

# EARTH MOVING REGULATIONS

## PART 1. GENERAL PROVISIONS

1.1 Authority. These regulations are promulgated by the Secretary of Human Resources pursuant to [25 F.S.M.C. 610](#), as amended by Public Law No. 5-21. These regulations shall have the force and effect of law.

1.2 Applicability. These regulations shall apply to all earthmoving activities as defined herein, as follows:

(a) Ongoing activities/operations of a continuous nature such as dredging, quarrying, etc., shall be in compliance with these regulations within three months from the effective date of these regulations.

(b) Construction operations in progress on the effective date of these regulations shall comply immediately to the extent possible, and fully within three months of the effective date of these regulations.

(c) All new projects and new operations that begin on or after the effective date of these regulations shall comply fully with these regulations

1.3 Definitions. As used herein, unless the context otherwise requires, the term:

(a) "Accelerated erosion" means the removal of the surface of the land through the combined action of human activities and through the action of natural processes, at a rate greater than that which would result through the action of natural processes alone.

(b) "Accelerated sedimentation" means the sedimentation resulting from the combined action of human activities and natural processes resulting from storms, heavy rains, and high winds at a rate greater than that which would result through the action of natural processes alone.

(c) "Conveyance channel" means a channel other than an interceptor channel used for the conveyance of water through a project area.

(d) "Department" means the Federated States of Micronesia Department of Human Resources.

(e) "Diversion terrace" means a channel or dike constructed upslope of a project for the purpose of diverting storm water away from the unprotected slope.

(f) "Earthmoving" means any construction or other activity which disturbs or alters the surface of the land, a coral reef or bottom of a lagoon, including, but not limited to, excavations, dredging, embankments, land reclamation in a lagoon, land development, subdivision development, mineral extraction, ocean disposal, and the moving, depositing or storing of soil, rock, coral, or earth.

(g) "Embankment" or "fill" means a deposit of soil, rock, or other material placed by man.

(h) "Erosion" means the natural process by which the surface of the land is worn away by the action of water, wind, or chemical action.

(i) "Excavation" means, but is not limited to, a cavity formed by, quarrying, dredging, uncovering, displacing, or relocating soil, coral, or rock.

(j) "Interceptor channel" means a channel or dike constructed across a slope for the purpose of

intercepting storm water, reducing the speed of water flow, or diverting it to outlets where it can be disposed.

(k) "Land development" means the construction, installing, placing, planting, or building of surface structures, land reclamation, navigation channels, harbors, utility lines, piers, shopping centers, causeways, golf courses, apartment complexes, hotels, schools, roads, parking areas, or any other similar activity.

(l) "Person" means the Federated States of Micronesia, a State, municipality, political subdivision, a public or private institution, corporation, partnership, joint venture, association, firm, or company organized or existing under the [laws of the Federated States of Micronesia](#) or any State or country, or a lessee or other occupant of property, or individual, acting singly or as a group.

(m) "Pollutant" means one or more substances or forms of energy which, when present in the air, land, or water, are or may be harmful or injurious to human health, welfare, or safety, to animal or plant life, or to property, or which unreasonably interfere with the enjoyment by the people of life or property.

(n) "Secretary" means the Secretary of the Federated States of Micronesia Department of Human Resources.

(o) "Sediment" means soils or other surface materials transported by water as the result of land erosion or earthmoving activity.

(p) "Sedimentation" means the process by which sediment is deposited on the bottom of a body of water, including, but not limited to, rivers, streams, ponds, lakes, the bottom of lagoons or the tops of reefs.

(q) "Sedimentation retention boom" means a watertight membrane suspended from floats and weighted at the bottom in water bodies arranged in a manner that will confine sediments to a local area.

(r) "Stabilization" means the proper placing, grading, and/or covering of soil, rock or earth, including the use of vegetation, to ensure its resistance to erosion, sliding, or other movement.

(s) "Subdivision" means the division or redivision of a lot, tract, or parcel of land by any means into two or more lots, tracts, parcels, or other divisions, including changes in existing lot lines for the purpose, whether immediate or in the future, of leasing, transfer of ownership, building, or lot development.

## **PART 2. EROSION AND SEDIMENTATION CONTROL**

2.1 General Requirement. All earthmoving activities within the Federated States of Micronesia shall be conducted in accordance with these regulations and in such a way as to prevent accelerated erosion and accelerated sedimentation. To accomplish this, all persons engaging in earthmoving activities shall design, implement, and maintain erosion and sedimentation control measures which effectively prevent accelerated erosion and accelerated sedimentation. The erosion and sedimentation control measures must be set forth in a plan, must be available at all times at the site of the project, and must be filed with the Department.

### 2.2 Erosion and Sedimentation Control Plan.

(a) The erosion and sedimentation control plan should be prepared by a person trained and experienced in erosion and sedimentation control methods and techniques.

(b) The erosion and sedimentation control plan should be prepared to prevent acceleration of erosion and acceleration of sedimentation and shall consider all factors which contribute to erosion and sedimentation, including, but not limited to, the following:

- (1) The topographic and/or hydrographic features of the project area.
- (2) The types, depth, slope, and area of the soils, coral, and/or reef.
- (3) The original state of the area as to plant and animal life.
- (4) Whether any coral reef which may be affected by the earthmoving is alive or dead.
- (5) The proposed alteration to the area.
- (6) The amount of runoff from the project area.
- (7) The staging of earthmoving activities.
- (8) Temporary control measures and facilities for use during earthmoving activity.
- (9) Permanent control measures and facilities for long term protection.
- (10) A maintenance program for the control facilities including disposal of materials removed from the control facilities or a project area.

(c) If the project involves an earthmoving activity in a lagoon, reef, or any body of water, the plan should show existing marine life populations as well as minimum and maximum turbidities.

### 2.3 Erosion and Sedimentation Control Measures and Facilities.

(a) General Requirement. The erosion and sedimentation control facilities set forth below shall be incorporated into all earthmoving activities unless the designer of the erosion and sedimentation control plan shows that alteration of these measures and/or facilities, or inclusion of other measures and/or facilities, will prevent accelerated erosion and accelerated sedimentation.

#### (b) Control Measures.

(1) Limiting Exposed Area. All earthmoving activities shall be planned in such a manner so as to minimize the area of disturbed land, reef, or lagoon.

(2) Containment of Underwater Sedimentation. All sedimentation resulting from underwater earthmoving activities shall be contained, confined, and restricted by the best available means in such a manner that turbidities will be kept to a minimum.

(3) Velocity Control. All permanent facilities for the conveyance of water around, through, or from the project site shall be designed to reduce the velocity of flow in the facilities to a speed that will not cause significant erosion.

(4) Stabilization. Within a section or area of the project, all slopes, channels, ditches, or any disturbed area shall be stabilized as soon as possible after the final grade or final earthmoving has been completed.

(5) Interim Stabilization. Where it is not possible to permanently stabilize a disturbed area immediately after the final earthmoving has been completed or where the activity stops for more than fourteen days, interim stabilization measures shall be promptly implemented.

(6) Containment of Fills and Reclaimed Land Within Bodies of Water or Tidal Zones. Before filling or land development within a body of water or tidal zone, adequate seawalls and/or breakwater facilities shall be constructed to safely contain the fill without failure and to prevent accelerated sedimentation.

(7) Collection of Runoff. All runoff from a project area shall be collected and diverted to facilities for removal of sediment.

(8) Solids Separation. Runoff from a project area shall not be discharged into the waters of the Federated States of Micronesia without effective means to prevent sedimentation.

(c) Control Facilities.

(1) Sedimentation Retention Booms. These facilities must be used to restrict accelerated sedimentation around earthmoving or related activities on reefs or in lagoons in all cases, except when a finding has been made after actual demonstration that no facilities are needed to prevent accelerated sedimentation. Approval of use of alternate facilities or a finding that no facilities are necessary shall be made in writing by the Department.

(2) Diversion Terraces.

(i) Diversion terraces shall be constructed upgrade of a project area to convey runoff around the project area. They shall have sufficient capacity to convey such runoff without overflowing.

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

(iii) Outlet structures shall be designed to reduce the discharge velocity to that which will not cause accelerated erosion, and shall be stabilized before use.

(3) Seawalls and Breakwater Facilities. Seawalls and/or breakwaters to contain fill or reclaimed land shall be sufficiently watertight to prevent accelerated sedimentation, well constructed on solid foundation, and to a level at least two feet above the highest tide or flood level of historical knowledge. these facilities should be planned, designed; and constructed under the direction of a person trained and experienced in building seawalls and breakwater facilities.

(4) Interceptor Channels.

(i) Interceptor channels may be used within a project area to reduce the speed of flow of surface runoff 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 or other bodies of water.

(iii) Outlets to vegetated areas shall be designed to reduce the discharge velocity to that which will not cause accelerated erosion.

(5) Channels of Conveyance. All channels of conveyance shall be designed and/or grassed or lined with erosion resistant materials so as to reduce the speed of flow of surface runoff so as not to cause accelerated erosion.

(6) Solids Separation Facilities.

(i) A basin for settling solids out of water shall be structurally sound and have sufficient capacity to hold the water that drains into the basin-until the solids have settled out.

(ii) The basin shall be cleaned when the settling of solids has reduced the capacity of the basin by 25.

(iii) Outlet structures shall be designed to allow only adequately settled water to be discharged, and at a rate that will not cause accelerated erosion.

(7) Hydraulic Dredged Fills. The discharge from pumps or hydraulic dredges used to construct fills shall be sufficiently treated and retained with dikes, levees, seawalls, or other structures for a sufficient period of time so that accelerated sedimentation will not take place in the waters which receive the effluent. Transmission pipelines transporting fill material will be maintained in a watertight condition at all times of excavation and fill operation.

(8) Barges, Scows, or Vessels for Hauling Dredged Material. Such vessels operating in waters of the Federated States of Micronesia will be sufficiently tight and secure so that accelerated sedimentation will not occur by reason of leaking or premature dumping due to faulty mechanisms.

## 2.4 Restoration.

(a) Stabilization. Upon completion of the project, all areas which were disturbed by the project shall be stabilized so that accelerated erosion and/or accelerated sedimentation will be prevented.

(b) Interim Control Measures. Any erosion and sedimentation control facility required or necessary to protect areas from erosion during the stabilization period shall be maintained until stabilization is completed.

(c) Final Measures. Upon completion of stabilization, all unnecessary or unusable control facilities shall be removed, the areas shall be graded, and the soils shall be stabilized.

## **PART 3. PERMITS**

3.1 Permit Rewired. Any person who engages in an earthmoving activity within the Federated States of Micronesia shall first obtain a permit from the Secretary for the proposed activity.

### 3.2 Application for Permit.

(a) Application for permits shall be on forms provided by the Secretary and shall be submitted by the person undertaking the earthmoving activity. In the case of land development, the application shall be submitted by the land developer rather than the contractor or agent.

(b) Applications shall be accompanied by an erosion and sedimentation control plan and such other documents as the Secretary may require.

(c) The following fees shall be due upon issuance of a permit: \$50, which is not refundable, except that a \$10 fee is required for an earthmoving activity for the purpose of erecting a single residential home. There shall be no fee required for a permit for agricultural tilling and plowing.

(d) The Secretary may, prior to the issuance of a permit or to the denial of a permit, hold a public hearing to determine the facts on which to base the decision.

3.3 Notification to Secretary a on Receipt of Application. Any person who issues loans or permits to build shall notify the Secretary immediately upon receipt of an application for a loan or building permit involving an earthmoving activity, by forwarding to the Secretary a copy of the application.

3.4 Withholding Loans or Building Permits. No person shall release funds, equipment or materials, or building permit to those engaged in earthmoving activities requiring a permit until the Secretary has issued the permit pursuant to these regulations or determined that no permit is required.

## **PART 4. RIGHT OF ENTRY**

Whenever it is necessary for the purposes of these regulations, the Secretary, or any member, agent, or employee of the Department when duly authorized by the Secretary or by court order, may, at reasonable times, enter any establishment or upon any property.

## **PART 5. ENFORCEMENT**

5.1 Violations Subject to Enforcement. Any person who violates any provision of these regulations shall be subject to enforcement action by the Secretary. Such enforcement action may include, but is not limited to, issuance of an order to cease and desist from such violation, imposition of a civil penalty of not less than \$100.00 but not more than \$10,000.00 for each day of such violation, or commencement of a civil action to enjoin such violation and for possible civil damages.

5.2 Civil Action. The Secretary may commence a civil action in the Trial Division of the Federated States of Micronesia Supreme Court requesting any of the following remedies:

(a) The issuance of an injunction against the offending party;

(b) An action seeking civil penalties of not less than \$100.00 but not more than \$10,000.00 for each day of the violation;

(c) An action seeking civil damages which damages shall be in addition to any civil penalties assessed under Sub-section (b).

5.3 Penalties or Damages. Any civil penalties or damages assessed under Sub-section 5.2 shall be paid to the Treasury of the Federated States of Micronesia for credit to the General Fund of the Federated States of Micronesia.

5.4 Issuance of Cease and Desist Order.

(1) When the Secretary determines that a violation of these regulations is taking place or threatening to take place within its jurisdiction, the Secretary shall issue an order to cease and desist and direct that those persons not complying with these regulations do one of the following:

(a) Cease operations and comply forthwith;

(b) Comply in accordance with a time schedule set by the Secretary; or

(c) In the event of a threatened violation, take appropriate remedial or preventive action.

(2) Cease and desist orders of the Secretary shall become effective upon issuance, and final as to the Secretary upon issuing findings after a hearing. Copies shall be served upon the person being charged with the violation of the requirements by either personally delivering a copy to the person or his agent or by service by registered mail.

(3) A hearing to determine the authenticity of the facts upon which the cease and desist order was issued shall be conducted by the Secretary, adequate notice of which and opportunity to appear and be heard at which shall be afforded to all interested persons.

## **PART 6. SEVERABILITY**

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

## **PART 7. REPEALERS**

These regulations supersede and repeal all of the Earthmoving Regulations issued by the Trust Territory Environmental Protection Board.

### **ADOPTION OF EARTHMOVING REGULATIONS**

Pursuant to the authority vested in me by [section 610 of title 25 of the Code of the Federated States of Micronesia](#), these Earthmoving Regulations are hereby adopted, subject to the approval of the President.

/s/

Dr. Eliuel K. Pretrick  
Secretary Department of Human Resources  
Date: 10/31/88

The provisions of this Amendment have been reviewed by the Office of the Attorney General and are found to be in proper legal form.

/s/

Attorney General  
Federated States of Micronesia  
Date: 10/31/88

These Earthmoving Regulations, which have been promulgated by the Secretary of the Department of Human Resources in accordance with law, are hereby approved and shall become effective immediately.

/s/

John R. Haglelgam  
President  
Federated States of Micronesia  
Date: 11/07/88