but this needs to be drawn out specifically and authorized by the administrator.
- As proposed in the language, the burden of the detailed studies, would be on the developer if they would like to incorporate it in the development, such as, covering it completely.
- All sink holes should be identified on their U.S. geological survey maps. They need to be called out and should not be taken for granted that activities could be done in such close proximity to the sink holes, because we could be blocking water that naturally needs to fall in the sink holes.
- If a sink hole is sitting on private property, then GEPA would have to identify it, much like identifying wet lands.

Senator John Salas asked what would be the result if the government is in violation of the regulations as it is not clearly stated. He asked this question because he is concerned about the area across Fort Soledad in Umatac .The people who live in the area have had their utilities and their roads washed out by erosion due to the runoffs. The people who live in the area are concerned because they cannot get into their houses, everything is exposed and their

phones do not work.

Mr. Salas responded that under Definitions, it identifies the person as also being public or private. GEPA will clarify this Definition to ensure that all parties are not exempted from the Rules and Regulations. The re-vegetation of the area, which Senator Salas had mentioned, will be done within thirty days of the completion of the project. He will follow up and advice the Committee.

Mr. Domingo Cabusao added he will look into this matter. He said that before any project can be done, it is required that contractors or government of Guam agencies and departments certify the project in complying with the regulations.

Senator Carlotta Leon Guerrero asked:

- Senator Eddie Calvo has a bill which would require that an Economic Impact Statement be issued before any fees could be imposed. She asked GEPA if these were new fees that were indicated on the rules and regulations. Mr. Salas responded that new fees are indicated, but these are minimal to the extent of the project. (See pages 43-44)

- On page 38, number 10- <u>The Protection and Removal of Native Vegetation.</u> She remembers coming across this issue on the performance of I' Tanota. Although it is admirable, it is also unenforceable. How will GEPA have the manpower to look at every single site and determine if it has an appropriate plan for the removal and re-vegetation of a site? Mr. Salas said GEPA does not have the staff at this time, but he hopes the Agency will have the assistance to do so in the future.

  Senator Brown said that in spite of the fact that the Agency has limited resources, the hammer that the Agency has, is whether or not in the end the Agency is going to permit a project. This is one of the ways the Agency can get the developer to fall into compliance in addressing these concerns.

Mr. Salas said if GEPA reviewed the project, compliance is up to the individual. With the Agency's limited resources, it does random checks and inspections. With GEPA's initial review, he hopes GEPA will catch the problem areas.

- On page 44 (C) Fees for Additional Plan Reviews, what would be additional plan reviews? Why would GEPA charge people $30.00 an hour if they come back with revisions or additional plans? Mr. Salas said that in order to ensure that the Rules and Regulations are being followed, there would be hours spent, which is allocated to that.

- On page 51 (G) Corporate Violations. What is the purpose of adding this section to the regulation that whenever a corporation violates any provisions, it should be the responsibility of either the individual directors, officers or agents?
  Mr. Salas responded that it is to prevent any ambiguities as to whom is ultimately responsible. He said there have been instances, not in this regulation, but in the litter citation, when an individual working in a company is cited, and yet the company will not accept any responsibility or knowledge of the incident. The company should take responsibility.

- **Senator Leon Guerrero** inquired how this would work with the corporate shield as this is the reason that corporation form this shield, for protection. **Senator Brown** added that the Committee can look closely into this. If a company has authorized a project to proceed, it becomes their responsibility because they have the permit to do so; It is not the employee who is permitted.

- What did the road projects, between Agat and Umatac, do to our reefs? Is there anything GEPA can do to improve the situation? **Mr. Salas** said it is years in the making because GEPA did not have these Rules and Regulations back then.

FILE

MINA' BENTE SINGKO NA LIHESLATURAN GUÅHAN
TWENTY-FIFTH GUAM LEGISLATURE
155 Hesler Street, Hagåtña, Guam 96910

June 13, 2000
(DATE)

Memorandum

To: Senator Joanne M.S. Brown

From: Clerk of the Legislature

Subject: Report on Bill No. 392(LS)

Pursuant to §7.04 of Rule VII of the 25th Standing Rules, transmitted herewith is a copy of the Committee Report on Bill No. 392(LS), for which you are the prime sponsor.

Should you have any questions or need further information, please call the undersigned at 472-3464/5.

Josephine Brennan-Badley

Attachment

RECEIVED
06/13/2000
"Repro"

Office of Senator

Joanne M. Salas Brown

MINA' BENTE SINGKO NA LIHESLATURAN GUÅHAN

June 9, 2000

The Honorable Antonio R. Unpingco
Speaker
Mina' Bente Singko Na Liheslaturan Guahan
155 Hesler Street
Hagatna, Guam 96910

Dear Speaker Unpingco:

The Committee on Natural Resources to which was referred **Bill No. 392: AN ACT TO APPROVE THE GUAM ENVIRONMENTAL PROTECTION AGENCY (GEPA) GUAM SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS** wishes to report back to *I Liheslaturan Guahan* its recommendation **TO PASS as substituted**.

The voting sheet is as follows:

TO PASS	8
NOT TO PASS	0
ABSTAIN	0
PLACE IN INACTIVE FILE	0

Copies of the Committee Report and other pertinent documents are enclosed. Thank you for your attention to this matter.

Sincerely,

JOANNE M.S. BROWN
Senator and Chairperson
Committee on Natural Resources

Enclosures

Legislative Secretary Chairperson, Committee on Natural Resources
Suite 200 • 130 Aspinall Street • Hagåtña, Guam 96910 Phone: 472-3450 • Fax: 472-4090

Office of Senator

Joanne M. Salas Brown

MINA' BENTE SINGKO NA LIHESLATURAN GUÅHAN

June 8, 2000

MEMORANDUM

To: Committee Members

From: Chairperson, Committee on Natural Resources

Subject: **Bill No. 392: AN ACT TO APPROVE THE GUAM ENVIRONMENTAL PROTECTION AGENCY (GEPA) GUAM SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS. (As substituted)**

Transmitted herewith for your consideration and action is the Committee Report on Bill No. 392 as substituted. Please indicate your choice on the attached Voting Sheet and return the documents to my office for transmittal to the other members.

Should you have any questions on the narrative report or the accompanying documents, please do not hesitate to contact my office at 472-3450/1.

Your attention and cooperation on this matter is greatly appreciated.

JOANNE M.S. BROWN

Attachments

Legislative Secretary Chairperson, Committee on Natural Resources
Suite 200 • 130 Aspinall Street • Hagåtña, Guam 96910 Phone: 472-3450 • Fax: 472-4090

MINA' BENTE SINGKO NA LIHESLATURAN GUAHAN

Committee on Natural Resources
Joanne M.S. Brown
Chairperson

VOTING SHEET

Committee Report on

BILL NO. 392 (LS): AN ACT TO APPROVE THE GUAM ENVIRONMENTAL PROTECTION AGENCY (GEPA) GUAM SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS. (As Substituted)

Joanne M.S. Brown Chairperson	✓				
A.C. Lamorena, V Vice Chairman	✓				
L. Kasperbauer Member	X				
S. Sanchez, II Member	✓				
C. Leon Guerrero Member					
M. Forbes Member	✓				
K. Moylan Member	✓				
V. Pangelinan Member					
M. Camacho Member	✓				
J. Salas Member	✓				
F. Aguon, Jr. Member					
A.R. Unpingco Speaker Ex-Officio Member					

Committee on Natural Resources
Senator Joanne M. S. Brown, Chairperson

Tuesday, March 7, 2000
9:00 a.m.

COMMITTEE REPORT

The Committee on Natural Resources held a confirmation hearing on the appointments of Mr. Alfred P. Benavente, Acting Member of the Guam Waterworks Authority, Board of Directors and Mr. Greg S. Kalbaugh, Acting Member of the Guam Environmental Protection Agency, Board of Directors. A Public Hearing also took place with regard to Bill No. 392 (LS)-An Act to Establish the Guam Environmental Protection Agency (GEPA) Guam Soil Erosion and Sedimentation Control Regulations. The confirmation and public hearings took place on Tuesday, March 7, 2000, 9:00 a.m. at the Legislative Public Hearing room. The Senators and Committee Members who were present were:

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Mr. Jesus Salas, for the record, stated his name and thanked the Committee for inviting him to testify on Bill No. 392. Please see Mr. Salas' written testimony, for your easy reference, which is attached to this report.

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- What did the road projects, between Agat and Umatac, do to our reefs? Is there anything GEPA can do to improve the situation? **Mr. Salas** said it is years in the making because GEPA did not have these Rules and Regulations back then.

Senator Lamorena inquired:

- How are the regular citizens going to be informed of these Rules and Regulations and to ensure that they will conform to them?
  Mr. Salas said there are exemptions in the Rules and Regulations. One of the things GEPA ensures is that the consultants are aware of the Rules and Regulations. In addition to that, at the initial stage, by educating the people also helps. The review is also being conducted at the offices as well.

- He also notices, due to the frequent road constructions around the island, pulverized asphalt is being used to fill needed areas. What are the Rules and Regulations pertaining to pulverized asphalt because of the danger it may have if dumped on the water lens? According to **Mr. Salas**, it is common practice in the states. This is another area that needs to be studied further to see the impact it may have.

- How is the issue of junk cars on private properties being addressed in the Rules and Regulations? **Mr. Salas** replied that GEPA is looking into this but in a separate statute.

Senator Brown also requested that GEPA provide a justification for each fee that is going to be charged; for example, if the fee is $30.00 an hour to review a certain project, what is the cost, in terms of the hourly wage of the workers and resources? She also requested GEPA to provide a point sheet.

The public hearing on Bill No. 392 adjourned at 11:10 a.m.

MINA 'BENTE SINGKO NA LIHESLATURAN GUAHAN
2000 (SECOND) REGULAR SESSION

Bill No. 392(LS)
As Substituted by the Committee on Natural Resources

Introduced by: **J.M.S. Brown**

AN ACT TO APPROVE THE GUAM ENVIRONMENTAL PROTECTION AGENCY (GEPA) GUAM SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS

BE IT ENACTED BY THE PEOPLE OF GUAM:

Section 1. Legislative Findings and Intent. In accordance with the Administrative Adjudication Law, §9303 of Title 5 of the Guam Code Annotated, as amended by Public Law Number 24-27, on December 10, 1997 the Guam Environmental Protection Agency (GEPA) transmitted on January 25, 2000 to *I Liheslaturan Guahan*, the *"Guam Environmental Protection Agency Guam Soil Erosion and Sedimentation Control Regulations"* which were adopted on April 24, 2000. *I Liheslaturan Guahan* wishes to amend the rules and regulations as proposed by GEPA to further strengthen its implementation.

Section 2. Approval of GEPA Regulations. *I Liheslaturan Guahan* hereby approves the GEPA rules and regulations, Exhibit A, entitled, *"Guam Environmental Protection Agency Guam Soil Erosion and Sedimentation Control Regulations.*

Section 3. Severability. If any provision of this Law or its application to any person or circumstance is found to be invalid or contrary to law, such invalidity shall not affect other provisions or applications of this Law which can be given effect without the invalid provisions or application, and to this end the provisions of this Law are severable.

Section 4. Effective Date. Effective date of this Act shall be October 1, 2000.

EXHIBIT A

GUAM SOIL EROSION AND SEDIMENT CONTROL REGULATIONS

TABLE OF CONTENTS

GUAM SOIL EROSION AND SEDIMENT CONTROL REGULATIONS

22 GAR - GEPA

Division II - Water Control

CHAPTER 10

GUAM SOIL EROSION AND SEDIMENT CONTROL REGULATIONS

Section 10100. Authority

10 GCA Chapter 47 - "Water Pollution Control Act."

Section 10101. General Provisions: Purpose, Scope, Applicability and Exemptions.

A. Purpose.

Whereas soil erosion and sedimentation resulting from the construction of sub-divisions, industrial and commercial developments, highways and other activities requiring excavation and filling can affect the purity of wetlands, streams and marine waters on Guam and thereby may cause unreasonable damage to aquatic and marine life in general; and whereas, the pollution of wetlands, 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 surface and groundwater resources and to protect, maintain and improve the quality and potability thereof; it is declared ~~to be~~ that the purpose of these regulations is to control accelerated soil erosion, ~~and the resulting sedimentation of the waters of the Territory~~ thereby

preventing the pollution of Guam's waters from fertilizers, pesticides, sediments and other polluting substances carried by sediment, and to protect property and to promote the public health, safety and welfare by regulating grading, clearing, grubbing and stockpiling, and by setting minimum standards for erosion and sedimentation control for the Island of Guam.

It is also the purpose of these regulations to manage nonpoint source pollution consistent with the latest "Guam Nonpoint Source Program", the "Guam Erosion & Sedimentation Manual" guidelines and recommendations, the comprehensive approach set forth in Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990, "Protecting Coastal Waters", codified as 16 U.S.C. §1455(b), and the "Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters" (EPA/840-B-92-002, dated January 1993) issued under the authority of Section 6217(g) of the Coastal Zone Act Reauthorization Amendments of 1990 recommendations.

B. Scope.

The provisions of these regulations impose requirements on those earth-moving activities which create accelerated erosion or a danger of accelerated erosion and which require planning and implementation of effective soil conservation measures. These regulations set forth requirements for the control of grading, clearing and grubbing, and stockpiling, set limits for erosion and sedimentation, establish administrative procedures and minimum requirements for issuance of permits and provide for the enforcement of such rules and regulations.

C. Applicability.

These regulations apply to all clearing, grubbing, grading, embankment or filling, excavating, stockpiling or other earth-moving operations on Guam which require a permit as provided for in 21 Guam Code Annotated, Chapter 66 (as amended). Such applicable clearing or earth-moving operations include those performed by private and governmental sectors, including, the Government of Guam and 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, Sub-Section D, below.

D. Exemptions.

An application for a clearing, grubbing, grading, embankment or filling, excavating or other earth-moving activity shall be submitted to the Agency for review, and approved before the activity is started. The following earth-moving activities may be exempted from these regulations if the Administrator, in writing, determines that the scope or size of the activity will not create either an erosion or other hazard to surface or marine waters of Guam:

~~1) A clearing, grading, filling, excavating or other earthmoving activity may be exempted from these regulation by the Administrator if, in his discretion, he determines in writing that the scope, or size of such earth-moving activity does not require compliance with these regulations~~

~~2) The following earth-moving activities and operations are exempt from these regulations except in cases where the Administrator, in his discretion, determines that these regulations shall apply.~~

1. Clearing, grading and filling for the purpose of constructing a house, pad or driveway for a one-or two-family residence;

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

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

4. Clearing & grubbing individual cemetery graves or plots without using heavy equipment.

5. Excavations for wells, tunnels or utilities, which are permitted under different rules & regulations.

6. Exploratory excavations for wells or for the purpose of soils testing, provided that no clearing and grubbing or grading is to be performed; ~~otherwise a permit is required~~.

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 for coralline type soil and 3:1 slope for clay type soil, provided that all slopes and open areas are stabilized and vegetated.

8. Any fill which is less than one foot in height and placed on undisturbed terrain with existing topography of a ratio less than 5 horizontal to 1 vertical and which does not obstruct a drainage course, provided the area of the property does not exceed 5,000 sq. ft. and open areas are properly stabilized and vegetated.

9. Field plowing and normal tilling operations, or clearing land ~~or re-clearing~~ for agricultural purposes provided these activities or operations do not cause sediment and runoff water to move beyond the edge of the farm boundaries and degrade the water quality of the receiving water bodies. ~~are performed in accordance with the guidelines and standards of Resource Management Systems, approved by Guam's Soil Conservation District~~. Initial field plowing or clearing land for agricultural purposes must be performed in accordance with the implementation of a conservation management system that meets minimum standards contained in the U.S. Field Office Technical Guides and approved by either the appropriate Soil and Water Conservation District created by 5 GCA Chapter 63, in accordance with an approved USDA Soil Conservation Service "Conservation Plan" or the Director of the Guam Department of Agriculture.

10. Clearing and grubbing of land for the purpose of making topographic surveys, and hand clearing of trails for survey lines and for access for soil exploration equipment.

E. Certain Rules of Word Usage

1. Words used in the present tense include the future tense, and the singular includes the plural unless the context clearly indicates the contrary.

2. The term "shall" is always mandatory and not discretionary; and the word "may" is permissive.

3. A word or term not interpreted or defined by this article shall be used with a meaning of common or standard utilization.

Section 10102. Definitions.

A. Meanings of words and terms. The following words and terms, when used in these regulations, shall have the following meanings, unless the context clearly indicates otherwise:

1. Accelerated erosion: The removal of the surface of the land through the combined action of man's activities and natural processes at a rate greater than would occur because of the natural process alone.

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

3. Agency: The Guam Environmental Protection Agency (GEPA).

4. Board: Board of Directors, Guam Environmental Protection Agency.

5. Building pad: The compacted land area on which a structure is to be built.

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

7. Channel: ~~shall mean~~ A natural stream that conveys water; a ditch excavated for the flow of water.

8. Check dam: ~~shall mean~~ A structure used to reduce or prevent excessive erosion by reduction of velocities in water courses.

9. Chutes/flumes: ~~shall mean~~ Channels of concrete or comparable material that are used to conduct storm runoff down slopes where concentrated runoff would cause slope erosion.

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

11. Clearing and grubbing: The removal of vegetation, including trees, timber, shrubbery, and plants, when said vegetation is dislodged or uprooted from the surface of the ground~~, or when removal of structures or other objects are removed from the ground in the course or progress of construction or agricultural use~~.

12. Compaction: The densification of a fill by mechanical means.

13. Crimping: A method used to secure fiber mulches. The operation is performed by a crimping machine which partially punches the mulch into the soil.

14. Deflection Structures: Stones ~~A stone~~, or concrete or wooden groins placed ~~constructed~~ in a river or stream at an angle outward from the shore in a downstream direction to deflect the current away from a critical area of the bank.

15. Denuded: Bare; naked; stripped.

16. Developer: Any person who is engaged in land development. ~~A person or corporate entity who controls a land parcel from its acquired state through the process of urbanization. The acquired state may be wild or farm which is changed to a shopping center, housing unit, commercial unit or amenities, golf courses, etc.~~

17. Dissipate: To scatter; disperse; cause to vanish.

18. Diversion: To change the accustomed course of all or part of a stream or of sheet runoff.

19. Diversion dike: A temporary ridge of soil constructed at the top of a cut or fill slope to divert overland flow from small area away from unstabilized slopes.

20. Diversion ditch: A ditch constructed to channel stream or sheet runoff into desired directions, and may also be referred to as Interceptor Channel.

21. Diversion terrace: A channel or dike constructed up slope of an area for the purpose of diverting storm water runoff.

22. Earth material: Any rock, coral, sand, gravel, natural soil or fill /or any combination thereof.

23. Earth-moving operations: Human caused alterations to the existing topography. ~~Also see clearing, grading, filling and excavation.~~ Any construction or other activity which disturbs the surface of the land including, but not limited to, clearing, grading, excavation, embankment, construction, and development, subdivision development, mineral extraction, sand mining, and the moving, depositing or storing of soil, rock or earth.

24. Embankment ~~or fill: An act by which soil, rock, or other materials are placed or deposited by man or by artificial means, and the resulting placements or deposit.~~ A placement of soil, rock, or other material by man.

25. Engineer: A person duly registered as a professional civil and/or structural engineer on Guam.

26. Engineer's Soils Report: A report on soils conditions prepared by a professional engineer qualified in the practice of civil and/or structural engineering.

27. Environmental Impact Statement: A comprehensive and systematic assessment of environmental impacts which would likely result from a human activity or action. Its purpose is to provide, in part, a basis for making decisions which will affect the human condition as well as the purely biological or natural conditions of our environment. It should provide a reasonable set of alternatives and a preferred option which appropriately balances various environmental concerns, including financial, social or cultural concerns. The assessment should rely on proven assessment methods both scientific and political.

28. Environmental Protection Plan: A document describing, for a proposed development, the methods/equipment selected for use, expected environmental problems during and after construction, and methods and equipment chosen to avoid, mitigate or control potential adverse effects on the environment.

29. 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.

30. Erosion check: ~~A technique whereby porous, material like is installed in a slit trench~~ A slit trench filled with porous matter that is oriented perpendicular to the direction of flow in a ditch or swale to prevent the formation of rills and gullies. ~~gullied by permitting subsurface water migration without the removal of soil particles.~~

31. Erosion and sediment control: The control of solid material, both mineral and organic, during an earth-moving operation, intended to prevent its transport out of the operation area by means of air, water, or gravity.

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

33. Excavation or cut: ~~An act by which earth material is cut into, dug, or moved and shall include the conditions resulting therefrom.~~ A cavity formed by digging, cutting, quarrying, uncovering, displacing or relocating soil or rock.

34. Existing grade: The grade prior to grading.

35. Fill ~~or filling~~: ~~Raising the existing ground elevation by earth-moving operations.~~ A placement of soil, rock, or other material by man to raise the existing ground elevation.

36. Finish grade: The final grade of the site which conforms to the approved plan.

37. Grading: Establishing a topographical profile by earth-moving operations involving cuts and fills or excavation or other earth work activities.

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

39. Interceptor channel: A channel or dike constructed across a slope for the purpose of intercepting storm water, reducing the velocity of flow, and diverting it to outlets where it can be disposed.

40. Interceptor dike: A temporary ridge of compacted soil across a graded right-of-way that ~~are~~ is not subject to vehicular traffic, designed to intercept and divert storm runoff ~~and divert it~~ to temporary outlets where it can be disposed of with minimal erosion.

41. Intermittent stream: A stream or portion of a stream that flows only in direct response to precipitation and receives little or no water from springs ~~and no long-continued supply from~~ or other sources.

42. Jute Netting: A heavy woven jute mesh laid directly over seedbeds to minimize soil erosion in critical areas until vegetation can become firmly established. Due to its thick fibrous composition, it also functions as a mulch to conserve soil moisture, insulate against solar insulation, dissipate energy from falling raindrops and reduce erosion caused by overland flow.

43. Key: A designed compacted fill placed in an earthen trench excavated beneath the toe of a proposed fill slope.

44. Land developer: Any person who is engaged in land development.

45. Land development: The constructing, installing, placing, planting, or building of surface structures, utility lines, shopping centers and malls, golf courses, apartment complexes, schools, roads, highways, parking areas, or any other similar activity.

46. Level spreader: An outlet constructed at zero grade across a slope to collect concentrated runoff and covert it into sheet flow with non-erosive velocities onto areas stabilized by existing vegetation.

47. Mulch: A natural or artificial layer of plant residue (fiber mulches) other materials, such as sand or paper, on the soil surface.

48. Mulch blanket : Blanket type materials used in the establishment of vegetation on swales, ditches and steep slopes where fiber mulch products do not provide sufficient levels of protection during germination and early growth.

49. Netting: A method of securing fiber mulches through the use of jute, plastic, paper or fiberglass nets on steep exposed slopes where crimping is not possible and tacking will not perform satisfactorily.

50. Outcrop: To come to, or be exposed on the surface.

51. Permeability: The property of a porous material which permits the passage or seepage of fluids, such as water for example, or air through its interconnection voids.

52. Permeable: Having a texture through which water can move. ~~that permits water to move through.~~

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

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

55. 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.

56. pH: A numerical measure of the acidity or hydrogen ion activity of a soil. (The neutral point is pH = 7.0. All pH values below 7.0 are acid and all above 7.0 are alkaline).

57. Right-of-way: Right of passage over another person's land; a route that is lawful to use; a strip of land acquired for transport or utility construction.

58. Riprap: Broken rock, cobbles or boulders placed on earth surfaces such as the face of a dam or the bank of a stream, for protection against the action of water or waves; also applied to brush or pole mattresses, or brush and stone, or other similar materials used for soil erosion control.

59. Rough grade: The stage at which the grade approximately conforms to the approved plan.

60. Runoff: Water from rain or irrigation that flows over the ground ~~surface~~ to surface, marine or ground waters. 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.

61. Sandbag sediment barrier: ~~shall mean~~ Temporary barriers or diversions that are constructed of sandbags.

62. Sectional down drain: A prefabricated sectional conduit of half-round, bituminized fiber pipe or other material used to conduct storm runoff from one elevation to another without erosion of slope.

63. Sedimentation: The depositing of sediments.

64. Sediment retention basin: A temporary dam or basin, or a combination of both, that will trap and store sediment produced on exposed areas and delivered to the structure by storm runoff.

65. Sediments: Mineral or organic solid materials that settle to the bottom of water. ~~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.~~

66. Site: The spacial location, under the same ownership, of an actual or planned structure or structures, or earth-moving activity.

67. Slope: An inclined ground surface, the inclination of which is expressed as a ratio of horizontal distance to vertical distance.

68. Soil: ~~(1)~~ The unconsolidated mineral and organic material found on the earth's upper layer, that may be dug or plowed and in which plants can grow. ~~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.~~

69. Soil engineering: The application of the principles of soil mechanics in the investigation, evaluation and design of civil works involving the use of earth materials, and the inspection and/or testing of the construction thereof.

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

71. Soil slopes: All denuded cut, fill or natural soil constituted slopes.

72. Stabilization: The proper placing, grading and/or covering of soil, rock or earth to insure its resistance to erosion, sliding, or other movements.

73. Stockpiling: Temporary open storage of earth materials upon any premises where a grading permit has been issued for the purpose of using the materials at some other premises at a future time.

74. Storm water management: The practice of using detention measure to reduce the impact of minor storms which cause accelerated erosion of stream channels and drainage ways (not to be confused with control of flood flows).

75. Storm water runoff: Rain that is not absorbed when it comes in contact with the soil and thus runs down hill into waters of Guam. This runoff may carry soil with it.

76. Strip planting: The planting of strips of wet soil tolerant, high erosion resistant vegetation in the critical area near the waterline of a major waterway, and the planting of conventional robust rooted grasses and legumes above the critical zone.

77. Subdivision: The division, re-division or change of lot lines of a lot, tract, or parcel of land for the purpose of leasing, transferring ownership, or development, either immediately or in the future.

78. Tacking: A method of securing mulches by the application of an asphalt or chemical binder which binds the individual fibers together to form a resistant blanket.

79. 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.

80. Terrace: A relatively level step constructed in the face of a grade slope surface for drainage and maintenance purposes.

81. Territory: The ~~Territory of~~ Island of Guam, United States of America.

82. Tetrahedron: Solid figure with four (4) triangular surfaces.

83. Uniform Building Code (UBC): The most recent edition of minimum standards to safeguard life or limb, health, property and 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.

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

85. Watershed: ~~The area contained within a divide above a specified point on a stream~~. For any river, stream or other water body, the drainage area that contributes water to that water body.

86. Watershed divide: The line that follows the ridges or summits forming the exterior boundary of a drainage basin and separates one drainage basin from another.

87. Waterway: A natural course or constructed channel for the flow of water.

Section 10103. Permit Issuance and Denials.

A. Permits Required.

1. Unless exempted, no person shall commence or perform any grading, clearing, grubbing, embankment, filling, excavation or other earth-moving activity without a grading permit;

2. Unless exempted, no person shall commence or perform any stockpiling without a stockpiling permit.

B. Permit Application Process.

An applicant shall obtain the required application from the Building Permit Section, Department of Public Works located at the One-Stop Permit Center, and shall complete and submit the application to the One-Stop Permit Center for review and approval of all concerned agencies, including the Guam Environmental Protection Agency.

C. Permit Application Contents

1. A description of the proposed activity, including its purpose, proof of land ownership (title, deed or authorized letter) and other pertinent information as may be required by the Administrator.

2. A vicinity map or plan of the site indicating:

a. Site information. The location, including names and locations of streets, roadways, and right-of-ways; property line locations, dimensions and azimuths, easements and setbacks of property; the location of any utility and utility lines, buildings, structures and improvements on or within 100 feet of the site; prominent visible rock out-cropping; elevations, dimensions, location, extent and slopes of all proposed earth moving

activities shown by contours and/or other means; the area in square feet of the land to be affected; and the quantities of excavation and fill involved.

b. Water course information. Locations, dimensions and flow of springs, rivers, wetlands, wells and streams; natural drainage depressions, basins and sinks; flood plains on the project site and downstream locations which will undergo changes due to the proposed earth-moving operations; and existing and proposed water quality monitoring stations located on or nearby the project site.

c. Vegetation information. Location and type of existing trees with a diameter of 12 inches and greater.

3. Required maps will be prepared and signed by a licensed land surveyor. Grading plans and specifications will be prepared and signed by an engineer. Required maps should conform to the latest Zoning Code of Guam's Land Use Plan and subdivision law. The scale shall be no smaller than 1 inch = 50 feet or 1 inch = 5 meters.

4. An application for a stockpiling permit shall include: a plot plan showing the property boundaries; easements, setbacks, and location of the proposed stockpiles; quantities; height of stockpile; the kind/source of the material to be stockpiled; expected life of the stockpile, and any other information required by the Administrator to control dust, drainage or sedimentation problems. Where stockpiling is for the purpose of surcharging to stabilize or consolidate an area, the permittee shall submit an engineer's soil report which shall include data on the effect such surcharging will have on adjacent buildings or structures.

5. Required Plans

a. Erosion and Sediment Control Plan. ~~as a prerequisite of all permits issued by the Building officials, Department of Public Works,~~ This plan is required for clearing,

grading, grubbing, embankment or filling, excavation or other earth-moving operations not otherwise exempted by these regulations.

b. Storm water Runoff Drainage System Plan. This plan, in addition to the Erosion and Sediment Control Plan, is required when the area to be graded is more than 5,000 square feet or a proposed cut or fill is greater than five feet in height.

c. Both the Erosion and Sediment Control and Storm water Runoff Drainage Systems Plans shall:

i. be prepared and signed by an engineer in accordance with these regulations, and the best management practices (BMP) guidance manual or other application of BMPs; and.

ii. show the method to be used for controlling erosion and disposal of storm water runoff prior to and post construction, including drainage devices such as terraces, berms, ditches culverts, subsurface drains, sedimentation basins, and the estimated runoff quantities of the areas served by each drain and drainage structure.

d. Environmental Protection Plan will be required depending on the intensity and scope of the project. This plan will describe the methods and equipment to be used on site: expected or anticipated environmental problems during and after construction: and the methods and equipment that may be used to avoid, mitigate or control potential adverse effects on the environment.

6. When a proposed cut or fill is greater than five (5) feet or the proposed grading is on land with slopes exceeding 5 percent, or when any fill is to be placed in a gully, or when the fill material will be a highly plastic clay, the applicant shall submit to the Administrator, for the

Agency's evaluation and review, an engineer's soils report signed by an engineer and approved by the owner. The soils report shall include data regarding the nature of the distribution and engineering characteristics of existing soils, and the subsurface conditions at the site. It shall recommend the limits for the proposed grading, the fill material to be used, the geotechnical calculations for the cut or fill area, and the manner of placing, including the heights and slopes of cut and fill sections.

7. When an activity or project is located within an environmentally sensitive area (e.g.; areas that affect seashore, rivers and streams, wetlands, critical habitats, and aquifers), an Environmental Impact Assessment (EIA) must be submitted, unless the Administrator determines in writing that the activity is exempted from EIA requirements.

8. If wetlands exist on the property to be cleared and grubbed, graded or used for stockpiling of earth materials, the (wetlands) must be identified with both field markings and by mapping on the site and/or grading plan(s). Wetlands cannot be cleared, grubbed, graded or otherwise be used as a stockpiling site without first obtaining both a valid Guam Wetland Development Permit and a U.S. Army Corps of Engineers Section 404 fill or discharge permit.

9. The Administrator may require that wetlands, on the property to be cleared, grubbed or used for stockpiling of earth materials, be officially delineated, in whole or in part, when conditions such as slope, soil stability, proximity of work or other performance related conditions warrant an official delineation. Individuals required to delineate wetlands in accordance with this provision shall apply the mapping requirements of the Guam Environmental Protection Agency Wetlands Mapping Policy, revised November 9, 1995.

10. Other permits, plans or approvals associated with and issued for the proposed project shall be submitted with the permit application. Activities described in the permit application shall be consistent with these permits, plans or approvals. Such documents include, but are not limited to:

a. Any required conditional use seashore clearance, wetland, Section 401 WQC, Section 404 permits (CWA), and planned development approvals, height variances, plan review use approvals, or re-zoning under the Guam Zoning Regulations;

b. Sub-division approvals, when an application includes the grading of a development that is to be subdivided, pursuant to the Guam Subdivision Rules and Regulations;

c. Conditional use approvals from Territorial Land Use Commission, when the area to be graded or excavated will be used as quarry, and extracted materials used to fill a different area or sold as a fill material by the owner.

D. Permit Conditions

1. ~~Additionally,~~ No permit for earth-moving operations will be issued that will cause erosion and sediment loads or cause pollution to the waters of ~~the Territory~~ Guam, as defined by the latest Guam Water Pollution Control Act and the ~~current~~ Water Quality Standards, unless an Environmental Protection Plan and an Erosion and Sediment Control Plan have ~~has~~ been approved by the Agency.

2. The Administrator may attach such conditions as may be reasonably necessary to ensure that any grading work is for a use or structure permitted in accordance with zoning requirements, and to prevent creation of a nuisance or hazard to public or private property, health or welfare. Such conditions may include but are not limited to:

a. improvements of any existing grading to bring it up to the standards of these regulations;

b. requirements for fencing of excavation or fill to minimize hazards;

c. requirements for retaining walls or other earth retention structures to prevent loss of, support to, erosion of, and interference with natural drainage patterns on adjacent properties;

d. requirements involving clean-up of an area; and

e. limitations on the months, days and hours of permitted work.

3. The issuance of a grading permit shall constitute an authorization to do only that work which is described in the permit and in the plans and specifications approved by the Administrator.

4. Permits issued under these regulations shall not relieve the permittee of the responsibility for securing permits or approvals for work to be done which is regulated by any federal laws or other laws of Guam, or by department, or division of the governing agencies of the Government of Guam.

5. Permits issued under these regulations shall be consistent with other permits, plans or approvals associated with the proposed project.

6. Where any operations are delayed for any reason, a revised work schedule shall be submitted to the Administrator which describes any required modifications to the temporary storm water drainage system and to the Erosion and Sediment Control Plan, and other information the Administrator may require.

7. A copy of the permit, plans and specifications for grading, clearing & grubbing, or stockpiling shall be maintained at the job-site during the progress of the work.

E. Permit Denials.

The Administrator shall deny a clearing and grubbing, grading or stockpiling permit if there is reasonable cause for concern that the work as proposed by the applicant may present a risk or endangerment to public health or the environment. Factors to be considered in determining probability of dangerous conditions include, but are not limited to:

1. possible saturation of ground by rain;

2. dangerous geological conditions or flood hazards;

3. undesirable surface water runoff, and

4. subsurface conditions such as the stratification and faulting of rock, nature and type of soil or rock.

Section 10104. Erosion and Sediment Control Plans

A. General Requirements

1. All earth-moving activities on Guam shall be conducted in such a way as to prevent accelerated erosion and the resulting sedimentation. To accomplish this all persons engaged in earth-moving activities shall design, implement, and maintain erosion and sediment control measures which effectively prevent accelerated erosion and sedimentation. These erosion and sediment measures must be as set forth in Erosion and Sediment Control Plans submitted, reviewed and approved by GEPA.

2. All clearing, grading, embankment or filling, excavating and other earth-moving operations shall proceed only in accordance with an Erosion and Sediment Control Plan, prepared in accordance with the requirements set forth in these regulations, and ~~which is~~ duly approved by the Agency.

~~3. Such Erosion and Sediment Control Plans shall be prepared in accordance with the requirements set forth in these regulations.~~

3. An approved Erosion and Sediment Control Plan does not abrogate a permittee's responsibility to comply with all other applicable ~~Territorial~~ Guam and federal laws and regulations.

~~(3) An Erosion Control Plan shall be a prerequisite of all permits issued by the Building officials, Department of Public Works, for clearing, grading, filling, excavating or other earth-moving operations not otherwise exempted by these regulations. Additionally, no permit shall be issued if earth-moving operations will cause erosion and sediment loads or cause pollution to the waters of the Territory, as define by the Guam Water Pollution Act and the Water Quality Standards, unless and Environmental Protection Plan has been approved by the Agency.~~

B. Agency approval of Erosion and Sediment Control Plans

1. ~~Two~~ Four copies of a proposed Erosion and Sediment Control Plan shall be submitted to the Agency with ~~Such Plan copies shall accompany~~ the permit application for earth-moving operations.

2. The Agency shall have ~~ten~~ thirty (30) working days to approve or disapprove of such plan.

C. Compliance

1. All clearing, grading, embankment or filling, excavating and other earth-moving operations, except ~~as provided under Section H 10109 (3)(b) below, or as~~ those otherwise exempted from these regulations by the Administrator, must proceed in accordance with a duly approved Erosion and Sediment Control Plan.

2. Earth-moving operations in progress, other than quarrying, shall comply with these regulations within ~~7~~15 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 these regulations.

Section 10105. Erosion and Sediment Control Plans and Measures.

A. General policies for Erosion and Sediment Control

~~(a) Planning policies for control of Erosion and Sediment Control Plan~~

1. All earth-moving operations ~~in the Territory~~ on Guam shall be conducted in a manner that prevents accelerated land erosion, transportation of sediment to and along highways, or siltation ~~or~~ of rivers, estuaries and marine waters. ~~In conjunction with the project construction schedule, the Plan shall indicate the construction sequence of erosion and sedimentation control measures~~.

2. The area affected by earth-moving operations shall be kept to a minimum by either selective clearing, increment phases of development or other effective means. The Erosion and Sediment Control Plan must contain measures that ensure that each phase of any proposed large development affects less than 20 acres.

3. All earth-moving operations shall be scheduled during periods of expected low rainfall.

4. Any earth moving operations authorized under these regulations shall be performed so as not to violate applicable provisions of the latest Guam Water Quality Standards.

5. No person shall perform any earth moving operation so as to cause falling rocks, soil or debris in any form to fall, slide or flow onto adjoining properties or waters of Guam.

6. All work areas shall be maintained so as to minimize dust which may cause a nuisance or

hazard to others, and in conformance with the Guam Air Pollution Control Standards and regulations.

7. Where construction equipment will make frequent crossings of a natural drainage course, plans shall provide for temporary culverts or bridge structures to be installed. The required clearances from concerned agencies shall be obtained before any construction of temporary crossing access begins.

8. The erosion and sedimentation control measures set forth in this section are required, unless the Erosion and Sediment Control Plan shows that the alteration of these measures and facilities or inclusion of other measures and facilities will better prevent accelerated erosion and sedimentation.

B. Required contents of Erosion and Sediment Control Plans

1. Description of the Project.

The plan shall include a ~~brief~~ detailed narrative description, with photographs and construction drawings, of the proposed project. ~~Sketches, photographs and construction drawings may be used to supplement this description.~~

2. Project Site Plan.

a. The necessary information is that which is required in Section 10103.C. Permit Application Contents. ~~A project site plan shall include the data listing in this subsection~~ Plan sheet size shall not be smaller that 18 inches x 24 inches and not larger than 30 inches x 42 inches. Plan sheet sizes shall not vary .

~~(a) Project site vicinity map and north arrow~~.

~~(b) Existing land uses and structures.~~

~~(c) Existing vegetation,~~

~~(d) Existing topography at contour intervals of not greater than ten feet~~

~~(e) Grading plan at contour intervals of not greater than five feet which extend be-yond the project site limits so as to adequately depict the off-site drainage pattern for purposes of assessing any erosion or its deposition onto other properties.~~

b. Soil description including: soil classification by USDA Natural Resources ~~Soil~~ Conservation Service "Soil Taxonomy Classification System"; soil erodibility factor; soil permeability and percolation rates; type and extent of out-croppings; depth of soil; capability for establishing vegetation; and coefficient of runoff.

c. Evaluation of subsurface information. Subsurface investigations shall consist of drilling, excavations, or observations of naturally exposed soil and bedrock exposures at sufficient intervals and depths to indicate the type of material or condition to be encountered at final grading. The person or firm making the investigation shall submit a written report of their findings and recommendations. ~~as described in part (h) below~~ This information is required where the stability will be lessened by proposed grading or filling, where any other weaknesses are found, or where any of the following conditions are discovered or proposed:

i. At locations where a fill slope is to be placed above or a cut slope;.

ii. At proposed cuts exceeding 15 feet in height unless in competent rock as determined by an engineer;.

iii. At locations of proposed fills exceeding 15 feet in height;.

iv. Where sides of hill fills are to be placed on existing slopes steeper than 15 percent;

v. Wherever groundwater from either the grading project or adjoining properties is likely to reduce stability;

vi. At zones of trapped water or high water table; or.

vii. Where the topography is indicative of landslides, as determined by an engineer.

d. Site Assessment. ~~of the Site. The assessment of the site shall determine the need for an erosion and sediment control plan by considering~~ Consider the detrimental effects of construction of the site as it pertains to: erosion and loss of sediments; slope stability; water quality; plant communities; wildlife and aquatic life; and condition of marine waters and reef flats which will receive storm water runoff, either directly or indirectly, from the project site.

3. Grading Plan.

It is the purpose of this paragraph to ensure that minimum grading is performed and that natural contours and topography will be retained wherever feasible.

a. Grading shall be designed and implemented so as to blend in with the surrounding area.

b. All grading plans and specifications shall show, using contours, cross sections, spot elevations or other means, the condition of the land before and after grading.

c. The grading plan shall provide information regarding the location and source of imported fill material, and the location for disposal of excess excavation material.

d. Where a grading activity is to occur in increments or phases, the plan shall also include the plan for future site development and the proposed grading of future increments.

4. Construction Schedule.

a. Construction increments shall be described in detail and identified on the project plan.

b. The schedule will indicate completion dates for each construction increment and the construction sequence of erosion and sediment control measures. ~~shall be indicated.~~ Each increment phase of work shall have an approved Environmental Protection Plan and Soil Erosion and Sedimentation Control Plan from the Agency.

c. The Agency shall check the adequacy of the schedule with respect to short term and long term erosion anticipated on the project site. The construction schedule shall be checked to ensure prompt establishment of protective vegetation with full recognition of climatic and other factors that influence its establishment.

5. Storm water Drainage System and Control of Site Water Runoff.

a. The proposed temporary and permanent, natural and man-made, storm water drainage systems shall be depicted in detail in the drawing plans, including, but not limited to, dimensions, alignments and elevations of all structures as well as the anticipated volume and velocity of the storm water. Design calculations for the drainage systems and siltation basins, best management practices, and other pertinent structures, shall be submitted. The following shall also be provided:

i. The runoff to be expected during and after the proposed development;

ii. The size of drainage areas above cuts and slopes;

iii. Estimate soil loss volume;

iv. The methods for trapping sediments, reducing erosion of drainage ways, and for controlling the collection and discharge of Storm water during and after construction.

v. The method and schedule of construction of waterway crossings. Sediment control structures for natural waterways shall be scheduled for installation prior to any earth-moving operations.

b. Adequate provisions shall be made to prevent surface waters from damaging the cut face of an excavation or the sloped surfaces of a fill. Positive drainage shall be provided to prevent the accumulation or retention of surface water in pits, gullies, holes or similar depressions. All drainage facilities shall be designed to carry surface water runoff to a storm drain that will discharge to a catchment facility within the project site. The Administrator may require such drainage structures and pipes to be constructed or installed, which in his opinion, are necessary to prevent erosion damage and to adequately carry off surface waters. The flow of any existing and known natural underground drainage shall not be impeded or changed so as to cause damage to adjoining property.

~~c. Storm water 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.~~

c. During construction, all storm sewer inlets shall be protected with silt traps.

d. If a project to be developed is covered under the Federal Storm water Regulations (40 CFR Parts 122 & 123), a notice of intent to discharge Storm water to surface and marine waters of Guam must be submitted to US Environmental Protection Agency and a copy furnished GEPA. An NPDES permit which authorizes the discharge must also be secured.

~~**(5) Erosion and Sediment Control Measures.**~~

~~(a) The erosion and sediment 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.~~

~~(b) In conjunction with the project construction schedule, the Plan shall indicate the construction sequence of erosion and sedimentation control measures.~~

~~© Stabilization of all affected streams, waterways and drainage ways;~~

e. Structural measures such as berms, dikes, traps, basins, shall be installed prior to any other grading, clearing, or disturbance of the existing surface of the site..

f. Diversion Terraces

i. Diversion terraces shall be constructed up-grade of a project area to convey runoff around the project area. For temporary diversions, the channel shall have capacity to convey 1.6 cubic feet per second per acre of land tributary to it. For permanent diversions, the channel shall have capacity to convey 2.75 cubic feet per second per acre of land tributary to it.

ii. Diversion terraces shall be grassed or lined with erosion resistant material to prevent accelerated erosion within the channel.

iii. Outlet structures shall be designed to maintain a discharge velocity of less than 2.0 feet per second and all areas affected by the construction activity shall be stabilized before the outlet structures shall be used.

g. Interceptor Channels.

i. Interceptor channels may be used within the project area to reduce the velocity of the flow and thus prevent accelerated erosion.

ii. Water collected by interceptor channels shall be conveyed to sedimentation basins or to vegetated areas but not directly to streams.

iii. Outlets to vegetated areas shall be designed to maintain an outlet velocity of less than 2.0 feet per second. Outlet structures shall be screened to lower the amount of suspended solids in the discharge water.

h. Channels of Conveyance.

All channels used to convey water through a project area shall be designed to have a velocity of less than 1.5 feet per second. Where this is not possible, the channel shall be grassed or lined with erosion resistant material.

i. Sedimentation Basins.

i. The basin shall be cleaned when the storage capacity of the basin is reduced to 5,000 cubic feet per acre of project area tributary to the basin.

ii. Water from a sedimentation basin shall not be discharged to a natural waterway. Designs of sediment basins must provide for enough storage to give time for runoff water to be leached into the ground.

iii. Outlets of sedimentation basins shall be screened and designed in a manner

which does not discourage regular maintenance.

iv. Sedimentation basins shall be structurally sound and properly secured to protect them from unauthorized acts of third party activities.

6. Cut and fill ~~measures~~

a. The conditions of the following subsections may be modified by the Administrator based on a supportive engineer's soils report, and receipt of approvals from the owner and concerned agencies:

i. Height. Where a cut or fill is greater than 15 feet in height, terraces, or benches shall be constructed at vertical intervals of 15 feet except where only one bench is required, the single bench shall be constructed at the midpoint. The minimum width of such terraces or benches shall be at least 18 feet and provided with drainage provisions to control erosion on the slope and face and bench surface.

ii. Cut Slopes. Under the following conditions, no cut may be steeper in slope than the ratio of its horizontal to its vertical distance as shown below:

(a) 2 horizontal to 1 vertical in unweathered rock or mudrock;

(b) 2 horizontal to 1 vertical in decomposed rock; or

(c) 2 horizontal to 1 vertical in soils of low plasticity for cuts of any height in highly plastic soils. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

iii. Fill slopes shall not be steeper than the ratio 3 horizontal to 1 vertical except that fill using highly plastic clays shall have slopes specifically recommended in the engineer's soils report signed by a professional civil engineer, and approved by the owner. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

b. Fill material shall be selected to meet the requirements and conditions of the particular fill for which it is to be used. The fill material shall not contain vegetation or organic matter. Where rocks, concrete, or similar materials of greater than 8 inches in diameter are incorporated into the fill, they shall be placed in accordance with the recommendation of the professional civil engineer.

c. Before placing fill or stockpiling, the natural ground surface shall be prepared by removing the vegetation and, shall be notched by a series of benches and/or subsurface drains installed.

d. No fill shall be placed over any waters of Guam (e.g.; spring, marsh, wetlands), refuse dumps, or soft, soggy or springy foundations. The plan must highlight possible wetland characteristics on the site and adjacent properties.

e. Fill materials shall be spread and compacted in a series of eight (8) inch to ten (10) inch layers, unless otherwise recommended by the professional civil engineer. For slopes, the fill shall be compacted to ninety five (95) percent maximum density as determined by the most recent ASTM Soil Compaction Test D1557. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

f. Distance from property line. The following requirements may be modified by the Administrator when cuts or fills are supported by retaining walls or when the permittee

submits an engineer's soils report stating that the soil conditions will permit a lesser horizontal distance without causing damage or danger to the adjoining property. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

The horizontal distance from the top of a cut slope or the bottom of a fill slope to the adjoining property line shall not be less than as follows:

Heights of cut or fill	Distance from property line (in feet)
Zero feet to 4 feet	4
More than 4 feet to 10 feet	6
More than 10 feet to 15 feet	8
More than 15 feet	10

7. Maintenance Procedures.

a. A maintenance program for the erosion and sedimentation control structures and facilities shall be established. ~~Such~~ The program shall include ~~periodic~~, but not be limited to, a schedule for inspecting the facilities and for removing and disposing ~~inspection schedule of the facilities, schedule of removal and disposal~~ of sediment materials from the control structures, or project area, and specific ~~assignment~~ duties of the designated maintenance personnel.

b. If the original owner has sold the property, the subsequent owner shall be responsible for maintaining the permanent measures that have been installed on the property.

8. Disposal of Spoil Materials.

The information concerning the disposal of spoil materials shall include the following: type of spoil material; location of disposal area; method for processing and disposing of spoil

materials; procedures for preventing soil loss to adjacent watercourses; and, if intending to burn spoil materials, burning procedures for combustible spoil material. Burning requires a permit from the Guam Fire Department;

9. Stockpiles.

The following information shall be provided: source of stockpile material; location, slope, and height of stockpile; duration that the material is to be stockpiled; provisions to prevent erosion and sediment loss from rain and wind action; plan for removing stockpiles at project completion.

10. Stabilization of Affected Areas

a. Stabilization of slopes, channels, ditches, berms, diversions, silt dams, or any disturbed areas shall begin as soon as possible and no later than 30 calendar days after the final grade or final earth-moving activities has been completed.

b. Electric power, and telephone trenches are to be stabilized as soon as possible and no later than 30 days after backfill.

c. Stabilization of stream banks shall be scheduled during periods of expected low rainfall.

~~b. 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.~~

d. Where it is not possible to permanently stabilize a disturbed area immediately after the final earth-moving has been completed or where the activity ceases for more than 30 calendar days, interim or temporary stabilization measures shall promptly be implemented and enforced.

e. Any disturbed area not paved, sodded or built shall be seeded and mulched with vegetative cover appropriate to the soil type, as recommended by an engineer, or the condition of the area based on soil test analysis done by a laboratory. This condition does not prohibit the use of matting, gabion, armor coating on erodible surfaces or other type of vegetative cover that will minimize erosion.

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

f. All structural sediment control measures are to remain in place until permission for their removal has been obtained from the Agency.

~~4. No graded area shall remain in an unstabilized condition for longer than or longer than authorized by its approved Erosion Control Plan.~~

~~5. In the event that earth-moving operations are discontinued or delayed, graded areas shall receive interim, or temporary cover~~

~~6. All areas disturbed by earth-moving operations, including slopes, channels, ditches, banks, must be stabilized as soon as possible after the final grade has been established~~

11. Protection and Removal of Native Vegetation.

a. In order to protect native vegetation from construction impacts, the following information shall be provided: location and description of native vegetation whose root zone will be affected by compaction, fills, trenches, and changes in the groundwater table; measures which will prevent conditions damaging to vegetation; and criteria used to determine removal;

b. Whenever feasible, natural vegetation should be retained. If their removal is necessitated, they shall not be stored or deposited along banks of streams, rivers or natural water courses. after being uprooted, or displaced from the ground by excavation, clearing or grubbing. Removed vegetation shall be disposed of at a disposal site approved by the Administrator, and removed from the site within a reasonable time, not to exceed one (1) month from date of removal.

12. Establishment of Vegetation

a. Where the establishment of vegetation is required on slopes of cut and fill, graded areas, and watercourses, etc., the following information shall be provided :

I. Location and areas to be vegetated;

ii. An indication of whether vegetation is to be temporary or permanent;

iii. Type and quantity of seeds or plants;

iv. Ground conditions, including: soil surface condition, pH, permeability, size distribution, slope angle, slope length, and aspect, nutrients;

v. Type and quantity of mulch;

vi. Type and quantity of fertilizer;

vii. Method and schedule of seeding, mulching, planting, and fertilizing;

viii. Irrigation schedule.

b. The plan shall provide for the revisiting of the location every three (3) months to verify that vegetation has been successfully established. If not successful the site must be revegetated until the area ~~returns to its pre-existing condition substantially~~. is successfully revegetated.

13. Certification. The Plan shall be stamped and signed by ~~a professional civil or environmental~~ an engineer. ~~holding current Guam registration in the Territory~~.

Section 10106. Special Requirements.

A. Protection of adjoining properties.

Any person performing or causing to be performed any excavation or fill shall, at his own expense, provide the necessary means to prevent the movement of earth to the adjoining properties, and to maintain the existing natural grade of adjoining properties.

B. Protection of public utilities.

Any person performing or causing to be performed any excavation or fill shall be responsible for the maintenance or restoration of street pavements, sidewalks and curbs, and improvements of public utilities which may be affected. Such maintenance shall be in accordance with the requirements of the Department of Public Works, Government of Guam agencies and affected public utilities. At cuts fronting any street, a suitable and adequate barrier shall be installed to provide protection to the public.

C. Removal of silt or other debris.

Any person depositing or causing to be deposited, any silt or debris in ditches, water courses, drainage facilities, and public roadways, shall remove such silt or other debris. In case such person shall fail, neglect or refuse to comply with the provisions of this section within 48 hours after written notice served upon him, either by mail or by personal service, the Administrator may proceed to remove the silt and other debris or to take any other action he

deems appropriate. The costs incurred for any action taken by the Administrator shall be payable by such person.

D. Safety precautions.

At any stage of the grading, grubbing, or stockpiling, if the Administrator finds that further work as authorized by an existing permit is likely to create soil erosion problems or to endanger life, limb or property, he may require safety precautions. These precautions may include but are not limited to: flattening exposed slopes; constructing additional silting or sediment basins, providing drainage facilities or benches; removing rocks, boulders, debris and other dangerous objects which, if dislodged, are likely to cause injury or damage; or constructing fences or other suitable protective barriers.

E. Creation of individual building sites.

Hillside lots shall be graded in such a manner that any parcels which may be created, including all separate building sites which may be contained within said parcels, can be satisfactorily graded and developed as individual building sites.

F. Protection of Sink Holes:

Earth-moving operations shall not be performed in sink holes or in such close proximity as to threaten their viability, function or the conveyance of surface water into such features unless specifically authorized by the administrator. In the event a developer proposes to modify or use a sinkhole, an environmental and hydrogeologic assessment must be performed to ensure adverse affects will not result, including but not limited to the displacement of groundwater, interference with well production, significant changes to groundwater recharge, flooding, or the threat or introduction of any pollutant to groundwater, regardless of zone or category.

Section 10107 Project Completion ~~HH. Minimum Conditions of an Erosion and Sediment Control Plan~~

A. Products to be submitted.

1. As-built / graded plan, prepared by an engineer or land surveyor, upon completion of an

earth-moving operation covering an area of greater than one (1) acre;

2. Soils report, when earth moving operations involve cuts or fills for which an engineer's soils report is required. The report shall contain:

a. A description of materials used in the fill and its moisture content at the time of compaction;

b. The procedures used in depositing and compacting the fill;

3. A description of the preparation of the original ground surface before making the fill, but not limited to benching and subsurface drainage;

4. A plan or tabulation showing the general location and elevation of compaction tests made in the fill together with a tabulation of relative compaction densities obtained at each location, the location of sub-drains, and other pertinent features of the fill necessary for its stability; and

5. Certification that the work was done in conformity with these regulations, the approved plans and specifications, and the engineer's soils report.

B. Final inspection and approval.

The permittee or his agent shall notify the Administrator or his representative when the earth-moving operation is ready for final inspection. Final approval shall not be given until all approved work has been completed. Final approval shall be dependent on installation of all drainage structures and their protective devices, establishment of a healthy vegetation growth in conformance with the approved plans and specifications, and submittal of any required reports.

~~(a) Planning policies for control of Erosion and Sediment Control Plan.~~

~~1. All earth-moving operations in the Territory of Guam shall be conducted in a manner that prevents accelerated land erosion, transportation of sediment to and along highways, siltation or rivers, estuaries and marine waters.~~

~~2. The area affected by earth-moving operations shall be kept to a minimum by either selective clearing, increment phases of development or other effective means.~~

~~3. All earth-moving operations shall be scheduled during periods of expected low-rainfall.~~

~~4. No graded area shall remain in an unstabilized condition for longer than thirty 30 calendar days or longer than authorized by its approved Erosion Control Plan.~~

~~5. In the event that earth-moving operations are discontinued or delayed, graded areas shall receive interim, or temporary cover, which is acceptable to the Agency;~~

~~6. All areas disturbed by earth-moving operations, including slopes, channels, ditches, banks, must be stabilized as soon as possible after the final grade has been established~~

~~7. Storm water 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~~

~~8. All 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~~.

Section 10108. Permit Fees.

A. Applicability.

All applicants (e.g.; private individuals, federal agencies, and Government of Guam agencies or departments, including autonomous and semi-autonomous agencies) for earth-moving operations permits, shall pay required permit fees.

B. Grading permits.

1. Before issuing a grading permit clearance, the Administrator shall collect site grading plan review fees based on the volume of excavation or fill measured in place according to the

following schedules:

TABLE A - GRADING PLAN REVIEW FEES

50 cubic yards or less ---------- No Fee

51 to 100 cubic yards ---------- $15.00

101 to 1,000 cubic yards ---------- $22.50

1,001 to 10,000 cubic yards -- ---------- $30.00

10,001 to 100,000 cubic yards ---------- $30.00 for the first 10,000 cubic yards, plus $15.00 for each additional 10,000 cubic yards or fraction thereof.

100,001 to 200,000 cubic yards ---------- $165.00 for the first 100,000 cubic yards, plus $9.00 for each additional 10,000 cubic yards or fraction thereof.

200,001 cubic yards or more ---------- $225.00 for the first 200,000 cubic yards, $4.50 for each additional 10,000 cubic yards or fraction thereof.

2. The fee for a grading permit authorizing additional work to that under a valid permit shall be the difference between the fee paid for the original permit and the fee shown for the entire project.

C. Fees for additional plan reviews.

Additional plan reviews required for any changes, additions or revisions to approved plans are $30.00 per hour, or the total hourly cost to the jurisdiction, whichever is the greatest. This cost

shall include those associated with supervision, overhead, equipment, hourly wages and fringe benefits of the employees involved.

D. Clearing and grubbing permits.

Before issuing a clearing and grubbing permit clearance, the Administrator shall collect a clearance fee of $20.00 for clearing & grubbing areas greater than 15,000 square feet plus $2.00 per each additional 1,000 square feet or fraction thereof. No fee shall be charged for clearing and grubbing less than 15,000 square feet.

E. Stockpiling permits.

Before issuing a stockpiling permit clearance, the Administrator shall collect a permit clearance fee of $7.50 for stockpiling in excess of the 100 cubic yards, plus $1.50 for each additional 100 cubic yards or fraction thereof.

F. Work occurring without a permit.

Where work for which a permit is required by these regulations has commenced or has been accomplished without a permit, a permit shall be obtained, and two times the fees specified above shall be assessed, provided that such work complies with or may be made to comply with the requirements of these regulations. If the grading/clearing/ stockpiling/ grubbing work accomplished or commenced cannot be made to comply with the provisions of these regulations, the person or persons responsible for the initiation or accomplishment of such grading work shall restore the land to its original condition and shall obtain a certificate of completion thereof from the Administrator. Notwithstanding the above, the person or persons responsible for such grading/clearing/ grubbing/stockpiling shall be deemed to have violated the provisions of these regulations by performing such activity/ies without a permit.

G. Water Protection Fund.

All permit fees, monetary charges, fines, and penalties assessed, collected or received by GEPA pursuant to this regulation and other regulations promulgated under the Water Pollution

Control Act, as well as contributions and assets made for the purpose of improving water quality or preventing water pollution shall be deposited into the Water Protection Fund. The Water Protection Fund shall be established as separate and apart from any other funds of the Government of Guam, and shall be administered by the Administrator. Independent records and accounts shall be maintained in connection therewith. The funds shall be used for the administration and implementation and enforcement of the Water Pollution Control Act and regulations promulgated from said Act, for educational programs and grants for research and development, advertisement promotions, and inspections of facilities to prevent or minimize erosion that contributes to pollution of the waters.

Section 10109. Permit Expiration.

A. Grading, clearing and grubbing and stockpiling permits.

All grading, clearing and grubbing or stockpiling permits shall expire and become null and void under the following circumstances:

1. If permitted work is not started withing 180 calendar days after the date of issuance of the permit; or

2. If work is suspended or abandoned any time after the work is commenced for a minimum period of 60 days; or

3. If work is continued without interruption for one year, beginning with the date of issuance of the permit, or is completed within the time frame provided in the approved permit application, whichever comes first.

B. Stockpiling permits.

Every stockpiling permit shall expire and become null and void one year after the date of issuance. Prior to the expiration of the stockpile permit, all stockpiled material temporarily

stored on the premises shall be removed from the premises or used on the premises as fill material under a grading permit for fill.

C, Permit expiration.

Once a permit has expired, the owner/applicant shall pay the required fees and obtain a new permit pursuant to these regulations, before beginning new work. If the owner begins work with obtaining a new permit, the owner shall pay the necessary penalty fees pursuant to these regulations.

Section 10110. Stop Work Order.

A. Unacceptable conditions.

Whenever the Administrator determines that any permitted clearing & grubbing, grading, or stockpiling is or may become unstable or dangerous, endangers property, adversely affects the safety, use, or stability of a public way or drainage channel, or results in a violation of the Guam Water Quality Standards, the owner of the property, or other person or agent in control of the property, on receipt of notice in writing from the Administrator, shall abate the danger, implement necessary corrective measures, and shall conform with the requirements of these regulations. The Administrator, or his authorized representative, shall have the authority to enter the property and investigate, and enforce the provisions of this section. A hearing will be held as required under 10 GCA Section 47109.

B. Stop work order procedures.

If the Administrator determines that the work must stop due to unstable or dangerous conditions, the Administrator shall issue a stop work order to the owner/contractor of the property and transmit a copy of the order to the Department of Public Works Building Permit Section. Both GEPA and the Department of Public Works shall jointly enforce the stop work order.

C. Work occurring without a permit.

Notwithstanding the above, if an earth-moving operation is occurring without a valid permit the Agency can order the operation to immediately cease and either require the violator to

obtain an after the fact permit, or if the operation cannot be permitted, to have the violator take corrective measures to return the land to its previous condition.

Section 10111. Suspension or revocation of Permit.

A. Criteria for suspending or revoking permits.

The Administrator shall, in writing, suspend or revoke a permit issued under the provisions of these regulations whenever: the permit has been issued on the basis of incorrect information supplied by the permittee; existing site conditions are found not to be in accordance with the terms and conditions of the permit; it is determined that the permittee has not complied with a provision of any other applicable law, ordinance rule or regulation of the Guam; the clearing and grubbing, grading or stockpiling discloses conditions that are objectionable or unsafe; or an immediate danger exists in a downstream/adjacent area.

B. Process for recommencing work.

When a permit has been suspended the permittee may submit details and proposals for compliance with the provisions of these regulations, and any other applicable laws, rules or regulations of Guam. Upon approval of such plans and proposals by the Administrator, the Administrator shall authorize the permittee, in writing, to proceed with the work.

C. Non-compliance

Non-compliance with the correction notice or stop work order issued for the construction of the sediment and erosion control practices, and/or the construction of storm water management facilities may result in the revocation of the issued permit.

Section 10112. Inspections.

A. Access to the site.

Each permit issued under these regulations shall be deemed to include the right of the Administrator or his authorized representative to enter at reasonable time upon any property to inspect the clearing and grubbing, grading, or stockpiling operations. Such inspections may take place before, during and after any earth change activity for which a permit has been issued to ensure that control measures are properly installed or performed and maintained at the expense of the applicant.

Section 10113. Enforcement.

A. Corrective Measures.

If the Agency determines that a person is conducting operations ~~in a~~ which ~~is~~ are causing or ~~is~~ are likely to cause pollution, the Administrator may order the owner or operation to take ~~of~~ corrective measures needed to prevent or cease the pollution.

B. Stop Work Order.

If the operation is causing or is likely to cause alteration of physical, chemical, or biological properties to the waters of Guam, resulting from sediment, deposition presenting an imminent and substantial danger to the public health, safety or welfare, or the health of animals, fish or aquatic life, to a public water supply or to other reasonable uses of water, the Administrator can issue an order requiring the cessation of relevant activities and implementation of corrective measures. In emergency situation, any order issued by the Administrator shall become final no later than 24 hours after the date of the notice and order served.

C. Voluntary compliance.

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

D. Permit violations.

Whenever the Agency has reason to believe that a violation of any Section of these regulations

has occurred, it shall 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 fifteen (15) days that after the date of the notice and order 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 shall require that the alleged violator or violators appear before the Agency for a time and place specified in the notice and answer the charges complained of, or the Agency may initiate action pursuant to Section 10114 of these regulations.

E. Corrective actions from Hearing.

If, after a hearing is held pursuant to 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 soil erosion.

F. Court Appeal.

No later than ~~ten (10)~~ fifteen (15) 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.

G. Corporate Liability:

(a) A corporation may be found liable or convicted for (1) any violation or offense committed in furtherance of its affairs on the basis of conduct performed, authorized, requested, commanded or recklessly tolerated by (A) the board of directors; (B) a managerial agent acting in the scope of his employment; or (C) any other person for whose conduct the statute defining the violation or offense provides responsibility; (2) failure to perform a duty imposed by law; (3) any violation or offense committed by an agent of the corporation acting in the scope of his employment in furtherance of its affairs. (b) As used in this section, managerial agent means an agent of the corporation having duties of such responsibility that his conduct may fairly be found to represent the policy of the corporation.

H. Emergency Procedures.

1. Any other provisions of law to the contrary notwithstanding, if the Administrator finds that a generalized condition of pollution exists, and that it creates an emergency requiring immediate action to protect the intended uses of the water as designated in the Standards of Water Quality for Waters of Guam, or to protect human health or safety, the Administrator, with the concurrence of the Governor, shall order persons causing or contributing to the pollution to reduce or discontinue immediately the pollutants, and such order shall fix a place and time, not later than twenty-four (24) hours thereafter, for a hearing to be held before the Agency. Not more than twenty-four (24) hours after the commencement of such hearing, and without adjournment thereof, the Agency shall affirm, modify or set aside the order of the Administrator.

2. In the absence of a generalized condition of pollution of the type referred to in Subsection (1), but if the Administrator finds that pollutants from the operation of one or more polluting sources is causing imminent danger to the intended uses of the water as designated in the Standards of Water Quality for Waters of Guam or is causing imminent danger to human health or safety, he may order the person or persons responsible for the operation or operations in question to reduce or discontinue pollutants immediately, without regard to the provision of Subsection (a) of §47109, Chapter 47, 10 GCA of this Act. In such event, the requirements

for hearing and affirmance, modification or setting aside of orders set forth in Subsection (1) of this Section apply.

Section 10114. Penalties, Liability, and Severability Clause

A. Penalties:

(a). **Field citations** - Any person violating the Water Pollution Control Act or these regulations may be served by the officer or inspector with a pollution citation. Water Pollution citation violations shall be settled by amount of no less than $ 150 per violation and not more than $3,000 per violation. Cost to take corrective action and community service in lieu of all or a portion of the fine may be accepted by the Board. The Agency will establish a scale amount to assist in determining the penalty amount for settlement. The Board must hold a public hearing to establish and notify the public of the monetary citation fines under this subsection before fines can be imposed. The citation will provide that the violator can request a hearing with the Guam Environmental Protection Agency Board of Directors (the "Board"). The Board can impose a fine up to $3,000 per violation noted in the citation. Costs of corrective action and community service in lieu of all or a portion of the fine may be accepted by the Board. Fines imposed and collected under this Section will be deposited into the Water Protection Fund. Judicial review may be had of any Board decision by any party affected adversely by it. If the Board decision is not in accordance with law or not supported by substantial evidence, the court shall remand the Board to take action according to law or the evidence.

(b) **Administrative** - Whenever on the basis of any information available the Administrator reasonably determines that any person has violated the provisions of this rules and regulations or a lawful order, or has violated any permit condition or limitation, the Administrator may assess a civil penalty that may not exceed $10,000 per day per violation that the violation continues, except that the maximum amount of any civil penalty under this section shall not exceed $125,000.

(1) Before issuing an order assessing a civil penalty, the Administrator shall give to the person to be assessed such penalty, written notice of the Administrator's proposal to issue

such order and the opportunity to request, within 30 days of the date the notice is received by such person, a hearing on the proposed order. Hearing will be conducted as provided under the Administrative Adjudication Law (AAL). In lieu of an order, the Agency may require that 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 10114 of this regulations.

(a) If, after a hearing held pursuant to the AAL, the Board 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 for the prevention, abatement, or control of the pollution or discharges involved or for the taking of such other correction action as may be appropriate.

(b) If, after hearing on an order contained in a notice, the Board finds that no violation has occurred or is occurring, it shall rescind the order.

(c) 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 may prescribe timetables for the necessary action in preventing, abating or controlling the pollution or discharge.

(2) In determining the amount of any penalty assessed, the Administrator shall take into account the nature, circumstances, extent and gravity of the violation or violations and with respect to the violator, ability to pay, any prior history of such violations, the degree of culpability, economic benefit or savings if any resulting from the violation, and such other matters as justice may require.

(3) If any person fails to pay an assessment of a civil penalty after the order making the assessment has become final, or after a court in an action has entered a final judgement in favor of the Administrator, the Administrator shall request the Attorney General to bring a civil action to recover the amount assessed. In such an action, the validity,

amount, and appropriateness of such penalty shall not be subject to review.

(4) The Administrator may settle, modify or release, with or without conditions, any administrative penalty which may be imposed under this section.

B. Liability.

The provisions of these regulations shall not be construed to relieve or alleviate the liability of any person for damages resulting from preforming, or causing to be performed, by grading, grubbing or stock-piling operation. The Government of Guam, GEPA, its officers and employees shall be free from any liability, cost or damage which may accrue from any grading, grubbing or stockpiling or any work connected therewith, authorized by these regulations.

C. Severability Clause.

If any provisions of these rules, or its application to any person or circumstances, is held invalid, the application of such provision to other persons or circumstances, and the remainder of these rules, shall not be affected thereby.

MINA 'BENTE SINGKO NA LIHESLATURAN GUAHAN
2000 (SECOND) REGULAR SESSION

Clerk of the Legislature
ACKNOWLEDGEMENT RECEIPT
Received by: [signature]
Time: 5:10 P
Date: 3/24/2000

Bill No. 394(LS)

Introduced by: **J.M.S. Brown**

AN ACT TO ESTABLISH THE GUAM ENVIRONMENTAL PROTECTION AGENCY (GEPA) GUAM SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS

BE IT ENACTED BY THE PEOPLE OF GUAM:

Section 1. Legislative Findings and Intent. In accordance with the Administrative Adjudication Law, §9303 of Title 5 of the Guam Code Annotated, as amended by Public Law Number 24-27, on December 10, 1997 the Guam Environmental Protection Agency (GEPA) transmitted to I Liheslaturan Guahan, the *"Guam Environmental Protection Agency Guam Soil Erosion and Sedimentation Control Regulations."* I Liheslaturan Guahan agrees with the regulations as presented and seeks to approve said regulations.

Section 2. Approval of GEPA Regulations. I Liheslaturan Guahan hereby approves the GEPA rules and regulations entitled, *"Guam Environmental Protection Agency Guam Soil Erosion and Sedimentation Control Regulations,"* which were transmitted to I Liheslaturan Guahan on January 25, 2000.

Section 3. Severability. If any provision of this Law or its application to any person or circumstance is found to be invalid or contrary to law, such invalidity shall not affect other provisions or applications of this Law which can be given effect without the invalid provisions or application, and to this end the provisions of this Law are severable.

EXHIBIT A

GUAM SOIL EROSION AND SEDIMENT CONTROL REGULATIONS

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Section 10101. General Provisions: Purpose, Scope, Applicability and Exemptions.

A. Purpose.

Whereas soil erosion and sedimentation resulting from the construction of sub-divisions, industrial and commercial developments, highways and other activities requiring excavation and filling can affect the purity of wetlands, streams and marine waters on Guam and thereby may cause unreasonable damage to aquatic and marine life in general; and whereas, the pollution of wetlands, 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 surface and groundwater resources and to protect, maintain and improve the quality and potability thereof; it is declared ~~to be~~ that the purpose of these regulations is to control accelerated soil erosion, ~~and the resulting sedimentation of the waters of the Territory~~ thereby

preventing the pollution of Guam's waters from fertilizers, pesticides, sediments and other polluting substances carried by sediment, and to protect property and to promote the public health, safety and welfare by regulating grading, clearing, grubbing and stockpiling, and by setting minimum standards for erosion and sedimentation control for the Island of Guam.

It is also the purpose of these regulations to manage nonpoint source pollution consistent with the latest "Guam Nonpoint Source Program", the "Guam Erosion & Sedimentation Manual" guidelines and recommendations, the comprehensive approach set forth in Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990, "Protecting Coastal Waters", codified as 16 U.S.C. §1455(b), and the "Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters" (EPA/840-B-92-002, dated January 1993) issued under the authority of Section 6217(g) of the Coastal Zone Act Reauthorization Amendments of 1990 recommendations.

B. Scope.

The provisions of these regulations impose requirements on those earth-moving activities which create accelerated erosion or a danger of accelerated erosion and which require planning and implementation of effective soil conservation measures. These regulations set forth requirements for the control of grading, clearing and grubbing, and stockpiling, set limits for erosion and sedimentation, establish administrative procedures and minimum requirements for issuance of permits and provide for the enforcement of such rules and regulations.

C. Applicability.

These regulations apply to all clearing, grubbing, grading, embankment or filling, excavating, stockpiling or other earth-moving operations on Guam which require a permit as provided for in 21 Guam Code Annotated, Chapter 66 (as amended). Such applicable clearing or earth-moving operations include those performed by private and governmental sectors, including the Government of Guam and 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, Sub-Section D, below.

D. Exemptions.

An application for a clearing, grubbing, grading, embankment or filling, excavating or other earth-moving activity shall be submitted to the Agency for review, and approved before the activity is started. The following earth-moving activities may be exempted from these regulations if the Administrator, in writing, determines that the scope or size of the activity will not create either an erosion or other hazard to surface or marine waters of Guam:

~~1) A clearing, grading, filling, excavating or other earthmoving activity may be exempted from these regulation by the Administrator if, in his discretion, he determines in writing that the scope, or size of such earth-moving activity does not require compliance with these regulations~~

~~2) The following earth-moving activities and operations are exempt from these regulations except in cases where the Administrator, in his discretion, determines that these regulations shall apply.~~

1. Clearing, grading and filling for the purpose of constructing a house, pad or driveway for a one-or two-family residence;

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

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

4. Clearing & grubbing individual cemetery graves or plots without using heavy equipment.

5. Excavations for wells, tunnels or utilities, which are permitted under different rules & regulations.

6. Exploratory excavations for wells or for the purpose of soils testing, provided that no clearing and grubbing or grading is to be performed; ~~otherwise a permit is required~~.

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 for coralline type soil and 3:1 slope for clay type soil, provided that all slopes and open areas are stabilized and vegetated.

8. Any fill which is less than one foot in height and placed on undisturbed terrain with existing topography of a ratio less than 5 horizontal to 1 vertical and which does not obstruct a drainage course, provided the area of the property does not exceed 5,000 sq. ft. and open areas are properly stabilized and vegetated.

9. Field plowing and normal tilling operations, or clearing land ~~or re-clearing~~ for agricultural purposes provided these activities or operations do not cause sediment and runoff water to move beyond the edge of the farm boundaries and degrade the water quality of the receiving water bodies. ~~are performed in accordance with the guidelines and standards of Resource Management Systems, approved by Guam's Soil Conservation District~~. Initial field plowing or clearing land for agricultural purposes must be performed in accordance with the implementation of a conservation management system that meets minimum standards contained in the U.S. Field Office Technical Guides and approved by either the appropriate Soil and Water Conservation District created by 5 GCA Chapter 63, in accordance with an approved USDA Soil Conservation Service "Conservation Plan" or the Director of the Guam Department of Agriculture.

10. Clearing and grubbing of land for the purpose of making topographic surveys, and hand clearing of trails for survey lines and for access for soil exploration equipment.

E. Certain Rules of Word Usage

1. Words used in the present tense include the future tense, and the singular includes the plural unless the context clearly indicates the contrary.

2. The term "shall" is always mandatory and not discretionary; and the word "may" is permissive.

3. A word or term not interpreted or defined by this article shall be used with a meaning of common or standard utilization.

Section 10102. Definitions.

A. Meanings of words and terms. The following words and terms, when used in these regulations, shall have the following meanings, unless the context clearly indicates otherwise:

1. Accelerated erosion: The removal of the surface of the land through the combined action of man's activities and natural processes at a rate greater than would occur because of the natural process alone.

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

3. Agency: The Guam Environmental Protection Agency (GEPA).

4. Board: Board of Directors, Guam Environmental Protection Agency.

5. Building pad: The compacted land area on which a structure is to be built.

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

7. Channel: ~~shall mean~~ A natural stream that conveys water; a ditch excavated for the flow of water.

8. Check dam: ~~shall mean~~ A structure used to reduce or prevent excessive erosion by reduction of velocities in water courses.

9. Chutes/flumes: ~~shall mean~~ Channels of concrete or comparable material that are used to conduct storm runoff down slopes where concentrated runoff would cause slope erosion.

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

11. Clearing and grubbing: The removal of vegetation, including trees, timber, shrubbery, and plants, when said vegetation is dislodged or uprooted from the surface of the ground; ~~or when removal of structures or other objects are removed from the ground in the course or progress of construction or agricultural use~~.

12. Compaction: The densification of a fill by mechanical means.

13. Crimping: A method used to secure fiber mulches. The operation is performed by a crimping machine which partially punches the mulch into the soil.

14. Deflection Structures: Stones ~~A stone~~, or concrete or wooden groins placed ~~constructed~~ in a river or stream at an angle outward from the shore in a downstream direction to deflect the current away from a critical area of the bank.

15. Denuded: Bare; naked; stripped.

16. Developer: Any person who is engaged in land development. ~~A person or corporate entity who controls a land parcel from its acquired state through the process of urbanization. The acquired state may be wild or farm which is changed to a shopping center, housing unit, commercial unit or amenities, golf courses, etc.~~

17. Dissipate: To scatter; disperse; cause to vanish.

18. Diversion: To change the accustomed course of all or part of a stream or of sheet runoff.

19. Diversion dike: A temporary ridge of soil constructed at the top of a cut or fill slope to divert overland flow from small area away from unstabilized slopes.

20. Diversion ditch: A ditch constructed to channel stream or sheet runoff into desired directions, and may also be referred to as Interceptor Channel.

21. Diversion terrace: A channel or dike constructed up slope of an area for the purpose of diverting storm water runoff.

22. Earth material: Any rock, coral, sand, gravel, natural soil or fill /or any combination thereof.

23. Earth-moving operations/activities: Human caused alterations to the existing topography. ~~Also see clearing, grading, filling and excavation.~~ Any construction or other activity which disturbs the surface of the land including, but not limited to, clearing, grading, grubbing, excavation, embankment, construction, and development, subdivision development, mineral extraction, sand mining, and the moving, depositing or storing of earth material.

24. Embankment ~~or fill: An act by which soil, rock, or other materials are placed or deposited by man or by artificial means, and the resulting placements or deposit.~~ A placement of soil, rock, or other material by man.

25. Engineer: A person duly registered as a professional civil and/or structural engineer on Guam.

26. Engineer's Soils Report: A report on soils conditions prepared by an a professional engineer qualified in the practice of civil and/or structural engineering.

27. Environmental Impact Statement: A comprehensive and systematic assessment of environmental impacts which would likely result from a human activity or action. Its purpose is to provide, in part, a basis for making decisions which will affect the human condition as well as the purely biological or natural conditions of our environment. It should provide a reasonable set of alternatives and a preferred option which appropriately balances various environmental concerns, including financial, social or cultural concerns. The assessment should rely on proven assessment methods both scientific and political.

28. Environmental Protection Plan: A document describing, for a proposed development, the methods/equipment selected for use, expected environmental problems during and after construction, and methods and equipment chosen to avoid, mitigate or control potential adverse effects on the environment.

29. 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.

30. Erosion check: ~~A technique whereby porous, material like is installed in a slit trench~~ A slit trench filled with porous matter that is oriented perpendicular to the direction of flow in a ditch or swale to prevent the formation of rills and gullies. ~~gullied by permitting subsurface water migration without the removal of soil particles.~~

31. Erosion and sediment control: The control of earth material, both mineral and organic, during an earth-moving operation, intended to prevent its transport out of the operation area by means of air, water, or gravity.

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

33. Excavation or cut: ~~An act by which earth material is cut into, dug, or moved and shall include the conditions resulting therefrom.~~ A cavity formed by digging, cutting, quarrying, uncovering, displacing or relocating soil or rock.

34. Existing grade: The grade prior to grading.

35. Fill ~~or filling~~: ~~Raising the existing ground elevation by earth-moving operations.~~ A placement of soil, rock, or other material by man to raise the existing ground elevation.

36. Finish grade: The final grade of the site which conforms to the approved plan.

37. Grading: Establishing a topographical profile by earth-moving operations involving cuts and fills or excavation or other earth work activities.

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

39. Interceptor channel: A channel or dike constructed across a slope for the purpose of intercepting storm water, reducing the velocity of flow, and diverting it to outlets where it can be disposed.

40. Interceptor dike: A temporary ridge of compacted soil across a graded right-of-way that ~~are~~ is not subject to vehicular traffic, designed to intercept and divert storm runoff ~~and divert it~~ to temporary outlets where it can be disposed of with minimal erosion.

41. Intermittent stream: A stream or portion of a stream that flows only in direct response to precipitation and receives little or no water from springs ~~and no long-continued supply from~~ or other sources.

42. Jute Netting: A heavy woven jute mesh laid directly over seedbeds to minimize soil erosion in critical areas until vegetation can become firmly established. Due to its thick fibrous composition, it also functions as a mulch to conserve soil moisture, insulate against solar insulation, dissipate energy from falling raindrops and reduce erosion caused by overland flow.

43. Key: A designed compacted fill placed in an earthen trench excavated beneath the toe of a proposed fill slope.

44. Land developer: Any person who is engaged in land development.

45. Land development: The constructing, installing, placing, planting, or building of surface structures, utility lines, shopping centers and malls, golf courses, apartment complexes, schools, roads, highways, parking areas, or any other similar activity.

46. Level spreader: An outlet constructed at zero grade across a slope to collect concentrated runoff and covert it into sheet flow with non-erosive velocities onto areas stabilized by existing vegetation.

47. Mulch: A natural or artificial layer of plant residue (fiber mulches) other materials, such as sand or paper, on the soil surface.

48. Mulch blanket : Blanket type materials used in the establishment of vegetation on swales, ditches and steep slopes where fiber mulch products do not provide sufficient levels of protection during germination and early growth.

49. Netting: A method of securing fiber mulches through the use of jute, plastic, paper or fiberglass nets on steep exposed slopes where crimping is not possible and tacking will not perform satisfactorily.

50. Outcrop: To come to, or be exposed on the surface.

51. Permeability: The property of a porous material which permits the passage or seepage of fluids, such as water for example, or air through its interconnection voids.

52. Permeable: Having a texture through which water can move. ~~that permits water to move through.~~

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

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

55. Person: Any individual, partnership, firm, association, organization, municipality, public or private corporation, other types of private legal entities and public entities including any subdivision, agency or instrumentality of the government of Guam or the Federal Government, trust, estate or any other legal entity.

56. pH: A numerical measure of the acidity or hydrogen ion activity of a soil. (The neutral point is pH = 7.0. All pH values below 7.0 are acid and all above 7.0 are alkaline).

57. Right-of-way: Right of passage over another person's land; a route that is lawful to use; a strip of land acquired for transport or utility construction.

58. Riprap: Broken rock, cobbles or boulders placed on earth surfaces such as the face of a dam or the bank of a stream, for protection against the action of water or waves; also applied to brush or pole mattresses, or brush and stone, or other similar materials used for soil erosion control.

59. Rough grade: The stage at which the grade approximately conforms to the approved plan.

60. Runoff: Water from rain or irrigation that flows over the ground ~~surface~~ to surface, marine or ground waters. 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.

61. Sandbag sediment barrier: ~~shall mean~~ Temporary barriers or diversions that are constructed of sandbags.

62. Sectional down drain: A prefabricated sectional conduit of half-round, bituminized fiber pipe or other material used to conduct storm runoff from one elevation to another without erosion of slope.

63. Sedimentation: The depositing of sediments.

64. Sediment retention basin: A temporary dam or basin, or a combination of both, that will trap and store sediment produced on exposed areas and delivered to the structure by storm runoff.

65. Sediments: Mineral or organic solid materials that settle to the bottom of water. ~~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.~~

66. Site: The spacial location, under the same ownership, of an actual or planned structure or structures, or earth-moving activity.

67. Slope: An inclined ground surface, the inclination of which is expressed as a ratio of horizontal distance to vertical distance.

68. Soil: ~~(1)~~ The unconsolidated mineral and organic material found on the earth's upper layer, that may be dug or plowed and in which plants can grow. ~~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.~~

69. Soil engineering: The application of the principles of soil mechanics in the investigation, evaluation and design of civil works involving the use of earth materials, and the inspection and/or testing of the construction thereof.

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

71. Soil slopes: All denuded cut, fill or natural soil constituted slopes.

72. Stabilization: The proper placing, grading and/or covering of soil, rock or earth to insure its resistance to erosion, sliding, or other movements.

73. Stockpiling: Temporary open storage of earth materials upon any premises where a grading permit has been issued for the purpose of using the materials at some other premises at a future time.

74. Storm water management: The practice of using detention measure to reduce the impact of minor storms which cause accelerated erosion of stream channels and drainage ways (not to be confused with control of flood flows).

75. Storm water runoff: Rain that is not absorbed when it comes in contact with the soil and thus runs down hill into waters of Guam. This runoff may carry soil with it.

76. Strip planting: The planting of strips of wet soil tolerant, high erosion resistant vegetation in the critical area near the waterline of a major waterway, and the planting of conventional robust rooted grasses and legumes above the critical zone.

77. Subdivision: The division, re-division or change of lot lines of a lot, tract, or parcel of land for the purpose of leasing, transferring ownership, or development, either immediately or in the future.

78. Tacking: A method of securing mulches by the application of an asphalt or chemical binder which binds the individual fibers together to form a resistant blanket.

79. 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.

80. Terrace: A relatively level step constructed in the face of a grade slope surface for drainage and maintenance purposes.

81. Territory: The ~~Territory of~~ Island of Guam, United States of America.

82. Tetrahedron: Solid figure with four (4) triangular surfaces.

83. Uniform Building Code (UBC): The most recent edition of minimum standards to safeguard life or limb, health, property and 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.

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

85. Watershed: ~~The area contained within a divide above a specified point on a stream~~. For any river, stream or other water body, the drainage area that contributes water to that water body.

86. Watershed divide: The line that follows the ridges or summits forming the exterior boundary of a drainage basin and separates one drainage basin from another.

87. Waterway: A natural course or constructed channel for the flow of water.

Section 10103. Permit Issuance and Denials.

A. Permits Required.

1. Unless exempted, no person shall commence or perform any grading, clearing, grubbing, embankment, filling, excavation or other earth-moving activity without a grading permit;

2. Unless exempted, no person shall commence or perform any stockpiling without a stockpiling permit.

B. Permit Application Process.

An applicant shall obtain the required application from the Building Permit Section, Department of Public Works located at the One-Stop Permit Center or other approved location, and shall complete and submit the application to the One-Stop Permit Center or other GEPA approved location for review and approval of all concerned agencies, including the Guam Environmental Protection Agency.

C. Permit Application Contents

1. A description of the proposed activity, including its purpose, proof of land ownership (title, deed or authorized letter) and other pertinent information as may be required by the Administrator.

2. A vicinity map or plan of the site indicating:

a. Site information. The location, including names and locations of streets, roadways, and right-of-ways; property line locations, dimensions and azimuths, easements and setbacks of property; the location of any utility and utility lines, buildings, structures and improvements on or within 100 feet of the site; prominent visible rock out-cropping; elevations, dimensions, location, extent and slopes of all proposed earth moving

activities shown by contours and/or other means; the area in square feet of the land to be affected; and the quantities of excavation and fill involved.

b. Water course information. Locations, dimensions and flow of springs, rivers, wetlands, wells and streams; natural drainage depressions, basins and sinks; flood plains on the project site and downstream locations which will undergo changes due to the proposed earth-moving operations; and existing and proposed water quality monitoring stations located on or nearby the project site.

c. Vegetation information. Location and type of existing trees with a diameter of 12 inches and greater.

3. Required maps will be prepared and signed by a licensed land surveyor. Grading plans and specifications will be prepared and signed by an engineer. Required maps should conform to the latest Zoning Code of Guam's Land Use Plan and subdivision law. The scale shall be no smaller than 1 inch = 50 feet or 1 inch = 5 meters.

4. An application for a stockpiling permit shall include: a plot plan showing the property boundaries; easements, setbacks, and location of the proposed stockpiles; quantities; height of stockpile; the kind/source of the material to be stockpiled; expected life of the stockpile, and any other information required by the Administrator to control dust, drainage or sedimentation problems. Where stockpiling is for the purpose of surcharging to stabilize or consolidate an area, the permittee shall submit an engineer's soil report which shall include data on the effect such surcharging will have on adjacent buildings or structures.

5. Required Plans

a. Erosion and Sediment Control Plan. ~~as a prerequisite of all permits issued by the Building officials, Department of Public Works,~~ This plan is required for clearing,

grading, grubbing, embankment or filling, excavation or other earth-moving operations not otherwise exempted by these regulations.

b. Storm water Runoff Drainage System Plan. This plan, in addition to the Erosion and Sediment Control Plan, is required when the area to be graded is more than 5,000 square feet or a proposed cut or fill is greater than five feet in height.

c. Both the Erosion and Sediment Control and Storm water Runoff Drainage Systems Plans shall:

i. be prepared and signed by an engineer in accordance with these regulations, and the best management practices (BMP) guidance manual or other application of BMPs; and.

ii. show the method to be used for controlling erosion and disposal of storm water runoff prior to and post construction, including drainage devices such as terraces, berms, ditches culverts, subsurface drains, sedimentation basins, and the estimated runoff quantities of the areas served by each drain and drainage structure.

d. Environmental Protection Plan will be required depending on the intensity and scope of the project. This plan will describe the methods and equipment to be used on site; expected or anticipated environmental problems during and after construction; and the methods and equipment that may be used to avoid, mitigate or control potential adverse effects on the environment.

6. When a proposed cut or fill is greater than five (5) feet or the proposed grading is on land with slopes exceeding 5 percent, or when any fill is to be placed in a gully, or when the fill material will be a highly plastic clay, the applicant shall submit to the Administrator, for the

Agency's evaluation and review, an engineer's soils report signed by an engineer and approved by the owner. The soils report shall include data regarding the nature of the distribution and engineering characteristics of existing soils, and the subsurface conditions at the site. It shall recommend the limits for the proposed grading, the fill material to be used, the geotechnical calculations for the cut or fill area, and the manner of placing, including the heights and slopes of cut and fill sections.

7. When an activity or project is located within an environmentally sensitive area (e.g.; areas that affect seashore, rivers and streams, wetlands, critical habitats, and aquifers), an Environmental Impact Assessment (EIA) must be submitted, unless the Administrator determines in writing that the activity is exempted from EIA requirements.

8. If wetlands exist on the property to be cleared and grubbed, graded or used for stockpiling of earth materials, the (wetlands) must be identified with both field markings and by mapping on the site and/or grading plan(s). Wetlands cannot be cleared, grubbed, graded or otherwise be used as a stockpiling site without first obtaining both a valid Guam Wetland Development Permit and a U.S. Army Corps of Engineers Section 404 fill or discharge permit.

9. The Administrator may require that wetlands, on the property to be cleared, grubbed or used for stockpiling of earth materials, be officially delineated, in whole or in part, when conditions such as slope, soil stability, proximity of work or other performance related conditions warrant an official delineation. Individuals required to delineate wetlands in accordance with this provision shall apply the mapping requirements of the Guam Environmental Protection Agency Wetlands Mapping Policy, revised November 9, 1995.

10. Other permits, plans or approvals associated with and issued for the proposed project shall be submitted with the permit application. Activities described in the permit application shall be consistent with these permits, plans or approvals. Such documents include, but are not limited to:

a. Any required conditional use seashore clearance, wetland, Section 401 WQC, Section 404 permits (CWA), and planned development approvals, height variances, plan review use approvals, or re-zoning under the Guam Zoning Regulations;

b. Sub-division approvals, when an application includes the grading of a development that is to be subdivided, pursuant to the Guam Subdivision Rules and Regulations;

c. Conditional use approvals from Guam Land Use Commission, when the area to be graded or excavated will be used as quarry, and extracted materials used to fill a different area or sold as a fill material by the owner.

D. Permit Conditions

1. ~~Additionally,~~ No permit for earth-moving operations will be issued that will cause erosion and sediment loads or cause pollution to the waters of ~~the Territory~~ Guam, as defined by the latest Guam Water Pollution Control Act and the ~~current~~ Water Quality Standards, unless an Environmental Protection Plan and an Erosion and Sediment Control Plan have ~~has~~ been approved by the Agency.

2. The Administrator may attach such conditions as may be reasonably necessary to ensure that any grading work is for a use or structure permitted in accordance with zoning requirements, and to prevent creation of a nuisance or hazard to public or private property, health or welfare. Such conditions may include but are not limited to:

a. improvements of any existing grading to bring it up to the standards of these regulations;

b. requirements for fencing of excavation or fill to minimize hazards;

c. requirements for retaining walls or other earth retention structures to prevent loss of, support to, erosion of, and interference with natural drainage patterns on adjacent properties;

d. requirements involving clean-up of an area; and

e. limitations on the months, days and hours of permitted work.

3. The issuance of a grading permit shall constitute an authorization to do only that work which is described in the permit and in the plans and specifications approved by the Administrator.

4. Permits issued under these regulations shall not relieve the permittee of the responsibility for securing permits or approvals for work to be done which is regulated by any federal laws or other laws of Guam, or by department, or division of the governing agencies of the Government of Guam.

5. Permits issued under these regulations shall be consistent with other permits, plans or approvals associated with the proposed project.

6. Where any operations are delayed for any reason, a revised work schedule shall be submitted to the Administrator which describes any required modifications to the temporary storm water drainage system and to the Erosion and Sediment Control Plan, and other information the Administrator may require.

7. A copy of the permit, plans and specifications for grading, clearing & grubbing, or stockpiling shall be maintained at the job-site during the progress of the work.

E. Permit Denials.

The Administrator shall deny a clearing and grubbing, grading or stockpiling permit if there is reasonable cause for concern that the work as proposed by the applicant may present a risk or endangerment to public health or the environment. Factors to be considered in determining probability of dangerous conditions include, but are not limited to:

1. possible saturation of ground by rain;

2. dangerous geological conditions or flood hazards;

3. undesirable surface water runoff, and

4. subsurface conditions such as the stratification and faulting of rock, nature and type of soil or rock.

Section 10104. Erosion and Sediment Control Plans

A. General Requirements

1. All earth-moving activities on Guam shall be conducted in such a way as to prevent accelerated erosion and the resulting sedimentation. To accomplish this all persons engaged in earth-moving activities shall design, implement, and maintain erosion and sediment control measures which effectively prevent accelerated erosion and sedimentation. These erosion and sediment measures must be as set forth in Erosion and Sediment Control Plans submitted, reviewed and approved by GEPA.

2. All clearing, grading, embankment or filling, excavating and other earth-moving operations shall proceed only in accordance with an Erosion and Sediment Control Plan, prepared in accordance with the requirements set forth in these regulations, and ~~which is~~ duly approved by the Agency.

~~3. Such Erosion and Sediment Control Plans shall be prepared in accordance with the requirements set forth in these regulations.~~

3. An approved Erosion and Sediment Control Plan does not abrogate a permittee's responsibility to comply with all other applicable ~~Territorial~~ local and federal laws and regulations.

~~(3) An Erosion Control Plan shall be a prerequisite of all permits issued by the Building officials, Department of Public Works, for clearing, grading, filling, excavating or other earth-moving operations not otherwise exempted by these regulations. Additionally, no permit shall be issued if earth-moving operations will cause erosion and sediment loads or cause pollution to the waters of the Territory, as define by the Guam Water Pollution Act and the Water Quality Standards, unless and Environmental Protection Plan has been approved by the Agency.~~

B. Agency approval of Erosion and Sediment Control Plans

1. ~~Two~~ Four copies of a proposed Erosion and Sediment Control Plan shall be submitted to the Agency with ~~Such Plan copies shall accompany~~ the permit application for earth-moving operations.

2. The Agency shall have ~~ten~~ thirty (30) working days to approve or disapprove of such plan.

C. Compliance

1. All clearing, grading, embankment or filling, excavating and other earth-moving operations, except ~~as provided under Section II 10109 (3)(b) below, or as~~ those otherwise exempted from these regulations by the Administrator, must proceed in accordance with a duly approved Erosion and Sediment Control Plan.

2. Earth-moving operations in progress, other than quarrying, shall comply with these regulations within ~~7~~ 15 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 these regulations.

Section 10105. Erosion and Sediment Control Plans and Measures.

A. General policies for Erosion and Sediment Control

~~(a) Planning policies for control of Erosion and Sediment Control Plan~~

1. All earth-moving operations ~~in the Territory~~ on Guam shall be conducted in a manner that prevents accelerated land erosion, transportation of sediment to and along highways, or siltation ~~or~~ of rivers, estuaries and marine waters. ~~In conjunction with the project construction schedule, the Plan shall indicate the construction sequence of erosion and sedimentation control measures~~.

2. The area affected by earth-moving operations shall be kept to a minimum by either selective clearing, increment phases of development or other effective means. The Erosion and Sediment Control Plan must contain measures that ensure that each phase of any proposed large development affects less than 20 acres.

3. All earth-moving operations shall be scheduled during periods of expected low rainfall.

4. Any earth moving operations authorized under these regulations shall be performed so as not to violate applicable provisions of the latest Guam Water Quality Standards.

5. No person shall perform any earth moving operation so as to cause falling rocks, soil or debris in any form to fall, slide or flow onto adjoining properties or waters of Guam.

6. All work areas shall be maintained so as to minimize dust which may cause a nuisance or

hazard to others, and in conformance with the Guam Air Pollution Control Standards and regulations.

7. Where construction equipment will make frequent crossings of a natural drainage course, plans shall provide for temporary culverts or bridge structures to be installed. The required clearances from concerned agencies shall be obtained before any construction of temporary crossing access begins.

8. The erosion and sedimentation control measures set forth in this section are required, unless the Erosion and Sediment Control Plan shows that the alteration of these measures and facilities or inclusion of other measures and facilities will better prevent accelerated erosion and sedimentation.

B. Required contents of Erosion and Sediment Control Plans

1. Description of the Project.

The plan shall include a ~~brief~~ detailed narrative description, with photographs and construction drawings, of the proposed project. ~~Sketches, photographs and construction drawings may be used to supplement this description.~~

2. Project Site Plan.

a. The necessary information is that which is required in Section 10103.C. Permit Application Contents. ~~A project site plan shall include the data listing in this subsection~~ Plan sheet size shall not be smaller that 18 inches x 24 inches and not larger than 30 inches x 42 inches. Plan sheet sizes shall not vary .

~~(a) Project site vicinity map and north arrow~~.

~~(b) Existing land uses and structures.~~

~~(c) Existing vegetation,~~

~~(d) Existing topography at contour intervals of not greater than ten feet~~

~~(e) Grading plan at contour intervals of not greater than five feet which extend be-yond the project site limits so as to adequately depict the off-site drainage pattern for purposes of assessing any erosion or its deposition onto other properties.~~

b. Soil description including: soil classification by USDA Natural Resources ~~Soil~~ Conservation Service "Soil Taxonomy Classification System"; soil erodibility factor; soil permeability and percolation rates; type and extent of out-croppings; depth of soil; capability for establishing vegetation; and coefficient of runoff.

c. Evaluation of subsurface information. Subsurface investigations shall consist of drilling, excavations, or observations of naturally exposed soil and bedrock exposures at sufficient intervals and depths to indicate the type of material or condition to be encountered at final grading. The person or firm making the investigation shall submit a written report of their findings and recommendations. ~~as described in part (h) below~~ This information is required where the stability will be lessened by proposed grading or filling, where any other weaknesses are found, or where any of the following conditions are discovered or proposed:

i. At locations where a fill slope is to be placed above or a cut slope;.

ii. At proposed cuts exceeding 15 feet in height unless in competent rock as determined by an engineer;.

iii. At locations of proposed fills exceeding 15 feet in height;.

iv. Where sides of hill fills are to be placed on existing slopes steeper than 15 percent;

v. Wherever groundwater from either the grading project or adjoining properties is likely to reduce stability;

vi. At zones of trapped water or high water table; or.

vii. Where the topography is indicative of landslides, as determined by an engineer.

d. Site Assessment. ~~of the Site. The assessment of the site shall determine the need for an erosion and sediment control plan by considering~~ Consider the detrimental effects of construction of the site as it pertains to: erosion and loss of sediments; slope stability; water quality; plant communities; wildlife and aquatic life; and condition of marine waters and reef flats which will receive storm water runoff, either directly or indirectly, from the project site.

3. Grading Plan.

It is the purpose of this paragraph to ensure that minimum grading is performed and that natural contours and topography will be retained wherever feasible.

a. Grading shall be designed and implemented so as to blend in with the surrounding area.

b. All grading plans and specifications shall show, using contours, cross sections, spot elevations or other means, the condition of the land before and after grading.

c. The grading plan shall provide information regarding the location and source of imported fill material, and the location for disposal of excess excavation material.

d. Where a grading activity is to occur in increments or phases, the plan shall also include the plan for future site development and the proposed grading of future increments.

4. Construction Schedule.

a. Construction increments shall be described in detail and identified on the project plan.

b. The schedule will indicate completion dates for each construction increment and the construction sequence of erosion and sediment control measures. ~~shall be indicated.~~ Each increment phase of work shall have an approved Environmental Protection Plan and Soil Erosion and Sedimentation Control Plan from the Agency.

c. The Agency shall check the adequacy of the schedule with respect to short term and long term erosion anticipated on the project site. The construction schedule shall be checked to ensure prompt establishment of protective vegetation with full recognition of climatic and other factors that influence its establishment.

4. Stormwater Drainage System and Control of Site Water Runoff.

a. The proposed temporary and permanent, natural and man-made, storm water drainage systems shall be depicted in detail in the drawing plans, including, but not limited to, dimensions, alignments and elevations of all structures as well as the anticipated volume and velocity of the storm water. Design calculations for the drainage systems and siltation basins, best management practices, and other pertinent structures, shall be submitted. The following shall also be provided:

i. The runoff to be expected during and after the proposed development;

ii. The size of drainage areas above cuts and slopes;

iii. Estimate soil loss volume;

iv. The methods for trapping sediments, reducing erosion of drainage ways, and for controlling the collection and discharge of stormwater during and after construction.

v. The method and schedule of construction of waterway crossings. Sediment control structures for natural waterways shall be scheduled for installation prior to any earth-moving operations.

b. Adequate provisions shall be made to prevent surface waters from damaging the cut face of an excavation or the sloped surfaces of a fill. Positive drainage shall be provided to prevent the accumulation or retention of surface water in pits, gullies, holes or similar depressions. All drainage facilities shall be designed to carry surface water runoff to a storm drain that will discharge to a catchment facility within the project site. The Administrator may require such drainage structures and pipes to be constructed or installed, which in his opinion, are necessary to prevent erosion damage and to adequately carry off surface waters. The flow of any existing and known natural underground drainage shall not be impeded or changed so as to cause damage to adjoining property.

~~c. Storm water 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.~~

c. During construction, all storm sewer inlets shall be protected with silt traps.

d. If a project to be developed is covered under the Federal Stormwater Regulations (40 CFR Parts 122 & 123), a notice of intent to discharge stormwater to surface and marine waters of Guam must be submitted to US Environmental Protection Agency and a copy furnished GEPA. An NPDES permit which authorizes the discharge must also be secured.

~~(5) Erosion and Sediment Control Measures.~~

~~(a) The erosion and sediment 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.~~

~~(b) In conjunction with the project construction schedule, the Plan shall indicate the construction sequence of erosion and sedimentation control measures.~~

~~© Stabilization of all affected streams, waterways and drainage ways;~~

e. Structural measures such as berms, dikes, traps, basins, shall be installed prior to any other grading, clearing, or disturbance of the existing surface of the site..

f. Diversion Terraces

i. Diversion terraces shall be constructed up-grade of a project area to convey runoff around the project area. For temporary diversions, the channel shall have capacity to convey 1.6 cubic feet per second per acre of land tributary to it. For permanent diversions, the channel shall have capacity to convey 2.75 cubic feet per second per acre of land tributary to it.

ii. Diversion terraces shall be grassed or lined with erosion resistant material to prevent accelerated erosion within the channel.

iii. Outlet structures shall be designed to maintain a discharge velocity of less than 2.0 feet per second and all areas affected by the construction activity shall be stabilized before the outlet structures shall be used.

g. Interceptor Channels.

i. Interceptor channels may be used within the project area to reduce the velocity of the flow and thus prevent accelerated erosion.

ii. Water collected by interceptor channels shall be conveyed to sedimentation basins or to vegetated areas but not directly to streams.

iii. Outlets to vegetated areas shall be designed to maintain an outlet velocity of less than 2.0 feet per second. Outlet structures shall be screened to lower the amount of suspended solids in the discharge water.

h. Channels of Conveyance.

All channels used to convey water through a project area shall be designed to have a velocity of less than 1.5 feet per second. Where this is not possible, the channel shall be grassed or lined with erosion resistant material.

i. Sedimentation Basins.

i. The basin shall be cleaned when the storage capacity of the basin is reduced to 5,000 cubic feet per acre of project area tributary to the basin.

ii. Water from a sedimentation basin shall not be discharged to a natural waterway. Designs of sediment basins must provide for enough storage to give time for runoff water to be leached into the ground.

iii. Outlets of sedimentation basins shall be screened and designed in a manner

which does not discourage regular maintenance.

iv. Sedimentation basins shall be structurally sound and properly secured to protect them from unauthorized acts of third party activities.

5. Cut and fill ~~measures~~

a. The conditions of the following subsections may be modified by the Administrator based on a supportive engineer's soils report, and receipt of approvals from the owner and concerned agencies:

i. Height. Where a cut or fill is greater than 15 feet in height, terraces, or benches shall be constructed at vertical intervals of 15 feet except where only one bench is required, the single bench shall be constructed at the midpoint. The minimum width of such terraces or benches shall be at least 18 feet and provided with drainage provisions to control erosion on the slope and face and bench surface.

ii. Cut Slopes. Under the following conditions, no cut may be steeper in slope than the ratio of its horizontal to its vertical distance as shown below:

(a) 2 horizontal to 1 vertical in unweathered rock or mudrock;

(b) 2 horizontal to 1 vertical in decomposed rock; or

(c) 2 horizontal to 1 vertical in soils of low plasticity for cuts of any height in highly plastic soils. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

iii. Fill slopes shall not be steeper than the ratio 3 horizontal to 1 vertical except that fill using highly plastic clays shall have slopes specifically recommended in the engineer's soils report signed by a professional civil engineer, and approved by the owner. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

b. Fill material shall be selected to meet the requirements and conditions of the particular fill for which it is to be used. The fill material shall not contain vegetation or organic matter. Where rocks, concrete, or similar materials of greater than 8 inches in diameter are incorporated into the fill, they shall be placed in accordance with the recommendation of the professional civil engineer.

c. Before placing fill or stockpiling, the natural ground surface shall be prepared by removing the vegetation and, shall be notched by a series of benches and/or subsurface drains installed.

d. No fill shall be placed over any waters of Guam (e.g.; spring, marsh, wetlands), refuse dumps, or soft, soggy or springy foundations.

e. Fill materials shall be spread and compacted in a series of eight (8) inch to ten (10) inch layers, unless otherwise recommended by the professional civil engineer. For slopes, the fill shall be compacted to ninety five (95) percent maximum density as determined by the most recent ASTM Soil Compaction Test D1557. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

f. Distance from property line. The following requirements may be modified by the Administrator when cuts or fills are supported by retaining walls or when the permittee

submits an engineer's soils report stating that the soil conditions will permit a lesser horizontal distance without causing damage or danger to the adjoining property. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

The horizontal distance from the top of a cut slope or the bottom of a fill slope to the adjoining property line shall not be less than as follows:

Heights of cut or fill	Distance from property line (in feet)
Zero feet to 4 feet	4
More than 4 feet to 10 feet	6
More than 10 feet to 15 feet	8
More than 15 feet	10

6. Maintenance Procedures.

a. A maintenance program for the erosion and sedimentation control structures and facilities shall be established. ~~Such~~ The program shall include ~~periodic~~, but not be limited to, a schedule for inspecting the facilities and for removing and disposing ~~inspection schedule of the facilities, schedule of removal and disposal~~ of sediment materials from the control structures, or project area, and specific ~~assignment~~ duties of the designated maintenance personnel.

b. If the original owner has sold the property, the subsequent owner shall be responsible for maintaining the permanent measures that have been installed on the property.

7. Disposal of Spoil Materials.

The information concerning the disposal of spoil materials shall include the following: type of spoil material; location of disposal area; method for processing and disposing of spoil

materials; procedures for preventing soil loss to adjacent watercourses; and, if intending to burn spoil materials, burning procedures for combustible spoil material. Burning requires a permit from the Guam Fire Department;

8. Stockpiles.

The following information shall be provided: source of stockpile material; location, slope, and height of stockpile; duration that the material is to be stockpiled; provisions to prevent erosion and sediment loss from rain and wind action; plan for removing stockpiles at project completion.

9. Stabilization of Affected Areas

a. Stabilization of slopes, channels, ditches, berms, diversions, silt dams, or any disturbed areas shall begin as soon as possible and no later than 30 calendar days after the final grade or final earth-moving activities has been completed.

b. Electric power, and telephone trenches are to be stabilized as soon as possible and no later than 30 days after backfill.

c. Stabilization of stream banks shall be scheduled during periods of expected low rainfall.

~~b. 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.~~

d. Where it is not possible to permanently stabilize a disturbed area immediately after the final earth-moving has been completed or where the activity ceases for more than 30 calendar days, interim or temporary stabilization measures shall promptly be implemented and enforced.

e. Any disturbed area not paved, sodded or built shall be seeded and mulched with vegetative cover appropriate to the soil type, as recommended by an engineer, or the condition of the area based on soil test analysis done by a laboratory. This condition does not prohibit the use of matting, gabion, armor coating on erodible surfaces or other type of vegetative cover that will minimize erosion.

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

f. All structural sediment control measures are to remain in place until permission for their removal has been obtained from the Agency.

~~4. No graded area shall remain in an unstabilized condition for longer than or longer than authorized by its approved Erosion Control Plan.~~

~~5. In the event that earth-moving operations are discontinued or delayed, graded areas shall receive interim, or temporary cover~~

~~6. All areas disturbed by earth-moving operations, including slopes, channels, ditches, banks, must be stabilized as soon as possible after the final grade has been established~~

10. Protection and Removal of Native Vegetation.

a. In order to protect native vegetation from construction impacts, the following information shall be provided: location and description of native vegetation whose root zone will be affected by compaction, fills, trenches, and changes in the groundwater table; measures which will prevent conditions damaging to vegetation; and criteria used to determine removal;

b. Whenever feasible, natural vegetation should be retained. If their removal is necessitated, they shall not be stored or deposited along banks of streams, rivers or natural water courses, after being uprooted, or displaced from the ground by excavation, clearing or grubbing. Removed vegetation shall be disposed of at a disposal site approved by the Administrator, and removed from the site within a reasonable time, not to exceed one (1) month from date of removal.

11. Establishment of Vegetation

a. Where the establishment of vegetation is required on slopes of cut and fill, graded areas, and watercourses, etc., the following information shall be provided :

I. Location and areas to be vegetated;

ii. An indication of whether vegetation is to be temporary or permanent;

iii. Type and quantity of seeds or plants;

iv. Ground conditions, including: soil surface condition, pH, permeability, size distribution, slope angle, slope length, and aspect, nutrients;

v. Type and quantity of mulch;

vi. Type and quantity of fertilizer;

vii. Method and schedule of seeding, mulching, planting, and fertilizing;

viii. Irrigation schedule.

b. The plan shall provide for the revisiting of the location every three (3) months to verify that vegetation has been successfully established. If not successful the site must be revegetated until the area ~~returns to its pre-existing condition substantially~~. is successfully revegetated.

12. Certification. The Plan shall be stamped and signed by a professional civil and/or structural ~~environmental~~ engineer ~~holding current Guam registration in the Territory.~~ currently registered on Guam.

Section 10106. Special Requirements.

A. Protection of adjoining properties.

Any person performing or causing to be performed any excavation or fill shall, at his own expense, provide the necessary means to prevent the movement of earth to the adjoining properties, and to maintain the existing natural grade of adjoining properties.

B. Protection of public utilities.

Any person performing or causing to be performed any excavation or fill shall be responsible for the maintenance or restoration of street pavements, sidewalks and curbs, and improvements of public utilities which may be affected. Such maintenance shall be in accordance with the requirements of the Department of Public Works, Government of Guam agencies and affected public utilities. At cuts fronting any street, a suitable and adequate barrier shall be installed to provide protection to the public.

C. Removal of silt or other debris.

Any person depositing or causing to be deposited, any silt or debris in ditches, water courses, drainage facilities, and public roadways, shall remove such silt or other debris. In case such person shall fail, neglect or refuse to comply with the provisions of this section within 48 hours after written notice served upon him, either by mail or by personal service, the Administrator may proceed to remove the silt and other debris or to take any other action he

deems appropriate. The costs incurred for any action taken by the Administrator shall be payable by such person.

D. Safety precautions.

At any stage of the grading, grubbing, or stockpiling, if the Administrator finds that further work as authorized by an existing permit is likely to create soil erosion problems or to endanger life, limb or property, he may require safety precautions. These precautions may include but are not limited to: flattening exposed slopes; constructing additional silting or sediment basins, providing drainage facilities or benches; removing rocks, boulders, debris and other dangerous objects which, if dislodged, are likely to cause injury or damage; or constructing fences or other suitable protective barriers.

E. Creation of individual building sites.

Hillside lots shall be graded in such a manner that any parcels which may be created, including all separate building sites which may be contained within said parcels, can be satisfactorily graded and developed as individual building sites.

Section 10107 Project Completion ~~**HI. Minimum Conditions of an Erosion and Sediment Control Plan**~~

A. Products to be submitted.

1. As-built / graded plan, prepared by an engineer or land surveyor, upon completion of an earth-moving operation covering an area of greater than one (1) acre;

2. Soils report, when earth moving operations involve cuts or fills for which an engineer's soils report is required. The report shall contain:

a. A description of materials used in the fill and its moisture content at the time of compaction;

b. The procedures used in depositing and compacting the fill;

3. A description of the preparation of the original ground surface before making the fill, but not limited to benching and subsurface drainage;

4. A plan or tabulation showing the general location and elevation of compaction tests made in the fill together with a tabulation of relative compaction densities obtained at each location, the location of sub-drains, and other pertinent features of the fill necessary for its stability; and

5. Certification that the work was done in conformity with these regulations, the approved plans and specifications, and the engineer's soils report.

B. Final inspection and approval.

The permittee or his agent shall notify the Administrator or his representative when the earth-moving operation is ready for final inspection. Final approval shall not be given until all approved work has been completed. Final approval shall be dependent on installation of all drainage structures and their protective devices, establishment of a healthy vegetation growth in conformance with the approved plans and specifications, and submittal of any required reports.

~~(a) Planning policies for control of Erosion and Sediment Control Plan.~~

~~1. All earth-moving operations in the Territory on Guam shall be conducted in a manner that prevents accelerated land erosion, transportation of sediment to and along highways, siltation or rivers, estuaries and marine waters.~~

~~2. The area affected by earth-moving operations shall be kept to a minimum by either selective clearing, increment phases of development or other effective means.~~

~~3. All earth-moving operations shall be scheduled during periods of expected low~~

~~rainfall.~~

~~4. No graded area shall remain in an unstabilized condition for longer than thirty 30 calendar days or longer than authorized by its approved Erosion Control Plan.~~

~~5. In the event that earth-moving operations are discontinued or delayed, graded areas shall receive interim, or temporary cover, which is acceptable to the Agency;~~

~~6. All areas disturbed by earth-moving operations, including slopes, channels, ditches, banks, must be stabilized as soon as possible after the final grade has been established~~

~~7. Storm water 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~~

~~8. All 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.~~

Section 10108. Permit Fees.

A. Applicability.

All applicants (e.g.: private individuals, federal agencies, and Government of Guam agencies or departments, including autonomous and semi-autonomous agencies) for earth-moving operations permits, shall pay required permit fees.

B. Grading permits.

1. Before issuing a grading permit clearance, the Administrator shall collect site grading plan review fees based on the volume of excavation or fill measured in place according to the

following schedules:

TABLE A - GRADING PLAN REVIEW FEES

50 cubic yards or less ---------- No Fee

51 to 100 cubic yards ---------- $15.00

101 to 1,000 cubic yards ---------- $22.50

1,001 to 10,000 cubic yards -- ---------- $30.00

10,001 to 100,000 cubic yards ---------- $30.00 for the first 10,000 cubic yards, plus $15.00 for each additional 10,000 cubic yards or fraction thereof.

100,001 to 200,000 cubic yards ---------- $165.00 for the first 100,000 cubic yards, plus $9.00 for each additional 10,000 cubic yards or fraction thereof.

200,001 cubic yards or more ---------- $225.00 for the first 200,000 cubic yards, $4.50 for each additional 10,000 cubic yards or fraction thereof.

2. The fee for a grading permit authorizing additional work to that under a valid permit shall be the difference between the fee paid for the original permit and the fee shown for the entire project.

C. Fees for additional plan reviews.

Additional plan reviews required for any changes, additions or revisions to approved plans are $30.00 per hour, or the total hourly cost to the jurisdiction, whichever is the greatest. This cost

shall include those associated with supervision, overhead, equipment, hourly wages and fringe benefits of the employees involved.

D. Clearing and grubbing permits.

Before issuing a clearing and grubbing permit clearance, the Administrator shall collect a clearance fee of $20.00 for clearing & grubbing areas greater than 15,000 square feet plus $2.00 per each additional 1,000 square feet or fraction thereof. No fee shall be charged for clearing and grubbing less than 15,000 square feet.

E. Stockpiling permits.

Before issuing a stockpiling permit clearance, the Administrator shall collect a permit clearance fee of $7.50 for stockpiling in excess of the 100 cubic yards, plus $1.50 for each additional 100 cubic yards or fraction thereof.

F. Work occurring without a permit.

Where work for which a permit is required by these regulations has commenced or has been accomplished without a permit, a permit shall be obtained, and two times the fees specified above shall be assessed, provided that such work complies with or may be made to comply with the requirements of these regulations. If the grading/clearing/ stockpiling/ grubbing work accomplished or commenced cannot be made to comply with the provisions of these regulations, the person or persons responsible for the initiation or accomplishment of such grading work shall restore the land to its original condition and shall obtain a certificate of completion thereof from the Administrator. Notwithstanding the above, the person or persons responsible for such grading/clearing/ grubbing/stockpiling shall be deemed to have violated the provisions of these regulations by performing such activity/ies without a permit.

G. Water Protection Fund.

All permit fees, monetary charges, fines, and penalties assessed, collected or received by GEPA pursuant to this regulation and other regulations promulgated under the Water Pollution

Control Act, as well as contributions and assets made for the purpose of improving water quality or preventing water pollution , shall be deposited into the Water Protection Fund. The Water Protection Fund shall be established as separate and apart from any other funds of the Government of Guam, and shall be administered by the Administrator. Independent records and accounts shall be maintained in connection therewith. The funds shall be used for the administration and implementation and enforcement of the Water Pollution Control Act and regulations promulgated from said Act, for educational programs and grants for research and development, advertisement promotions, and inspections of facilities to prevent or minimize erosion that contributes to pollution of the waters.

Section 10109. Permit Expiration.

A. Grading, clearing and grubbing and stockpiling permits.

All grading, clearing and grubbing or stockpiling permits shall expire and become null and void under the following circumstances:

1. If permitted work is not started withing 180 calendar days after the date of issuance of the permit; or

2. If work is suspended or abandoned any time after the work is commenced for a minimum period of 60 days; or

3. If work is continued without interruption for one year, beginning with the date of issuance of the permit, or is completed within the time frame provided in the approved permit application, whichever comes first.

B. Stockpiling permits.

Every stockpiling permit shall expire and become null and void one year after the date of issuance. Prior to the expiration of the stockpile permit, all stockpiled material temporarily

stored on the premises shall be removed from the premises or used on the premises as fill material under a grading permit for fill.

C. Permit expiration.

Once a permit has expired, the owner/applicant shall pay the required fees and obtain a new permit pursuant to these regulations, before beginning new work. If the owner begins work with obtaining a new permit, the owner shall pay the necessary penalty fees pursuant to these regulations.

Section 10110. Stop Work Order.

A. Unacceptable conditions.

Whenever the Administrator determines that any permitted clearing & grubbing, grading, or stockpiling is or may become unstable or dangerous, endangers property, adversely affects the safety, use, or stability of a public way or drainage channel, or results in a violation of the Guam Water Quality Standards, the owner of the property, or other person or agent in control of the property, on receipt of notice in writing from the Administrator, shall abate the danger, implement necessary corrective measures, and shall conform with the requirements of these regulations. The Administrator, or his authorized representative, shall have the authority to enter the property and investigate, and enforce the provisions of this section. A hearing will be held as required under 10 GCA Section 47110.

B. Stop work order procedures.

If the Administrator determines that the work must stop due to unstable or dangerous conditions, the Administrator shall issue a stop work order to the owner/contractor of the property and transmit a copy of the order to the Department of Public Works Building Permit Section. Both GEPA and the Department of Public Works shall jointly enforce the stop work order.

C. Work occurring without a permit.

Notwithstanding the above, if an earth-moving operation is occurring without a valid permit

the Agency can order the operation to immediately cease and either require the violator to obtain an after the fact permit, or if the operation cannot be permitted, to have the violator take corrective measures to return the land to its previous condition.

Section 10111. Suspension or revocation of Permit.

A. Criteria for suspending or revoking permits.

The Administrator shall, in writing, suspend or revoke a permit issued under the provisions of these regulations whenever: the permit has been issued on the basis of incorrect information supplied by the permittee; existing site conditions are found not to be in accordance with the terms and conditions of the permit; it is determined that the permittee has not complied with a provision of any other applicable law, ordinance rule or regulation of the Guam; the clearing and grubbing, grading or stockpiling discloses conditions that are objectionable or unsafe; or an immediate danger exists in a downstream/adjacent area.

B. Process for recommencing work.

When a permit has been suspended the permittee may submit details and proposals for compliance with the provisions of these regulations, and any other applicable laws, rules or regulations of Guam. Upon approval of such plans and proposals by the Administrator, the Administrator shall authorize the permittee, in writing, to proceed with the work.

C. Non-compliance

Non-compliance with the correction notice or stop work order issued for the construction of the sediment and erosion control practices, and/or the construction of storm water management facilities may result in the revocation of the issued permit.

Section 10112. Inspections.

A. Access to the site.

Each permit issued under these regulations shall be deemed to include the right of the Administrator or his authorized representative to enter at reasonable time upon any property to inspect the clearing and grubbing, grading, or stockpiling operations. Such inspections may take place before, during and after any earth change activity for which a permit has been issued to ensure that control measures are properly installed or performed and maintained at the expense of the applicant.

Section 10113. Enforcement.

A. Pollution.

If the Agency determines that a person is conducting operations ~~in a~~ which ~~is~~ are causing or ~~is~~ are likely to cause pollution, the Administrator may order the owner or operation to take ~~of~~ corrective measures needed to prevent or cease the pollution.

B. Water pollution.

If the operation is causing or is likely to cause alteration of physical, chemical, or biological properties to the waters of Guam, resulting from sediment, deposition presenting an imminent and substantial danger to the public health, safety or welfare, or the health of animals, fish or aquatic life, to a public water supply or to other reasonable uses of water, the Administrator can issue an order requiring the cessation of relevant activities and implementation of corrective measures. In emergency situation, any order issued by the Administrator shall become final no later than 24 hours after the date of the notice and order served.

C. Voluntary compliance.

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

D. Permit violations.

Whenever the Agency has reason to believe that a violation of any Section of these regulations has occurred, it shall 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 fifteen (15) days that after the date of the notice and order 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 shall require that the alleged violator or violators appear before the Agency for a time and place specified in the notice and answer the charges complained of, or the Agency may initiate action pursuant to Section 10116 of these regulations.

E. Corrective actions.

If, after a hearing is held pursuant to 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 soil erosion.

F. Appeals.

No later than ~~ten (10)~~ fifteen (15) 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.

G. Corporate violations.

Whenever a corporation violates any provisions of these regulations, it shall be deemed that the individual directors, officers, or agents of the corporation, acting in their capacity as directors, officers or agents of such corporation, have authorized, ordered or done the acts constituting the violations.

H. Emergency Procedures.

1. Any other provisions of law to the contrary notwithstanding, if the Administrator finds that a generalized condition of pollution exists, and that it creates an emergency requiring immediate action to protect the intended uses of the water as designated in the Standards of Water Quality for Waters of Guam, or to protect human health or safety, the Administrator, with the concurrence of the Governor, shall order persons causing or contributing to the pollution to reduce or discontinue immediately the pollutants, and such order shall fix a place and time, not later than twenty-four (24) hours thereafter, for a hearing to be held before the Agency. Not more than twenty-four (24) hours after the commencement of such hearing, and without adjournment thereof, the Agency shall affirm, modify or set aside the order of the Administrator.

2. In the absence of a generalized condition of pollution of the type referred to in Subsection (1), but if the Administrator finds that pollutants from the operation of one or more polluting sources is causing imminent danger to the intended uses of the water as designated in the Standards of Water Quality for Waters of Guam or is causing imminent danger to human health or safety, he may order the person or persons responsible for the operation or operations in question to reduce or discontinue pollutants immediately, without regard to the provision of Subsection (a) of §47109, Chapter 47, 10 GCA of this Act. In such event, the requirements for hearing and affirmance, modification or setting aside of orders set forth in Subsection (1) of this Section apply.

Section 10114. Penalties, Liability, and Severability Clause

A. Penalties.

1. Administrative - Where work for which a permit is required by these regulations has been commenced or has been accomplished without a permit, a permit shall be obtained and a penalty fee paid equal to two (2) times the amount of the required fee to be assessed under Section 10107 Permit fees of these regulations. The Administrator shall assess the required clearance fee and penalty fee provided that the work complies or may be made to comply with the provisions of these regulations. If the activity accomplished or commenced cannot be made to comply with the provisions of these regulations, the person or persons responsible for the initiation or accomplishment of such activity shall restore the land to its original condition and shall obtain a certificate of completion from the Administrator. The person or persons who performed such activity shall be deemed to have violated the provisions of these regulations by performing an activity without a permit and may be subject to enforcement action pursuant to this section.

2. Criminal - Any person who violates any provision of these regulations shall be guilty of a misdemeanor and subject on account thereof to a fine of not to exceed One Thousand Dollars ($1,000.00). Each day of violation shall constitute a separate offense.

3. Civil - Action pursuant to Section 10116 (1)(b) of this Section shall not be a bar to enforcement of these regulations, by injunction or other appropriate remedy and the Agency shall have the power to institute and maintain in the name of Guam any and all such enforcement proceedings..

4. 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 or other appropriate proceedings therefor.

B. Liability.

The provisions of these regulations shall not be construed to relieve or alleviate the liability of any person for damages resulting from preforming, or causing to be performed, by grading, grubbing or stock-piling operation. The Government of Guam, GEPA, its officers and employees shall be free from any liability, cost or damage which may accrue from any grading, grubbing or stockpiling or any work connected therewith, authorized by these regulations.

C. Severability Clause.

If any provisions of these rules, or its application to any person or circumstances, is held invalid, the application of such provision to other persons or circumstances, and the remainder of these rules, shall not be affected thereby.

GUAM SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS

SECTION 10108: **PERMIT FEES**

SECTION C. **FEES FOR ADDITIONAL PLAN REVIEW**

The additional fee of $30 per hour is reasonable and low as compared to salaries of Engineers now employed at Guam EPA and private consulting engineers as compared below:

Guam EPA Engineers (Salary with Fringe Benefits)		**Private Consulting Engineers (Salary with Fringe Benefifts and 3.5% Overhead and profits)**	
Engineer I	$ 17.07/hour	Project Engineer	$ 93.15/hour
Engineer II	$ 26.12/hour	Civil Engineer	$ 93.15/hour
Engineer III	$ 37.67/hour	Project Manager	$113.85/hour
Chief Engineer	$ 40.07/hour	Principal Engineer	$155.25/hour

Section 10106. Special Requirements

F. Protection of Sink Holes

Earth-moving operations shall not be performed in sink holes or in such close proximity as to threaten their viability, function or the conveyance of surface water into such features unless specifically authorized by the Administrator. In the event a developer proposes to modify or use a sinkhole, an environmental and hydrogeologic assessment must be performed to ensure adverse affects will not result, including but not limited to the displacement of groundwater, interference with well production, significant changes to groundwater recharge, flooding, or the threat or introduction of any pollutant to groundwater, regardless of zone or category.

Guam Environmental Protection Agency
P.O. Box 22439 GMF, Barrigada, Guam 96921

TESTIMONY

Before the 25th Guam Legislature
Committee on Natural Resources
Regarding Bill 392

An Act to Establish the Guam Environmental Protection Agency (Guam EPA) Guam Soil Erosion and Sedimentation Control Regulations

Submitted By:

Jesus T. Salas, Administrator
Guam Environmental Protection Agency

March 7, 2000

Good Morning, Madame Chairperson and Members of the Committee on Natural Resources. For the record, my name is Jesus T. Salas, Administrator of the Guam Environmental Protection Agency. I would like to thank you for inviting Guam EPA to testify in support of Bill 392.

Soil erosion and sedimentation is one of the island's most serious nonpoint sources of water pollution. It affects the purity of streams and marine waters of Guam and causes unreasonable damage to fish and marine life in general.

Water generated erosion and sedimentation, *especially when influenced by earthmoving* operations/activities, can become a serious environmental problem when they destroy natural vegetation, expose the soil surface and alter drainage patterns. The accelerated soil erosion must be *controlled in order to minimize damage to Guam's water and land resources.*

In addressing soil erosion problems on Guam, Guam EPA promulgated, in December 1975, the first Guam Soil Erosion and Sedimentation Control Regulations under the authority of 10 Guam Code Annotated (GCA), Chapter 47. The regulations were later revised in May 1985.

During this latest review process, the regulations were released by Guam EA for preliminary review by the Guam Board of Directors and staff, several GovGuam departments and agencies, military and several consulting Engineers from March 1994 to November 1997.

The proposed revisions address important provisions that will eliminate and/or minimize nonpoint source pollution within Guam's waters such as fertilizers, pesticides and other polluting substances carried by sediment, protect property and promote public health, safety and welfare by regulating grading, clearing, grubbing and stockpiling, and set specific requirements for erosion and sedimentation control within the Island of Guam.

The proposed regulations expand the purpose and applicability by including grubbing and stockpiling to be permitted and redefine exemptions from the regulations.

The regulations added a section dealing with permit issuance and denials. It defines when a permit is required and establishes the permitting process and requirements needed to be included in the permit application applicable to such activity being requested to be permitted and factors to be considered in the denial of a permit application which are not included in the previous regulations.

It expanded the general policies for Erosion and Sediment Control and clarifies the contents of the Erosion Control Plan that is approvable by Guam EPA , including the construction schedule, control of storm water runoff, disposal of spoil materials, stockpiles and stabilization of affected areas.

A special requirement under the proposed regulations has been added for the protection of adjoining properties by requiring any person performing excavation or fill to provide the necessary means to prevent the movement of earth materials or discharge of storm water runoff to adjoining properties. It also provides provisions for the protection of public utilities, removal of silt or debris in ditches, water courses and drainage facilities and safety precautions for the protection of life, limb and property.

A section of permit fees has been included authorizing the Administrator of Guam to assess fees for plan review and inspections for applicants applying for clearing, grading, grubbing and stockpiling permits. The plan review fee schedule was patterned after the fees established by the Uniform Building Code adopted by Guam

Fees collected shall be deposited into the Water Protection Fund and shall be administered by the Administrator. The fund shall be used for the administration, implementation and enforcement of the Water Pollution Control Act and regulations promulgated from said Act.

As usual, I will make my staff available to assist your Office to further expedite changes that will enhance these soil erosion and sediment control regulations and ultimately help protect the oceans, reefs, and surrounding property through stronger monitoring of earth moving activities on Guam. The approval of these regulations is timely because of the slowdown in development which will provide this Agency the opportunity to educate contractors, developers, and the general public on the proper methods to minimize or eliminate soil erosion.

Mina' Bente Singko Na Liheslaturan Guahan

COMMITTEE ON NATURAL RESOURCES

PUBLIC HEARING
Tuesday, March 7, 2000, 9:00 a.m.

Bill No. 392 (LS)- An Act to Establish the Guam Environmental Protection Agency (GEPA) Guam Soil Erosion and Sedimentation Control Regulations

SIGN IN SHEET

Name	*Representing*	*Oral Testimony*	*Written Testimony*
J T SALAS	GEPA		✓
Randy Sablan	GEPA	✓	
Domingo Cabusao	GEPA	✓	

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MINA' BENTE SINGKO NA LIHESLATURAN GUAHAN

Committee on Natural Resources
Senator Joanne M. S. Brown
Chairperson

Notice of Public Hearing

The Committee on Natural Resources will be conducting a Hearing on Tuesday, March 7, 2000, 9:00 a.m., at the Legislative Public Hearing Room, 155 Hesler Street, Hagatna on the following:

Appointment of Mr. Alfred P. Benavente, Acting Member, Guam Waterworks Authority, Board of Directors

Appointment of Mr. Greg S. Kalbaugh, Acting Member, Guam Environmental Protection Agency, Board of Directors

Bill No. 392 (LS) - AN ACT TO ESTABLISH THE GUAM ENVIRONMENTAL PROTECTION AGENCY (GEPA) GUAM SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS

ADA Coordinator: Ann Legaspi at 472-3450/51
The public is invited to attend.

Gas prices fuel anti-S

Gannett News Service

For anyone ever tormented by sport-utility vehicles that hog highways, swallow parking spaces and guzzle gas, the sharp recent rise in gas prices is payback time.

Revenge of the car nerds? Maybe.

"It's kind of nice to see ...

... of Chicago where premium gas costs about $1.85 a gallon and $2 in the city.

Some SUV owners, however, have been driven to stealing gas. Shreveport, La., gas station owner Al Carroll says two people in large SUVs drove off without paying for $22 and $28 worth of gas.

Price be damned, the Walter Mitty in most of us appears to prefer machismo over mini. So although most SUVs are used as little more than glorified station wagons that seldom tackle anything rougher than speed bumps, for plenty of consumers, just knowing that they can handle any "Road Warrior" situation can be rationale for owning one.

But as the tab to fill up the largest SUVs climbs to $30 or more, consumers with long-simmering SUV resentment are relishing the moment.

"Hopefully the gas prices will lessen the enthusiasm for those things," laughs physicist John Mergenthaler, eyeing a Ford Explorer at a Shell station in Palo Alto, Calif.

Says Louisville, Ky., restaurateur Lynn Winter, who detests SUVs because their elevated headlights are blinding: "All my friends have gone out and gotten them. As far as I'm concerned, they can have them. The little guys are laughing now." Winter drives a Toyota Avalon (21/29 mpg).

Little sympathy

Among those also amused:

▲ Paul Cost of Groton ...

... pay more, maybe you shouldn't have these vehicles in the first place."

▲ Michael Feinstein of Santa Monica, Calif.: "People who think about environmental and social values were laughed at for doing so in the past. Now they are the ones who get the last laugh," said ...

... ment. Jay Karo... Web site, The Poseur Sport U... (http://poseur.4x... more than 15... month.

When you s... son driving a big... highway, it's ru... ying it is ineffic...

MINA' BENTE SINGKO NA LIHESLATURAN GUAM

COMMITTEE ON NATURAL RESOURCES

SENATOR JOANNE M. S. BROWN
CHAIRPERSON

CONFIRMATION HEARINGS
&
PUBLIC HEARING

TUESDAY, MARCH 7, 2000
9:00 a.m.

A G E N D A

1. **Introduction of Committee Members**

2. **Commencement of Confirmation Hearings**

   A) **Mr. Alfred P. Benavente, Acting Member**
   Board of Directors, Guam Waterworks Authority

   B) **Mr. Greg S. Kalbaugh, Acting Member**
   Board of Directors, Guam Environmental Protection Agency

3. **Public Hearing for Bill No. 392 (LS)- An Act to Establish the Guam Environmental Protection Agency (GEPA) Guam Soil Erosion and Sedimentation Control Regulations**

4. **Public Comment**

5. **Adjournment**

Bureau of Budget & Management Research
Fiscal Note of Bill No. 392 (LS)

MAR 1 4 2000

Bill Title (Preamble): AN ACT TO ESTABLISH THE GUAM ENVIRONMENTAL PROTECTION AGENCY (GEPA) GUAM SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS.

Department/Agency Appropriation Information	
Dept./Agency Affected: GEPA	Dept./Agency Head: Jesus Salas
General Fund appropriation(s) to date:	$ 863,822
Other Fund (specify): Federal Match appropriation(s) to date:	$ 1,349,831
Total Department/Agency Appropriation(s) to date:	$ 2,213,653

Fund Source Information of Proposed Appropriation			
	General Fund	Other (specify):	Total
FY Adopted Revenues	450,867,633		
FY Appro. to P.L. 25-98	449,845,214		
Sub-total	1,022,419		
Less appropriation in Bill	N/A		
Total	1,022,419		

Estimated Fiscal Impact of Bill						
	One full FY	For remainder of current FY (if appli.)	Second Year	Third Year	Fourth Year	Fifth Year
General Fund	1/					
Other Fund:						
Total						

1. Does the bill contain "revenue generating" provisions? / X / Yes / / No
   If yes, see attachment/footnote.
2. Is amount appropriated adequate to fund the intent of the appropriation? N/A / / Yes / / No
   If no, what is the additional amount required? $ _____
3. Does the Bill establish a new program/agency? / / Yes /X/ No
   If yes, will the program duplicate existing programs/agencies? / / Yes /X/ No
   Is there a federal mandate to establish the program/agency? / / Yes /X/ No
4. Will the enactment of this Bill require new physical facilities? / / Yes / X/ No
5. Was Fiscal Note coordinated with the affected dept/agency? If no, indicate reason: /X / Yes / / No
   / / Requested agency comments not rec'd by due date / / Other: _____

Analyst: Dina P. Chock Date: 3/7/00 Director: Joseph E. Rivera, Acting Date: MAR 1 4 2000

Footnotes: 1/ The Bill's intent is to approve the Guam Environmental Protection Agency (GEPA) Guam Soil Erosion and Sedimentation Control Regulations. However, if enacted, revenues could be generated from the collection of permit fees, from monetary charges, fines, and from penalties assessed as set under the Water Protection Fund (as created in the Regulations attached to this Bill).

2 2000

MINA 'BENTE SINGKO NA LIHESLATURAN GUAHAN
2000 (SECOND) REGULAR SESSION

Bill No. 392 (cs)

Introduced by: **J.M.S. Brown**

AN ACT TO ESTABLISH THE GUAM ENVIRONMENTAL PROTECTION AGENCY (GEPA) GUAM SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS

BE IT ENACTED BY THE PEOPLE OF GUAM:

Section 1. Legislative Findings and Intent. In accordance with the Administrative Adjudication Law, §9303 of Title 5 of the Guam Code Annotated, as amended by Public Law Number 24-27, on December 10, 1997 the Guam Environmental Protection Agency (GEPA) transmitted to I Liheslaturan Guahan, the *"Guam Environmental Protection Agency Guam Soil Erosion and Sedimentation Control Regulations."* I Liheslaturan Guahan agrees with the regulations as presented and seeks to approve said regulations.

Section 2. Approval of GEPA Regulations. I Liheslaturan Guahan hereby approves the GEPA rules and regulations entitled, *"Guam Environmental Protection Agency Guam Soil Erosion and Sedimentation Control Regulations,"* which were transmitted to I Liheslaturan Guahan on January 25, 2000.

Section 3. Severability. If any provision of this Law or its application to any person or circumstance is found to be invalid or contrary to law, such invalidity shall not affect other provisions or applications of this Law which can be given effect without the invalid provisions or application, and to this end the provisions of this Law are severable.

EXHIBIT A

GUAM SOIL EROSION AND SEDIMENT CONTROL REGULATIONS

TABLE OF CONTENTS

GUAM SOIL EROSION AND SEDIMENT CONTROL REGULATIONS

22 GAR - GEPA
Division II - Water Control

CHAPTER 10
GUAM SOIL EROSION AND SEDIMENT CONTROL REGULATIONS

Section 10100. Authority

10 GCA Chapter 47 - "Water Pollution Control Act."

Section 10101. General Provisions: Purpose, Scope, Applicability and Exemptions.

A. Purpose.

Whereas soil erosion and sedimentation resulting from the construction of sub-divisions, industrial and commercial developments, highways and other activities requiring excavation and filling can affect the purity of wetlands, streams and marine waters on Guam and thereby may cause unreasonable damage to aquatic and marine life in general; and whereas, the pollution of wetlands, 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 surface and groundwater resources and to protect, maintain and improve the quality and potability thereof; it is declared ~~to be~~ that the purpose of these regulations is to control accelerated soil erosion, ~~and the resulting sedimentation of the waters of the Territory~~ thereby

preventing the pollution of Guam's waters from fertilizers, pesticides, sediments and other polluting substances carried by sediment, and to protect property and to promote the public health, safety and welfare by regulating grading, clearing, grubbing and stockpiling, and by setting minimum standards for erosion and sedimentation control for the Island of Guam.

It is also the purpose of these regulations to manage nonpoint source pollution consistent with the latest "Guam Nonpoint Source Program", the "Guam Erosion & Sedimentation Manual" guidelines and recommendations, the comprehensive approach set forth in Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990, "Protecting Coastal Waters", codified as 16 U.S.C. §1455(b), and the "Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters" (EPA/840-B-92-002, dated January 1993) issued under the authority of Section 6217(g) of the Coastal Zone Act Reauthorization Amendments of 1990 recommendations.

B. Scope.

The provisions of these regulations impose requirements on those earth-moving activities which create accelerated erosion or a danger of accelerated erosion and which require planning and implementation of effective soil conservation measures. These regulations set forth requirements for the control of grading, clearing and grubbing, and stockpiling, set limits for erosion and sedimentation, establish administrative procedures and minimum requirements for issuance of permits and provide for the enforcement of such rules and regulations.

C. Applicability.

These regulations apply to all clearing, grubbing, grading, embankment or filling, excavating, stockpiling or other earth-moving operations on Guam which require a permit as provided for in 21 Guam Code Annotated, Chapter 66 (as amended). Such applicable clearing or earth-moving operations include those performed by private and governmental sectors, including, the Government of Guam and 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, Sub-Section D, below.

D. Exemptions.

An application for a clearing, grubbing, grading, embankment or filling, excavating or other earth-moving activity shall be submitted to the Agency for review, and approved before the activity is started. The following earth-moving activities may be exempted from these regulations if the Administrator, in writing, determines that the scope or size of the activity will not create either an erosion or other hazard to surface or marine waters of Guam:

~~1) A clearing, grading, filling, excavating or other earthmoving activity may be exempted from these regulation by the Administrator if, in his discretion, he determines in writing that the scope, or size of such earth-moving activity does not require compliance with these regulations~~

~~2) The following earth-moving activities and operations are exempt from these regulations except in cases where the Administrator, in his discretion, determines that these regulations shall apply.~~

1. Clearing, grading and filling for the purpose of constructing a house, pad or driveway for a one-or two-family residence;

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

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

4. Clearing & grubbing individual cemetery graves or plots without using heavy equipment.

5. Excavations for wells, tunnels or utilities, which are permitted under different rules & regulations.

6. Exploratory excavations for wells or for the purpose of soils testing, provided that no clearing and grubbing or grading is to be performed; ~~otherwise a permit is required~~.

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 for coralline type soil and 3:1 slope for clay type soil, provided that all slopes and open areas are stabilized and vegetated.

8. Any fill which is less than one foot in height and placed on undisturbed terrain with existing topography of a ratio less than 5 horizontal to 1 vertical and which does not obstruct a drainage course, provided the area of the property does not exceed 5,000 sq. ft. and open areas are properly stabilized and vegetated.

9. Field plowing and normal tilling operations, or clearing land ~~or re-clearing~~ for agricultural purposes provided these activities or operations do not cause sediment and runoff water to move beyond the edge of the farm boundaries and degrade the water quality of the receiving water bodies. ~~are performed in accordance with the guidelines and standards of Resource Management Systems, approved by Guam's Soil Conservation District~~. Initial field plowing or clearing land for agricultural purposes must be performed in accordance with the implementation of a conservation management system that meets minimum standards contained in the U.S. Field Office Technical Guides and approved by either the appropriate Soil and Water Conservation District created by 5 GCA Chapter 63, in accordance with an approved USDA Soil Conservation Service "Conservation Plan" or the Director of the Guam Department of Agriculture.

10. Clearing and grubbing of land for the purpose of making topographic surveys, and hand clearing of trails for survey lines and for access for soil exploration equipment.

E. Certain Rules of Word Usage

1. Words used in the present tense include the future tense, and the singular includes the plural unless the context clearly indicates the contrary.

2. The term "shall" is always mandatory and not discretionary; and the word "may" is permissive.

3. A word or term not interpreted or defined by this article shall be used with a meaning of common or standard utilization.

Section 10102. Definitions.

A. Meanings of words and terms. The following words and terms, when used in these regulations, shall have the following meanings, unless the context clearly indicates otherwise:

1. Accelerated erosion: The removal of the surface of the land through the combined action of man's activities and natural processes at a rate greater than would occur because of the natural process alone.

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

3. Agency: The Guam Environmental Protection Agency (GEPA).

4. Board: Board of Directors, Guam Environmental Protection Agency.

5. Building pad: The compacted land area on which a structure is to be built.

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

7. Channel: ~~shall mean~~ A natural stream that conveys water; a ditch excavated for the flow of water.

8. Check dam: ~~shall mean~~ A structure used to reduce or prevent excessive erosion by reduction of velocities in water courses.

9. Chutes/flumes: ~~shall mean~~ Channels of concrete or comparable material that are used to conduct storm runoff down slopes where concentrated runoff would cause slope erosion.

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

11. Clearing and grubbing: The removal of vegetation, including trees, timber, shrubbery, and plants, when said vegetation is dislodged or uprooted from the surface of the ground; ~~or when removal of structures or other objects are removed from the ground in the course or progress of construction or agricultural use.~~

12. Compaction: The densification of a fill by mechanical means.

13. Crimping: A method used to secure fiber mulches. The operation is performed by a crimping machine which partially punches the mulch into the soil.

14. Deflection Structures: Stones ~~A stone~~, or concrete or wooden groins placed ~~constructed~~ in a river or stream at an angle outward from the shore in a downstream direction to deflect the current away from a critical area of the bank.

15. Denuded: Bare; naked; stripped.

16. Developer: Any person who is engaged in land development. ~~A person or corporate entity who controls a land parcel from its acquired state through the process of urbanization. The acquired state may be wild or farm which is changed to a shopping center, housing unit, commercial unit or amenities, golf courses, etc.~~

17. Dissipate: To scatter; disperse; cause to vanish.

18. Diversion: To change the accustomed course of all or part of a stream or of sheet runoff.

19. Diversion dike: A temporary ridge of soil constructed at the top of a cut or fill slope to divert overland flow from small area away from unstabilized slopes.

20. Diversion ditch: A ditch constructed to channel stream or sheet runoff into desired directions, and may also be referred to as Interceptor Channel.

21. Diversion terrace: A channel or dike constructed up slope of an area for the purpose of diverting storm water runoff.

22. Earth material: Any rock, coral, sand, gravel, natural soil or fill /or any combination thereof.

23. Earth-moving operations/activities: Human caused alterations to the existing topography. ~~Also see clearing, grading, filling and excavation.~~ Any construction or other activity which disturbs the surface of the land including, but not limited to, clearing, grading, grubbing, excavation, embankment, construction, and development, subdivision development, mineral extraction, sand mining, and the moving, depositing or storing of earth material.

24. Embankment ~~or fill: An act by which soil, rock, or other materials are placed or deposited by man or by artificial means, and the resulting placements or deposit.~~ A placement of soil, rock, or other material by man.

25. Engineer: A person duly registered as a professional civil and/or structural engineer on Guam.

26. Engineer's Soils Report: A report on soils conditions prepared by an a professional engineer qualified in the practice of civil and/or structural engineering.

27. Environmental Impact Statement: A comprehensive and systematic assessment of environmental impacts which would likely result from a human activity or action. Its purpose is to provide, in part, a basis for making decisions which will affect the human condition as well as the purely biological or natural conditions of our environment. It should provide a reasonable set of alternatives and a preferred option which appropriately balances various environmental concerns, including financial, social or cultural concerns. The assessment should rely on proven assessment methods both scientific and political.

28. Environmental Protection Plan: A document describing, for a proposed development, the methods/equipment selected for use, expected environmental problems during and after construction, and methods and equipment chosen to avoid, mitigate or control potential adverse effects on the environment.

29. 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.

30. Erosion check: ~~A technique whereby porous, material like is installed in a slit trench~~ A slit trench filled with porous matter that is oriented perpendicular to the direction of flow in a ditch or swale to prevent the formation of rills and gullies. ~~gullied by permitting subsurface water migration without the removal of soil particles.~~

31. Erosion and sediment control: The control of earth material, both mineral and organic, during an earth-moving operation, intended to prevent its transport out of the operation area by means of air, water, or gravity.

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

33. Excavation or cut: ~~An act by which earth material is cut into, dug, or moved and shall include the conditions resulting therefrom.~~ A cavity formed by digging, cutting, quarrying, uncovering, displacing or relocating soil or rock.

34. Existing grade: The grade prior to grading.

35. Fill ~~or filling~~: ~~Raising the existing ground elevation by earth-moving operations.~~ A placement of soil, rock, or other material by man to raise the existing ground elevation.

36. Finish grade: The final grade of the site which conforms to the approved plan.

37. Grading: Establishing a topographical profile by earth-moving operations involving cuts and fills or excavation or other earth work activities.

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

39. Interceptor channel: A channel or dike constructed across a slope for the purpose of intercepting storm water, reducing the velocity of flow, and diverting it to outlets where it can be disposed.

40. Interceptor dike: A temporary ridge of compacted soil across a graded right-of-way that ~~are~~ is not subject to vehicular traffic, designed to intercept and divert storm runoff ~~and divert it~~ to temporary outlets where it can be disposed of with minimal erosion.

41. Intermittent stream: A stream or portion of a stream that flows only in direct response to precipitation and receives little or no water from springs ~~and no long continued supply from~~ or other sources.

42. Jute Netting: A heavy woven jute mesh laid directly over seedbeds to minimize soil erosion in critical areas until vegetation can become firmly established. Due to its thick fibrous composition, it also functions as a mulch to conserve soil moisture, insulate against solar insulation, dissipate energy from falling raindrops and reduce erosion caused by overland flow.

43. Key: A designed compacted fill placed in an earthen trench excavated beneath the toe of a proposed fill slope.

44. Land developer: Any person who is engaged in land development.

45. Land development: The constructing, installing, placing, planting, or building of surface structures, utility lines, shopping centers and malls, golf courses, apartment complexes, schools, roads, highways, parking areas, or any other similar activity.

46. Level spreader: An outlet constructed at zero grade across a slope to collect concentrated runoff and covert it into sheet flow with non-erosive velocities onto areas stabilized by existing vegetation.

47. Mulch: A natural or artificial layer of plant residue (fiber mulches) other materials, such as sand or paper, on the soil surface.

48. Mulch blanket : Blanket type materials used in the establishment of vegetation on swales, ditches and steep slopes where fiber mulch products do not provide sufficient levels of protection during germination and early growth.

49. Netting: A method of securing fiber mulches through the use of jute, plastic, paper or fiberglass nets on steep exposed slopes where crimping is not possible and tacking will not perform satisfactorily.

50. Outcrop: To come to, or be exposed on the surface.

51. Permeability: The property of a porous material which permits the passage or seepage of fluids, such as water for example, or air through its interconnection voids.

52. Permeable: Having a texture through which water can move. ~~that permits water to move through.~~

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

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

55. Person: Any individual, partnership, firm, association, organization, municipality, public or private corporation, other types of private legal entities and public entities including any subdivision, agency or instrumentality of the government of Guam or the Federal Government, trust, estate or any other legal entity.

56. pH: A numerical measure of the acidity or hydrogen ion activity of a soil. (The neutral point is pH = 7.0. All pH values below 7.0 are acid and all above 7.0 are alkaline).

57. Right-of-way: Right of passage over another person's land; a route that is lawful to use; a strip of land acquired for transport or utility construction.

58. Riprap: Broken rock, cobbles or boulders placed on earth surfaces such as the face of a dam or the bank of a stream, for protection against the action of water or waves; also applied to brush or pole mattresses, or brush and stone, or other similar materials used for soil erosion control.

59. Rough grade: The stage at which the grade approximately conforms to the approved plan.

60. Runoff: Water from rain or irrigation that flows over the ground ~~surface~~ to surface, marine or ground waters. 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.

61. Sandbag sediment barrier: ~~shall mean~~ Temporary barriers or diversions that are constructed of sandbags.

62. Sectional down drain: A prefabricated sectional conduit of half-round, bituminized fiber pipe or other material used to conduct storm runoff from one elevation to another without erosion of slope.

63. Sedimentation: The depositing of sediments.

64. Sediment retention basin: A temporary dam or basin, or a combination of both, that will trap and store sediment produced on exposed areas and delivered to the structure by storm runoff.

65. Sediments: Mineral or organic solid materials that settle to the bottom of water. ~~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.~~

66. Site: The spacial location, under the same ownership, of an actual or planned structure or structures, or earth-moving activity.

67. Slope: An inclined ground surface, the inclination of which is expressed as a ratio of horizontal distance to vertical distance.

68. Soil: ~~(1)~~ The unconsolidated mineral and organic material found on the earth's upper layer, that may be dug or plowed and in which plants can grow. ~~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.~~

69. Soil engineering: The application of the principles of soil mechanics in the investigation, evaluation and design of civil works involving the use of earth materials, and the inspection and/or testing of the construction thereof.

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

71. Soil slopes: All denuded cut, fill or natural soil constituted slopes.

72. Stabilization: The proper placing, grading and/or covering of soil, rock or earth to insure its resistance to erosion, sliding, or other movements.

73. Stockpiling: Temporary open storage of earth materials upon any premises where a grading permit has been issued for the purpose of using the materials at some other premises at a future time.

74. Storm water management: The practice of using detention measure to reduce the impact of minor storms which cause accelerated erosion of stream channels and drainage ways (not to be confused with control of flood flows).

75. Storm water runoff: Rain that is not absorbed when it comes in contact with the soil and thus runs down hill into waters of Guam. This runoff may carry soil with it.

76. Strip planting: The planting of strips of wet soil tolerant, high erosion resistant vegetation in the critical area near the waterline of a major waterway, and the planting of conventional robust rooted grasses and legumes above the critical zone.

77. Subdivision: The division, re-division or change of lot lines of a lot, tract, or parcel of land for the purpose of leasing, transferring ownership, or development, either immediately or in the future.

78. Tacking: A method of securing mulches by the application of an asphalt or chemical binder which binds the individual fibers together to form a resistant blanket.

79. 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.

80. Terrace: A relatively level step constructed in the face of a grade slope surface for drainage and maintenance purposes.

81. Territory: The ~~Territory of~~ Island of Guam, United States of America.

82. Tetrahedron: Solid figure with four (4) triangular surfaces.

83. Uniform Building Code (UBC): The most recent edition of minimum standards to safeguard life or limb, health, property and 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.

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

85. Watershed: ~~The area contained within a divide above a specified point on a stream~~. For any river, stream or other water body, the drainage area that contributes water to that water body.

86. Watershed divide: The line that follows the ridges or summits forming the exterior boundary of a drainage basin and separates one drainage basin from another.

87. Waterway: A natural course or constructed channel for the flow of water.

Section 10103. Permit Issuance and Denials.

A. Permits Required.

1. Unless exempted, no person shall commence or perform any grading, clearing, grubbing, embankment, filling, excavation or other earth-moving activity without a grading permit;

2. Unless exempted, no person shall commence or perform any stockpiling without a stockpiling permit.

B. Permit Application Process.

An applicant shall obtain the required application from the Building Permit Section, Department of Public Works located at the One-Stop Permit Center or other approved location, and shall complete and submit the application to the One-Stop Permit Center or other GEPA approved location for review and approval of all concerned agencies, including the Guam Environmental Protection Agency.

C. Permit Application Contents

1. A description of the proposed activity, including its purpose, proof of land ownership (title, deed or authorized letter) and other pertinent information as may be required by the Administrator.

2. A vicinity map or plan of the site indicating:

a. Site information. The location, including names and locations of streets, roadways, and right-of-ways; property line locations, dimensions and azimuths, easements and setbacks of property; the location of any utility and utility lines, buildings, structures and improvements on or within 100 feet of the site; prominent visible rock out-cropping; elevations, dimensions, location, extent and slopes of all proposed earth moving

activities shown by contours and/or other means; the area in square feet of the land to be affected; and the quantities of excavation and fill involved.

b. Water course information. Locations, dimensions and flow of springs, rivers, wetlands, wells and streams; natural drainage depressions, basins and sinks; flood plains on the project site and downstream locations which will undergo changes due to the proposed earth-moving operations; and existing and proposed water quality monitoring stations located on or nearby the project site.

c. Vegetation information. Location and type of existing trees with a diameter of 12 inches and greater.

3. Required maps will be prepared and signed by a licensed land surveyor. Grading plans and specifications will be prepared and signed by an engineer. Required maps should conform to the latest Zoning Code of Guam's Land Use Plan and subdivision law. The scale shall be no smaller than 1 inch = 50 feet or 1 inch = 5 meters.

4. An application for a stockpiling permit shall include: a plot plan showing the property boundaries; easements, setbacks, and location of the proposed stockpiles; quantities; height of stockpile; the kind/source of the material to be stockpiled; expected life of the stockpile, and any other information required by the Administrator to control dust, drainage or sedimentation problems. Where stockpiling is for the purpose of surcharging to stabilize or consolidate an area, the permittee shall submit an engineer's soil report which shall include data on the effect such surcharging will have on adjacent buildings or structures.

5. Required Plans

a. Erosion and Sediment Control Plan. ~~as a prerequisite of all permits issued by the Building officials, Department of Public Works,~~ This plan is required for clearing,

grading, grubbing, embankment or filling, excavation or other earth-moving operations not otherwise exempted by these regulations.

b. Storm water Runoff Drainage System Plan. This plan, in addition to the Erosion and Sediment Control Plan, is required when the area to be graded is more than 5,000 square feet or a proposed cut or fill is greater than five feet in height.

c. Both the Erosion and Sediment Control and Storm water Runoff Drainage Systems Plans shall:

i. be prepared and signed by an engineer in accordance with these regulations, and the best management practices (BMP) guidance manual or other application of BMPs; and.

ii. show the method to be used for controlling erosion and disposal of storm water runoff prior to and post construction, including drainage devices such as terraces, berms, ditches culverts, subsurface drains, sedimentation basins, and the estimated runoff quantities of the areas served by each drain and drainage structure.

d. Environmental Protection Plan will be required depending on the intensity and scope of the project. This plan will describe the methods and equipment to be used on site; expected or anticipated environmental problems during and after construction; and the methods and equipment that may be used to avoid, mitigate or control potential adverse effects on the environment.

6. When a proposed cut or fill is greater than five (5) feet or the proposed grading is on land with slopes exceeding 5 percent, or when any fill is to be placed in a gully, or when the fill material will be a highly plastic clay, the applicant shall submit to the Administrator, for the

Agency's evaluation and review, an engineer's soils report signed by an engineer and approved by the owner. The soils report shall include data regarding the nature of the distribution and engineering characteristics of existing soils, and the subsurface conditions at the site. It shall recommend the limits for the proposed grading, the fill material to be used, the geotechnical calculations for the cut or fill area, and the manner of placing, including the heights and slopes of cut and fill sections.

7. When an activity or project is located within an environmentally sensitive area (e.g.; areas that affect seashore, rivers and streams, wetlands, critical habitats, and aquifers), an Environmental Impact Assessment (EIA) must be submitted, unless the Administrator determines in writing that the activity is exempted from EIA requirements.

8. If wetlands exist on the property to be cleared and grubbed, graded or used for stockpiling of earth materials, the (wetlands) must be identified with both field markings and by mapping on the site and/or grading plan(s). Wetlands cannot be cleared, grubbed, graded or otherwise be used as a stockpiling site without first obtaining both a valid Guam Wetland Development Permit and a U.S. Army Corps of Engineers Section 404 fill or discharge permit.

9. The Administrator may require that wetlands, on the property to be cleared, grubbed or used for stockpiling of earth materials, be officially delineated, in whole or in part, when conditions such as slope, soil stability, proximity of work or other performance related conditions warrant an official delineation. Individuals required to delineate wetlands in accordance with this provision shall apply the mapping requirements of the Guam Environmental Protection Agency Wetlands Mapping Policy, revised November 9, 1995.

10. Other permits, plans or approvals associated with and issued for the proposed project shall be submitted with the permit application. Activities described in the permit application shall be consistent with these permits, plans or approvals. Such documents include, but are not limited to:

a. Any required conditional use seashore clearance, wetland, Section 401 WQC, Section 404 permits (CWA), and planned development approvals, height variances, plan review use approvals, or re-zoning under the Guam Zoning Regulations;

b. Sub-division approvals, when an application includes the grading of a development that is to be subdivided, pursuant to the Guam Subdivision Rules and Regulations;

c. Conditional use approvals from Guam Land Use Commission, when the area to be graded or excavated will be used as quarry, and extracted materials used to fill a different area or sold as a fill material by the owner.

D. Permit Conditions

1. ~~Additionally,~~ No permit for earth-moving operations will be issued that will cause erosion and sediment loads or cause pollution to the waters of ~~the Territory~~ Guam, as defined by the latest Guam Water Pollution Control Act and the ~~current~~ Water Quality Standards, unless an Environmental Protection Plan and an Erosion and Sediment Control Plan have ~~has~~ been approved by the Agency.

2. The Administrator may attach such conditions as may be reasonably necessary to ensure that any grading work is for a use or structure permitted in accordance with zoning requirements, and to prevent creation of a nuisance or hazard to public or private property, health or welfare. Such conditions may include but are not limited to:

a. improvements of any existing grading to bring it up to the standards of these regulations;

b. requirements for fencing of excavation or fill to minimize hazards;

c. requirements for retaining walls or other earth retention structures to prevent loss of, support to, erosion of, and interference with natural drainage patterns on adjacent properties;

d. requirements involving clean-up of an area; and

e. limitations on the months, days and hours of permitted work.

3. The issuance of a grading permit shall constitute an authorization to do only that work which is described in the permit and in the plans and specifications approved by the Administrator.

4. Permits issued under these regulations shall not relieve the permittee of the responsibility for securing permits or approvals for work to be done which is regulated by any federal laws or other laws of Guam, or by department, or division of the governing agencies of the Government of Guam.

5. Permits issued under these regulations shall be consistent with other permits, plans or approvals associated with the proposed project.

6. Where any operations are delayed for any reason, a revised work schedule shall be submitted to the Administrator which describes any required modifications to the temporary storm water drainage system and to the Erosion and Sediment Control Plan, and other information the Administrator may require.

7. A copy of the permit, plans and specifications for grading, clearing & grubbing, or stockpiling shall be maintained at the job-site during the progress of the work.

E. Permit Denials.

The Administrator shall deny a clearing and grubbing, grading or stockpiling permit if there is reasonable cause for concern that the work as proposed by the applicant may present a risk or endangerment to public health or the environment. Factors to be considered in determining probability of dangerous conditions include, but are not limited to:

1. possible saturation of ground by rain;

2. dangerous geological conditions or flood hazards;

3. undesirable surface water runoff, and

4. subsurface conditions such as the stratification and faulting of rock, nature and type of soil or rock.

Section 10104. Erosion and Sediment Control Plans

A. General Requirements

1. All earth-moving activities on Guam shall be conducted in such a way as to prevent accelerated erosion and the resulting sedimentation. To accomplish this all persons engaged in earth-moving activities shall design, implement, and maintain erosion and sediment control measures which effectively prevent accelerated erosion and sedimentation. These erosion and sediment measures must be as set forth in Erosion and Sediment Control Plans submitted, reviewed and approved by GEPA.

2. All clearing, grading, embankment or filling, excavating and other earth-moving operations shall proceed only in accordance with an Erosion and Sediment Control Plan, prepared in accordance with the requirements set forth in these regulations, and ~~which is~~ duly approved by the Agency.

~~3. Such Erosion and Sediment Control Plans shall be prepared in accordance with the requirements set forth in these regulations.~~

3. An approved Erosion and Sediment Control Plan does not abrogate a permittee's responsibility to comply with all other applicable ~~Territorial~~ local and federal laws and regulations.

~~(3) An Erosion Control Plan shall be a prerequisite of all permits issued by the Building officials, Department of Public Works, for clearing, grading, filling, excavating or other earth-moving operations not otherwise exempted by these regulations. Additionally, no permit shall be issued if earth-moving operations will cause erosion and sediment loads or cause pollution to the waters of the Territory, as define by the Guam Water Pollution Act and the Water Quality Standards, unless and Environmental Protection Plan has been approved by the Agency.~~

B. Agency approval of Erosion and Sediment Control Plans

1. ~~Two~~ Four copies of a proposed Erosion and Sediment Control Plan shall be submitted to the Agency with ~~Such Plan copies shall accompany~~ the permit application for earth-moving operations.

2. The Agency shall have ~~ten~~ thirty (30) working days to approve or disapprove of such plan.

C. Compliance

1. All clearing, grading, embankment or filling, excavating and other earth-moving operations, except ~~as provided under Section H 10109 (3)(b) below, or as~~ those otherwise exempted from these regulations by the Administrator, must proceed in accordance with a duly approved Erosion and Sediment Control Plan.

2. Earth-moving operations in progress, other than quarrying, shall comply with these regulations within ~~7~~ 15 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 these regulations.

Section 10105. Erosion and Sediment Control Plans and Measures.

A. General policies for Erosion and Sediment Control

~~(a) Planning policies for control of Erosion and Sediment Control Plan~~

1. All earth-moving operations ~~in the Territory~~ on Guam shall be conducted in a manner that prevents accelerated land erosion, transportation of sediment to and along highways, or siltation ~~or~~ of rivers, estuaries and marine waters. ~~In conjunction with the project construction schedule, the Plan shall indicate the construction sequence of erosion and sedimentation control measures.~~

2. The area affected by earth-moving operations shall be kept to a minimum by either selective clearing, increment phases of development or other effective means. The Erosion and Sediment Control Plan must contain measures that ensure that each phase of any proposed large development affects less than 20 acres.

3. All earth-moving operations shall be scheduled during periods of expected low rainfall.

4. Any earth moving operations authorized under these regulations shall be performed so as not to violate applicable provisions of the latest Guam Water Quality Standards.

5. No person shall perform any earth moving operation so as to cause falling rocks, soil or debris in any form to fall, slide or flow onto adjoining properties or waters of Guam.

6. All work areas shall be maintained so as to minimize dust which may cause a nuisance or

hazard to others, and in conformance with the Guam Air Pollution Control Standards and regulations.

7. Where construction equipment will make frequent crossings of a natural drainage course, plans shall provide for temporary culverts or bridge structures to be installed. The required clearances from concerned agencies shall be obtained before any construction of temporary crossing access begins.

8. The erosion and sedimentation control measures set forth in this section are required, unless the Erosion and Sediment Control Plan shows that the alteration of these measures and facilities or inclusion of other measures and facilities will better prevent accelerated erosion and sedimentation.

B. Required contents of Erosion and Sediment Control Plans

1. Description of the Project.

The plan shall include a ~~brief~~ detailed narrative description, with photographs and construction drawings, of the proposed project. ~~Sketches, photographs and construction drawings may be used to supplement this description.~~

2. Project Site Plan.

a. The necessary information is that which is required in Section 10103.C. Permit Application Contents. ~~A project site plan shall include the data listing in this subsection~~ Plan sheet size shall not be smaller that 18 inches x 24 inches and not larger than 30 inches x 42 inches. Plan sheet sizes shall not vary .

~~(a) Project site vicinity map and north arrow.~~

~~(b) Existing land uses and structures.~~

~~(c) Existing vegetation,~~

~~(d) Existing topography at contour intervals of not greater than ten feet~~

~~(e) Grading plan at contour intervals of not greater than five feet which extend be-yond the project site limits so as to adequately depict the off-site drainage pattern for purposes of assessing any erosion or its deposition onto other properties.~~

b. Soil description including: soil classification by USDA Natural Resources ~~Soil~~ Conservation Service "Soil Taxonomy Classification System"; soil erodibility factor; soil permeability and percolation rates; type and extent of out-croppings; depth of soil; capability for establishing vegetation; and coefficient of runoff.

c. Evaluation of subsurface information. Subsurface investigations shall consist of drilling, excavations, or observations of naturally exposed soil and bedrock exposures at sufficient intervals and depths to indicate the type of material or condition to be encountered at final grading. The person or firm making the investigation shall submit a written report of their findings and recommendations. ~~as described in part (h) below~~ This information is required where the stability will be lessened by proposed grading or filling, where any other weaknesses are found, or where any of the following conditions are discovered or proposed:

i. At locations where a fill slope is to be placed above or a cut slope;.

ii. At proposed cuts exceeding 15 feet in height unless in competent rock as determined by an engineer;.

iii. At locations of proposed fills exceeding 15 feet in height;.

iv. Where sides of hill fills are to be placed on existing slopes steeper than 15 percent;

v. Wherever groundwater from either the grading project or adjoining properties is likely to reduce stability;

vi. At zones of trapped water or high water table; or.

vii. Where the topography is indicative of landslides, as determined by an engineer.

d. Site Assessment. ~~of the Site. The assessment of the site shall determine the need for an erosion and sediment control plan by considering~~ Consider the detrimental effects of construction of the site as it pertains to: erosion and loss of sediments; slope stability; water quality; plant communities; wildlife and aquatic life; and condition of marine waters and reef flats which will receive storm water runoff, either directly or indirectly, from the project site.

3. Grading Plan.

It is the purpose of this paragraph to ensure that minimum grading is performed and that natural contours and topography will be retained wherever feasible.

a. Grading shall be designed and implemented so as to blend in with the surrounding area.

b. All grading plans and specifications shall show, using contours, cross sections, spot elevations or other means, the condition of the land before and after grading.

c. The grading plan shall provide information regarding the location and source of imported fill material, and the location for disposal of excess excavation material.

d. Where a grading activity is to occur in increments or phases, the plan shall also include the plan for future site development and the proposed grading of future increments.

4. Construction Schedule.

a. Construction increments shall be described in detail and identified on the project plan.

b. The schedule will indicate completion dates for each construction increment and the construction sequence of erosion and sediment control measures. ~~shall be indicated.~~ Each increment phase of work shall have an approved Environmental Protection Plan and Soil Erosion and Sedimentation Control Plan from the Agency.

c. The Agency shall check the adequacy of the schedule with respect to short term and long term erosion anticipated on the project site. The construction schedule shall be checked to ensure prompt establishment of protective vegetation with full recognition of climatic and other factors that influence its establishment.

4. Stormwater Drainage System and Control of Site Water Runoff.

a. The proposed temporary and permanent, natural and man-made, storm water drainage systems shall be depicted in detail in the drawing plans, including, but not limited to, dimensions, alignments and elevations of all structures as well as the anticipated volume and velocity of the storm water. Design calculations for the drainage systems and siltation basins, best management practices, and other pertinent structures, shall be submitted. The following shall also be provided:

i. The runoff to be expected during and after the proposed development;

ii. The size of drainage areas above cuts and slopes;

iii. Estimate soil loss volume;

iv. The methods for trapping sediments, reducing erosion of drainage ways, and for controlling the collection and discharge of stormwater during and after construction.

v. The method and schedule of construction of waterway crossings. Sediment control structures for natural waterways shall be scheduled for installation prior to any earth-moving operations.

b. Adequate provisions shall be made to prevent surface waters from damaging the cut face of an excavation or the sloped surfaces of a fill. Positive drainage shall be provided to prevent the accumulation or retention of surface water in pits, gullies, holes or similar depressions. All drainage facilities shall be designed to carry surface water runoff to a storm drain that will discharge to a catchment facility within the project site. The Administrator may require such drainage structures and pipes to be constructed or installed, which in his opinion, are necessary to prevent erosion damage and to adequately carry off surface waters. The flow of any existing and known natural underground drainage shall not be impeded or changed so as to cause damage to adjoining property.

~~c. Storm water 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.~~

c. During construction, all storm sewer inlets shall be protected with silt traps.

d. If a project to be developed is covered under the Federal Stormwater Regulations (40 CFR Parts 122 & 123), a notice of intent to discharge stormwater to surface and marine waters of Guam must be submitted to US Environmental Protection Agency and a copy furnished GEPA. An NPDES permit which authorizes the discharge must also be secured.

~~**(5) Erosion and Sediment Control Measures.**~~

~~(a) The erosion and sediment 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.~~

~~(b) In conjunction with the project construction schedule, the Plan shall indicate the construction sequence of erosion and sedimentation control measures.~~

~~© Stabilization of all affected streams, waterways and drainage ways;~~

e. Structural measures such as berms, dikes, traps, basins, shall be installed prior to any other grading, clearing, or disturbance of the existing surface of the site..

f. Diversion Terraces

i. Diversion terraces shall be constructed up-grade of a project area to convey runoff around the project area. For temporary diversions, the channel shall have capacity to convey 1.6 cubic feet per second per acre of land tributary to it. For permanent diversions, the channel shall have capacity to convey 2.75 cubic feet per second per acre of land tributary to it.

ii. Diversion terraces shall be grassed or lined with erosion resistant material to prevent accelerated erosion within the channel.

iii. Outlet structures shall be designed to maintain a discharge velocity of less than 2.0 feet per second and all areas affected by the construction activity shall be stabilized before the outlet structures shall be used.

g. Interceptor Channels.

i. Interceptor channels may be used within the project area to reduce the velocity of the flow and thus prevent accelerated erosion.

ii. Water collected by interceptor channels shall be conveyed to sedimentation basins or to vegetated areas but not directly to streams.

iii. Outlets to vegetated areas shall be designed to maintain an outlet velocity of less than 2.0 feet per second. Outlet structures shall be screened to lower the amount of suspended solids in the discharge water.

h. Channels of Conveyance.

All channels used to convey water through a project area shall be designed to have a velocity of less than 1.5 feet per second. Where this is not possible, the channel shall be grassed or lined with erosion resistant material.

i. Sedimentation Basins.

i. The basin shall be cleaned when the storage capacity of the basin is reduced to 5,000 cubic feet per acre of project area tributary to the basin.

ii. Water from a sedimentation basin shall not be discharged to a natural waterway. Designs of sediment basins must provide for enough storage to give time for runoff water to be leached into the ground.

iii. Outlets of sedimentation basins shall be screened and designed in a manner

which does not discourage regular maintenance.

iv. Sedimentation basins shall be structurally sound and properly secured to protect them from unauthorized acts of third party activities.

5. Cut and fill ~~measures~~

a. The conditions of the following subsections may be modified by the Administrator based on a supportive engineer's soils report, and receipt of approvals from the owner and concerned agencies;

i. Height. Where a cut or fill is greater than 15 feet in height, terraces, or benches shall be constructed at vertical intervals of 15 feet except where only one bench is required, the single bench shall be constructed at the midpoint. The minimum width of such terraces or benches shall be at least 18 feet and provided with drainage provisions to control erosion on the slope and face and bench surface.

ii. Cut Slopes. Under the following conditions, no cut may be steeper in slope than the ratio of its horizontal to its vertical distance as shown below:

(a) 2 horizontal to 1 vertical in unweathered rock or mudrock;

(b) 2 horizontal to 1 vertical in decomposed rock; or

(c) 2 horizontal to 1 vertical in soils of low plasticity for cuts of any height in highly plastic soils. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

iii. Fill slopes shall not be steeper than the ratio 3 horizontal to 1 vertical except that fill using highly plastic clays shall have slopes specifically recommended in the engineer's soils report signed by a professional civil engineer, and approved by the owner. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

b. Fill material shall be selected to meet the requirements and conditions of the particular fill for which it is to be used. The fill material shall not contain vegetation or organic matter. Where rocks, concrete, or similar materials of greater than 8 inches in diameter are incorporated into the fill, they shall be placed in accordance with the recommendation of the professional civil engineer.

c. Before placing fill or stockpiling, the natural ground surface shall be prepared by removing the vegetation and, shall be notched by a series of benches and/or subsurface drains installed.

d. No fill shall be placed over any waters of Guam (e.g.: spring, marsh, wetlands), refuse dumps, or soft, soggy or springy foundations.

e. Fill materials shall be spread and compacted in a series of eight (8) inch to ten (10) inch layers, unless otherwise recommended by the professional civil engineer. For slopes, the fill shall be compacted to ninety five (95) percent maximum density as determined by the most recent ASTM Soil Compaction Test D1557. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

f. Distance from property line. The following requirements may be modified by the Administrator when cuts or fills are supported by retaining walls or when the permittee

submits an engineer's soils report stating that the soil conditions will permit a lesser horizontal distance without causing damage or danger to the adjoining property. The engineer's soils report shall include the recommended slope design, and design calculations necessary to demonstrate slope stability.

The horizontal distance from the top of a cut slope or the bottom of a fill slope to the adjoining property line shall not be less than as follows:

Heights of cut or fill	Distance from property line (in feet)
Zero feet to 4 feet	4
More than 4 feet to 10 feet	6
More than 10 feet to 15 feet	8
More than 15 feet	10

6. Maintenance Procedures.

a. A maintenance program for the erosion and sedimentation control structures and facilities shall be established. ~~Such~~ The program shall include ~~periodic~~, but not be limited to, a schedule for inspecting the facilities and for removing and disposing ~~inspection schedule of the facilities, schedule of removal and disposal~~ of sediment materials from the control structures, or project area, and specific ~~assignment~~ duties of the designated maintenance personnel.

b. If the original owner has sold the property, the subsequent owner shall be responsible for maintaining the permanent measures that have been installed on the property.

7. Disposal of Spoil Materials.

The information concerning the disposal of spoil materials shall include the following: type of spoil material; location of disposal area; method for processing and disposing of spoil

materials; procedures for preventing soil loss to adjacent watercourses; and, if intending to burn spoil materials, burning procedures for combustible spoil material. Burning requires a permit from the Guam Fire Department;

8. Stockpiles.

The following information shall be provided: source of stockpile material; location, slope, and height of stockpile; duration that the material is to be stockpiled; provisions to prevent erosion and sediment loss from rain and wind action; plan for removing stockpiles at project completion.

9. Stabilization of Affected Areas

a. Stabilization of slopes, channels, ditches, berms, diversions, silt dams, or any disturbed areas shall begin as soon as possible and no later than 30 calendar days after the final grade or final earth-moving activities has been completed.

b. Electric power, and telephone trenches are to be stabilized as soon as possible and no later than 30 days after backfill.

c. Stabilization of stream banks shall be scheduled during periods of expected low rainfall.

~~b. 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.~~

d. Where it is not possible to permanently stabilize a disturbed area immediately after the final earth-moving has been completed or where the activity ceases for more than 30 calendar days, interim or temporary stabilization measures shall promptly be implemented and enforced.

e. Any disturbed area not paved, sodded or built shall be seeded and mulched with vegetative cover appropriate to the soil type, as recommended by an engineer, or the condition of the area based on soil test analysis done by a laboratory. This condition does not prohibit the use of matting, gabion, armor coating on erodible surfaces or other type of vegetative cover that will minimize erosion.

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

f. All structural sediment control measures are to remain in place until permission for their removal has been obtained from the Agency.

~~4. No graded area shall remain in an unstabilized condition for longer than or longer than authorized by its approved Erosion Control Plan.~~

~~5. In the event that earth-moving operations are discontinued or delayed, graded areas shall receive interim, or temporary cover~~

~~6. All areas disturbed by earth-moving operations, including slopes, channels, ditches, banks, must be stabilized as soon as possible after the final grade has been established~~

10. Protection and Removal of Native Vegetation.

a. In order to protect native vegetation from construction impacts, the following information shall be provided: location and description of native vegetation whose root zone will be affected by compaction, fills, trenches, and changes in the groundwater table; measures which will prevent conditions damaging to vegetation; and criteria used to determine removal;

b. Whenever feasible, natural vegetation should be retained. If their removal is necessitated, they shall not be stored or deposited along banks of streams, rivers or natural water courses, after being uprooted, or displaced from the ground by excavation, clearing or grubbing. Removed vegetation shall be disposed of at a disposal site approved by the Administrator, and removed from the site within a reasonable time, not to exceed one (1) month from date of removal.

11. Establishment of Vegetation

a. Where the establishment of vegetation is required on slopes of cut and fill, graded areas, and watercourses, etc., the following information shall be provided :

i. Location and areas to be vegetated;

ii. An indication of whether vegetation is to be temporary or permanent;

iii. Type and quantity of seeds or plants;

iv. Ground conditions, including: soil surface condition, pH, permeability, size distribution, slope angle, slope length, and aspect, nutrients;

v. Type and quantity of mulch;

vi. Type and quantity of fertilizer;

vii. Method and schedule of seeding, mulching, planting, and fertilizing;

viii. Irrigation schedule.

b. The plan shall provide for the revisiting of the location every three (3) months to verify that vegetation has been successfully established. If not successful the site must be revegetated until the area ~~returns to its pre-existing condition substantially~~. is successfully revegetated.

12. Certification. The Plan shall be stamped and signed by a professional civil and/or structural ~~environmental~~ engineer ~~holding current Guam registration in the Territory.~~ currently registered on Guam.

Section 10106. Special Requirements.

A. Protection of adjoining properties.

Any person performing or causing to be performed any excavation or fill shall, at his own expense, provide the necessary means to prevent the movement of earth to the adjoining properties, and to maintain the existing natural grade of adjoining properties.

B. Protection of public utilities.

Any person performing or causing to be performed any excavation or fill shall be responsible for the maintenance or restoration of street pavements, sidewalks and curbs, and improvements of public utilities which may be affected. Such maintenance shall be in accordance with the requirements of the Department of Public Works, Government of Guam agencies and affected public utilities. At cuts fronting any street, a suitable and adequate barrier shall be installed to provide protection to the public.

C. Removal of silt or other debris.

Any person depositing or causing to be deposited, any silt or debris in ditches, water courses, drainage facilities, and public roadways, shall remove such silt or other debris. In case such person shall fail, neglect or refuse to comply with the provisions of this section within 48 hours after written notice served upon him, either by mail or by personal service, the Administrator may proceed to remove the silt and other debris or to take any other action he

deems appropriate. The costs incurred for any action taken by the Administrator shall be payable by such person.

D. Safety precautions.

At any stage of the grading, grubbing, or stockpiling, if the Administrator finds that further work as authorized by an existing permit is likely to create soil erosion problems or to endanger life, limb or property, he may require safety precautions. These precautions may include but are not limited to: flattening exposed slopes; constructing additional silting or sediment basins, providing drainage facilities or benches; removing rocks, boulders, debris and other dangerous objects which, if dislodged, are likely to cause injury or damage; or constructing fences or other suitable protective barriers.

E. Creation of individual building sites.

Hillside lots shall be graded in such a manner that any parcels which may be created, including all separate building sites which may be contained within said parcels, can be satisfactorily graded and developed as individual building sites.

Section 10107 Project Completion ~~HI. Minimum Conditions of an Erosion and Sediment Control Plan~~

A. Products to be submitted.

1. As-built / graded plan, prepared by an engineer or land surveyor, upon completion of an earth-moving operation covering an area of greater than one (1) acre;

2. Soils report, when earth moving operations involve cuts or fills for which an engineer's soils report is required. The report shall contain:

a. A description of materials used in the fill and its moisture content at the time of compaction;

b. The procedures used in depositing and compacting the fill;

3. A description of the preparation of the original ground surface before making the fill, but not limited to benching and subsurface drainage;

4. A plan or tabulation showing the general location and elevation of compaction tests made in the fill together with a tabulation of relative compaction densities obtained at each location, the location of sub-drains, and other pertinent features of the fill necessary for its stability; and

5. Certification that the work was done in conformity with these regulations, the approved plans and specifications, and the engineer's soils report.

B. Final inspection and approval.

The permittee or his agent shall notify the Administrator or his representative when the earth-moving operation is ready for final inspection. Final approval shall not be given until all approved work has been completed. Final approval shall be dependent on installation of all drainage structures and their protective devices, establishment of a healthy vegetation growth in conformance with the approved plans and specifications, and submittal of any required reports.

~~(a) Planning policies for control of Erosion and Sediment Control Plan.~~

~~1. All earth-moving operations in the Territory on Guam shall be conducted in a manner that prevents accelerated land erosion, transportation of sediment to and along highways, siltation or rivers, estuaries and marine waters.~~

~~2. The area affected by earth-moving operations shall be kept to a minimum by either selective clearing, increment phases of development or other effective means.~~

~~3. All earth-moving operations shall be scheduled during periods of expected low~~

~~rainfall.~~

~~4. No graded area shall remain in an unstabilized condition for longer than thirty 30 calendar days or longer than authorized by its approved Erosion Control Plan.~~

~~5. In the event that earth-moving operations are discontinued or delayed, graded areas shall receive interim, or temporary cover, which is acceptable to the Agency;~~

~~6. All areas disturbed by earth-moving operations, including slopes, channels, ditches, banks, must be stabilized as soon as possible after the final grade has been established~~

~~7. Storm water 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~~

~~8. All 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~~.

Section 10108. Permit Fees.

A. Applicability.

All applicants (e.g.: private individuals, federal agencies, and Government of Guam agencies or departments, including autonomous and semi-autonomous agencies) for earth-moving operations permits, shall pay required permit fees.

B. Grading permits.

1. Before issuing a grading permit clearance, the Administrator shall collect site grading plan review fees based on the volume of excavation or fill measured in place according to the

following schedules:

TABLE A - GRADING PLAN REVIEW FEES

50 cubic yards or less ---------- No Fee

51 to 100 cubic yards ---------- $15.00

101 to 1,000 cubic yards ---------- $22.50

1,001 to 10,000 cubic yards -- ---------- $30.00

10,001 to 100,000 cubic yards ---------- $30.00 for the first 10,000 cubic yards, plus $15.00 for each additional 10,000 cubic yards or fraction thereof.

100,001 to 200,000 cubic yards ---------- $165.00 for the first 100,000 cubic yards, plus $9.00 for each additional 10,000 cubic yards or fraction thereof.

200,001 cubic yards or more ---------- $225.00 for the first 200,000 cubic yards, $4.50 for each additional 10,000 cubic yards or fraction thereof.

2. The fee for a grading permit authorizing additional work to that under a valid permit shall be the difference between the fee paid for the original permit and the fee shown for the entire project.

C. Fees for additional plan reviews.

Additional plan reviews required for any changes, additions or revisions to approved plans are $30.00 per hour, or the total hourly cost to the jurisdiction, whichever is the greatest. This cost

shall include those associated with supervision, overhead, equipment, hourly wages and fringe benefits of the employees involved.

D. Clearing and grubbing permits.

Before issuing a clearing and grubbing permit clearance, the Administrator shall collect a clearance fee of $20.00 for clearing & grubbing areas greater than 15,000 square feet plus $2.00 per each additional 1,000 square feet or fraction thereof. No fee shall be charged for clearing and grubbing less than 15,000 square feet.

E. Stockpiling permits.

Before issuing a stockpiling permit clearance, the Administrator shall collect a permit clearance fee of $7.50 for stockpiling in excess of the 100 cubic yards, plus $1.50 for each additional 100 cubic yards or fraction thereof.

F. Work occurring without a permit.

Where work for which a permit is required by these regulations has commenced or has been accomplished without a permit, a permit shall be obtained, and two times the fees specified above shall be assessed, provided that such work complies with or may be made to comply with the requirements of these regulations. If the grading/clearing/ stockpiling/ grubbing work accomplished or commenced cannot be made to comply with the provisions of these regulations, the person or persons responsible for the initiation or accomplishment of such grading work shall restore the land to its original condition and shall obtain a certificate of completion thereof from the Administrator. Notwithstanding the above, the person or persons responsible for such grading/clearing/ grubbing/stockpiling shall be deemed to have violated the provisions of these regulations by performing such activity/ies without a permit.

G. Water Protection Fund.

All permit fees, monetary charges, fines, and penalties assessed, collected or received by GEPA pursuant to this regulation and other regulations promulgated under the Water Pollution

Control Act, as well as contributions and assets made for the purpose of improving water quality or preventing water pollution , shall be deposited into the Water Protection Fund. The Water Protection Fund shall be established as separate and apart from any other funds of the Government of Guam, and shall be administered by the Administrator. Independent records and accounts shall be maintained in connection therewith. The funds shall be used for the administration and implementation and enforcement of the Water Pollution Control Act and regulations promulgated from said Act, for educational programs and grants for research and development, advertisement promotions, and inspections of facilities to prevent or minimize erosion that contributes to pollution of the waters.

Section 10109. Permit Expiration.

A. Grading, clearing and grubbing and stockpiling permits.

All grading, clearing and grubbing or stockpiling permits shall expire and become null and void under the following circumstances:

1. If permitted work is not started withing 180 calendar days after the date of issuance of the permit; or

2. If work is suspended or abandoned any time after the work is commenced for a minimum period of 60 days; or

3. If work is continued without interruption for one year, beginning with the date of issuance of the permit, or is completed within the time frame provided in the approved permit application, whichever comes first.

B. Stockpiling permits.

Every stockpiling permit shall expire and become null and void one year after the date of issuance. Prior to the expiration of the stockpile permit, all stockpiled material temporarily

stored on the premises shall be removed from the premises or used on the premises as fill material under a grading permit for fill.

C. Permit expiration.

Once a permit has expired, the owner/applicant shall pay the required fees and obtain a new permit pursuant to these regulations, before beginning new work. If the owner begins work with obtaining a new permit, the owner shall pay the necessary penalty fees pursuant to these regulations.

Section 10110. Stop Work Order.

A. Unacceptable conditions.

Whenever the Administrator determines that any permitted clearing & grubbing, grading, or stockpiling is or may become unstable or dangerous, endangers property, adversely affects the safety, use, or stability of a public way or drainage channel, or results in a violation of the Guam Water Quality Standards, the owner of the property, or other person or agent in control of the property, on receipt of notice in writing from the Administrator, shall abate the danger, implement necessary corrective measures, and shall conform with the requirements of these regulations. The Administrator, or his authorized representative, shall have the authority to enter the property and investigate, and enforce the provisions of this section. A hearing will be held as required under 10 GCA Section 47110.

B. Stop work order procedures.

If the Administrator determines that the work must stop due to unstable or dangerous conditions, the Administrator shall issue a stop work order to the owner/contractor of the property and transmit a copy of the order to the Department of Public Works Building Permit Section. Both GEPA and the Department of Public Works shall jointly enforce the stop work order.

C. Work occurring without a permit.

Notwithstanding the above, if an earth-moving operation is occurring without a valid permit

the Agency can order the operation to immediately cease and either require the violator to obtain an after the fact permit, or if the operation cannot be permitted, to have the violator take corrective measures to return the land to its previous condition.

Section 10111. Suspension or revocation of Permit.

A. Criteria for suspending or revoking permits.

The Administrator shall, in writing, suspend or revoke a permit issued under the provisions of these regulations whenever: the permit has been issued on the basis of incorrect information supplied by the permittee; existing site conditions are found not to be in accordance with the terms and conditions of the permit; it is determined that the permittee has not complied with a provision of any other applicable law, ordinance rule or regulation of the Guam; the clearing and grubbing, grading or stockpiling discloses conditions that are objectionable or unsafe; or an immediate danger exists in a downstream/adjacent area.

B. Process for recommencing work.

When a permit has been suspended the permittee may submit details and proposals for compliance with the provisions of these regulations, and any other applicable laws, rules or regulations of Guam. Upon approval of such plans and proposals by the Administrator, the Administrator shall authorize the permittee, in writing, to proceed with the work.

C. Non-compliance

Non-compliance with the correction notice or stop work order issued for the construction of the sediment and erosion control practices, and/or the construction of storm water management facilities may result in the revocation of the issued permit.

Section 10112. Inspections.

A. Access to the site.

Each permit issued under these regulations shall be deemed to include the right of the Administrator or his authorized representative to enter at reasonable time upon any property to inspect the clearing and grubbing, grading, or stockpiling operations. Such inspections may take place before, during and after any earth change activity for which a permit has been issued to ensure that control measures are properly installed or performed and maintained at the expense of the applicant.

Section 10113. Enforcement.

A. Pollution.

If the Agency determines that a person is conducting operations ~~in a~~ which ~~is~~ are causing or ~~is~~ are likely to cause pollution, the Administrator may order the owner or operation to take ~~of~~ corrective measures needed to prevent or cease the pollution.

B. Water pollution.

If the operation is causing or is likely to cause alteration of physical, chemical, or biological properties to the waters of Guam, resulting from sediment, deposition presenting an imminent and substantial danger to the public health, safety or welfare, or the health of animals, fish or aquatic life, to a public water supply or to other reasonable uses of water, the Administrator can issue an order requiring the cessation of relevant activities and implementation of corrective measures. In emergency situation, any order issued by the Administrator shall become final no later than 24 hours after the date of the notice and order served.

C. Voluntary compliance.

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

D. Permit violations.

Whenever the Agency has reason to believe that a violation of any Section of these regulations has occurred, it shall 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 fifteen (15) days that after the date of the notice and order 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 shall require that the alleged violator or violators appear before the Agency for a time and place specified in the notice and answer the charges complained of, or the Agency may initiate action pursuant to Section 10116 of these regulations.

E. Corrective actions.

If, after a hearing is held pursuant to 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 soil erosion.

F. Appeals.

No later than ~~ten (10)~~ fifteen (15) 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.

G. Corporate violations.

Whenever a corporation violates any provisions of these regulations, it shall be deemed that the individual directors, officers, or agents of the corporation, acting in their capacity as directors, officers or agents of such corporation, have authorized, ordered or done the acts constituting the violations.

H. Emergency Procedures.

1. Any other provisions of law to the contrary notwithstanding, if the Administrator finds that a generalized condition of pollution exists, and that it creates an emergency requiring immediate action to protect the intended uses of the water as designated in the Standards of Water Quality for Waters of Guam, or to protect human health or safety, the Administrator, with the concurrence of the Governor, shall order persons causing or contributing to the pollution to reduce or discontinue immediately the pollutants, and such order shall fix a place and time, not later than twenty-four (24) hours thereafter, for a hearing to be held before the Agency. Not more than twenty-four (24) hours after the commencement of such hearing, and without adjournment thereof, the Agency shall affirm, modify or set aside the order of the Administrator.

2. In the absence of a generalized condition of pollution of the type referred to in Subsection (1), but if the Administrator finds that pollutants from the operation of one or more polluting sources is causing imminent danger to the intended uses of the water as designated in the Standards of Water Quality for Waters of Guam or is causing imminent danger to human health or safety, he may order the person or persons responsible for the operation or operations in question to reduce or discontinue pollutants immediately, without regard to the provision of Subsection (a) of §47109, Chapter 47, 10 GCA of this Act. In such event, the requirements for hearing and affirmance, modification or setting aside of orders set forth in Subsection (1) of this Section apply.

Section 10114. Penalties, Liability, and Severability Clause

A. Penalties.

1. Administrative - Where work for which a permit is required by these regulations has been commenced or has been accomplished without a permit, a permit shall be obtained and a penalty fee paid equal to two (2) times the amount of the required fee to be assessed under Section 10107 Permit fees of these regulations. The Administrator shall assess the required clearance fee and penalty fee provided that the work complies or may be made to comply with the provisions of these regulations. If the activity accomplished or commenced cannot be made to comply with the provisions of these regulations, the person or persons responsible for the initiation or accomplishment of such activity shall restore the land to its original condition and shall obtain a certificate of completion from the Administrator. The person or persons who performed such activity shall be deemed to have violated the provisions of these regulations by performing an activity without a permit and may be subject to enforcement action pursuant to this section.

2. Criminal - Any person who violates any provision of these regulations shall be guilty of a misdemeanor and subject on account thereof to a fine of not to exceed One Thousand Dollars ($1,000.00). Each day of violation shall constitute a separate offense.

3. Civil - Action pursuant to Section 10116 (1)(b) of this Section shall not be a bar to enforcement of these regulations, by injunction or other appropriate remedy and the Agency shall have the power to institute and maintain in the name of Guam any and all such enforcement proceedings..

4. 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 or other appropriate proceedings therefor.