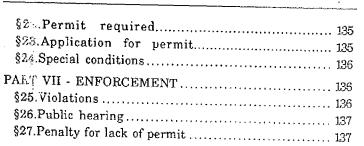
Republic of the Marshall Islands Environmental Protection Authority Earthmoving Regulations 1989



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REPUBLIC OF THE MARSHALL ISLANDS ENVIRONMENTAL PROTECTION AUTHORITY

EARTHMOVING REGULATIONS 1989



PART I - GENERAL PROVISIONS

§1. Authority

- a) These regulations are promulgated by the Republic of the Marshall Islands Environmental Protection Authority with the approval of the Minister of Health Services pursuant to Section 21 of the National Environmental Protection Act 1984.
- b) These regulations supercede all previous publications and repeal 63 Trust Territory Code Chapter 13, Subchapter III, Regulations Concerning the Control of Earthmoving and Sedimentation in the Trust Territory of the Pacific Islands.
- c) These regulations have the force and effect of law.

§2. Effective date

These regulations shall come into force 30 days after their approval by the Cabinet.

§3. Interpretation

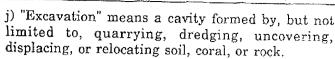
In these regulations, unless the context otherwise requires:

- a) "Accelerated Erosion" means the removal of the surface of the land through the combined action of human activities and natural processes, at a rate greater than would result through the action of natural processes alone.
- b) "Accelerated Sedimentation" means the sedimentation resulting from the combined action of human activities and the natural processes

resulting from storms, heavy rains, and high winds at a rate greater than would result through the action of natural processes alone.

- c) "the Authority" means the Republic of the Marshall Islands Environmental Protection Authority or its authorized representative.
- d) "Conveyance Channel" means a channel other than an interceptor channel used for the conveyance of water through a project area.
- e) "Cultural resource" means an historical, architectural, archeological or cultural site, remain, or artifact, including any place or object that enhances the knowledge or preservation of the environmental and cultural heritage of the Marshallese people.
- f) "Diversion Terrace" means a channel or dike constructed upslope of a project for the purpose of diverting storm water away from the unprotected slope.
- g) "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.
- h) "Embankment or Fill" means a deposit of soil, rock, or other material placed by human activity.
- i) "Erosion" means the natural process by which the surface of the land is worn away by the action of water, wind or chemical action.

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- k) "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.
- l) "Land Developer" means any person who is engaged in land development as a principal, rather than an agent or contractor.
- m) "Land Development" means the construction, installing, placing, planting, or building of surface structures, land reclamation, navigation channels, harbors, utility lines, piers, shopping centers and malls, causeways, recreational areas, apartment complexes, hotels, schools, roads, parking areas, or any other similar activity.
- n) "Person" means any individual, corporation, company, association, partnership, agency, authority, commission, foundation, the Republic of the Marshall Islands government or its political subdivisions, or any local, state, or foreign government or municipality, or other institution or entity, whether public or private.
- o) "Sediment" means soils or other surface materials transported by water as the result of erosion, earthmoving activity on a reef or in a lagoon, excavation or fill.
- 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, lagoons or the tops of reefs.



- q) "Sedimentation Retention Boom" means a watertight membrane suspended from floats and weighted to the bottom of water bodies arranged in a manner that will confine sediments to the local area of marine earthmoving activity.
- r) "Stabilization" means the proper placing, grading or covering of soil, rock or earth, including the use of vegetation, to ensure their 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 division of land including changes in existing lot lines for the purpose, whether immediate or future, of lease, transfer of ownership, or building or lot development.

§4. Applicability

These regulations shall apply to all earthmoving activities as follows:

- a) Ongoing activities or operations of a continuous nature such as dredging or quarrying in progress on the effective date of these regulations shall be in compliance with these regulations within three months from the effective date.
- b) Construction operations in progress on the effective date of these regulations shall be in compliance with these regulations within three months from the effective date.
- c) All new projects and new operations that begin on or after the effective date of these regulations shall be in compliance with these regulations.

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\$5. General Requirement

All earthmoving activities within the Republic of the Marshall Islands shall be conducted in accordance with these regulations and in such a way as to prevent accelerated erosion, accelerated sedimentation, and disturbance of potential cultural resources. To accomplish this, all persons engaging in earthmoving activities shall design, implement and maintain erosion control, sedimentation control, and cultural preservation measures which effectively prevent accelerated erosion, accelerated sedimentation, and adverse impact on cultural resources.

PART II - EROSION AND SEDIMENTATION CONTROL PLAN

§6. Plan required

The erosion and sedimentation control measures referred to in regulation 5 of these regulations must be set forth in a plan, which must be available at all times at the site of the activity and must be filed with the Authority.

§7. Preparation

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

38. Factors

The erosion and sedimentation control plan shall be designed 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:

- a) The topographic or hydrographic features, or both, of the project area.
- b) The types, depth, slope and area of the soils, coral and reef.
- c) The original state of the area as to plant and animal life.
- d) Whether any coral reef which may be affected by the earthmoving is alive or dead.
- e) The proposed alteration to the area.
- f) The amount of runoff from the project area.
- g) The staging of earthmoving activities.
- h) Temporary control measures and facilities for use during earthmoving activity.
- i) Permanent control measures and facilities for long-term protection.
- j) A maintenance program for the control facilities including disposal of materials removed from the control facilities or project area.

§9. Project involving water

If the project involves an earthmoving activity in a lagoon, or a reef, or any body of water, the Authority may require the plan to show existing marine life populations as well as maximum and minimum turbidities.

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PART III - EROSION AND SEDIMENTATION CONTROL MEASURES AND FACILITIES

§10.Control measures and facilities required

The erosion and sedimentation control measures and facilities set forth in regulations 11 and 12 of these regulations shall be incorporated into all earthmoving activities unless the designer of the erosion and sedimentation control plan shows that alteration of these measures or facilities, or inclusion of other measures or facilities, will prevent accelerated erosion and accelerated sedimentation.

§11 Control measures

- a) All earthmoving activities shall be planned in such a manner so as to minimize the area of disturbed land, reef or lagoon.
- b) 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.
- c) All permanent facilities for the conveyance of water around, through or from the project site shall be designed to limit the velocity of flow in the facilities to a speed that will not contribute to erosion.
- d) 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 within a section or area of the project.
- e) 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 14 days, interim

- stabilization measures shall be promptly implemented.
- f) Before filling or land development within a body of water or tidal zone, adequate seawalls or breakwater facilities, or both, shall be constructed to safely contain the fill without failure and to prevent accelerated sedimentation.
- g) All runoff from a project area shall be collected and diverted to facilities for removal of sediment.
- b) Runoff from a project area shall not be discharged into the waters of the Republic of the Marshall Islands without effective means to prevent sedimentation.

§12.Control facilities

- a) Sedimentation retention booms shall be used to restrict accelerated sedimentation around earthmoving or earth disturbing activity 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 Authority.
- b) Diversion terraces:
 - (i) shall be constructed upgrade of a project area to convey runoff around the project area, and shall have sufficient capacity to convey such runoff without overflowing;
 - (ii) shall be grassed or lined with erosionresistant materials to prevent accelerated erosion within the channel; and

- (iii) shall be designed so that outlet structures reduce the discharge speed to a level that will not cause accelerated erosion and are stabilized before use.
- c) Seawalls and breakwaters to contain fill or reclaimed land shall be sufficiently watertight to prevent accelerated sedimentation, well constructed on a solid foundation, and built to a level at least 2 feet above the highest tide or flood level of historical knowledge. These facilities shall be planned, designed and constructed under the direction of a person trained and experienced in building seawalls and breakwater facilities.
- d) Interceptor channels:
 - (i) may be used within a project area to reduce the speed of flow and prevent accelerated erosion;
 - (ii) shall convey collected waters to sedimentation basins or to vegetated areas but not directly to streams or other bodies of water; and
 - (iii) shall be designed so that outlets to vegetated areas reduce the discharge speed to a level that will not cause accelerated erosion.
- e) All conveyance channels shall be grassed or lined with erosion resistant materials or designed to reduce the speed of flow of surface runoff to a level that will not cause accelerated erosion.
- f) Solids separation facilities:
 - (i)shall have a basin for settling solids out of water that is structurally sound and has sufficient capacity to hold the water that drains into the basin until the solids have settled out;

- (ii) shall have a basin which is cleaned when the settling of solids has reduced the basin's capacity by 25%; and
- (iii) shall be designed so that outlet structures allow only adequately settled water to be discharged, and at a rate that will not cause accelerated erosion.
- g) The discharge from construction of fills, whether by pumps, hydraulic dredges, or any other means, used to construct fills shall be sufficiently treated and sufficiently retained with dikes, levees, seawalls, or other structures so that accelerated sedimentation will not take place in the waters which receive the effluent. Transmission pipelines transporting fill material shall be maintained in a watertight condition at all times of excavation and fill operation.
- h) Barges, scows, platforms, vessels, or anything used for hauling dredged material operating in the waters of the Republic of the Marshall Islands shall be sufficiently tight and secure that accelerated sedimentation will not occur by reason of leaking or premature dumping due to faulty mechanisms.

PART IV - CULTURAL PRESERVATION MEASURES

§13.Cultural preservation measures required

Any person who engages in an earthmoving activity shall prevent adverse impact on potential cultural resources by identifying and preserving all such resources.

\$14Prior determination

- a) Any person who engages in an earthmoving activity, whether or not that activity requires a permit pursuant to regulation 22, shall first make every reasonable effort to determine if a cultural resource may be unearthed, disturbed, or in any way affected by the earthmoving activity.
- b) Efforts to identify potential cultural resources pursuant to subregulation a) may include, but are not limited to, the following:
 - (i) inquiries to surrounding traditional landowners;
 - (ii) inquiries to the Secretary of Interior & Outer Island Affairs, appointed by Cabinet as the Republic of the Marshall Islands Historic Preservation Officer, or to any other officer so designated;
- iii) inquiries to the Ministry of Interior & Outer Islands Affairs Division of Cultural Heritage, or Alele Museum; and
- (iv) inquiries to any recognized authority on historic, architectural, archeological or cultural preservation.

§!5.Declaration to Authority

When investigation conducted pursuant to regulation 14 reveals that a potential cultural resource may be affected by an earthmoving activity, the person who wishes to engage in that activity shall immediately declare the results of the investigation in the following manner:



- (i) if the earthmoving activity requires a permit pursuant to regulation 22, declaration shall be made on the permit application form; or
- (ii) if the earthmoving activity does not require a permit pursuant to regulation 22, declaration shall be made by written instrument to the Authority before earthmoving begins.

§16.Adverse impact

If the Authority determines an earthmoving activity may adversely affect a cultural resource, the Authority shall, by written instrument attached to the earthmoving permit, or, in the case where no permit is required, by written instrument alone, require the person engaging in the earthmoving activity to design, implement and maintain appropriate cultural preservation measures.

§17.Duty to inform

In the event a cultural resource is discovered during the earthmoving process, the person engaged in the earthmoving activity shall inform the Authority by the quickest means available, and in writing, of the discovery.

§18.Mitigation

- a) When informed of a discovery pursuant to regulation 17, the Authority shall, in consultation with the person engaging in the earthmoving activity, develop mitigation procedures to limit potential damage to the cultural resource.
- b) Mitigation procedures may include a requirement to stop work temporarily at the earthmoving site so that the full extent of the

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cultural resource and the potential damage to that resource may be assessed.

- c) Mitigation procedures shall be:
 - (i) reasonable;
 - (ii) clearly described by the Authority by written instrument; and
 - (iii) delivered to the person engaged in the earthmoving activity in a timely manner.

PART V - RESTORATION

§19.Stabilization

Upon completion of the project, all areas which were disturbed by the project shall be stabilized so that accelerated erosion, or accelerated sedimentation, or both, will be prevented.

§20.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.

§21.Final measures

On completion of stabilization, all unnecessary or unusable control facilities shall be removed, the areas shall be graded and the soils shall be stabilized.

PART VI - PERMITS

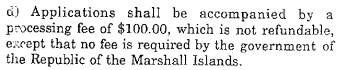
§22.Permit required

- a) Any person who engages in an earthmoving activity within the Republic of the Marshall Islands shall first obtain a permit from the Authority for the proposed activity except that no permit is required for:
 - (i) earthmoving activity that involves plowing or tilling for agricultural purposes; or
 - (ii) earthmoving activity for the purpose of erecting a one or two family residence, or for the purpose of erecting structures associated with them consistent with residential use.
- b) Those persons who qualify under the provisions of subregulation a) (i) and (ii) to engage in earthmoving activities without a permit must otherwise comply with all of the provisions of these regulations.

$\S23. Application for permit$

- a) Application for permits shall be on a form approved by the Authority 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 made no later than 1 month before the proposed earthmoving activity is scheduled to begin.
- c) Applications shall be accompanied by an erosion and sedimentation control plan and such other documents as the Authority may require.

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e) The Authority may, before issuing or denying a permit, hold a public hearing to determine the facts on which to base a decision.

\$24.Special conditions

The Authority may, upon issuing a permit, impose any conditions or special requirements as it sees fit. All such conditions and requirements shall be listed on a written instrument attached to the permit.

PART VII - ENFORCEMENT

\$25. Violations

- a) A person who violates any provision of these regulations or any permit, requirement or order issued thereunder, shall be subject to enforcement action by the Authority.
- b) The enforcement action may be any or all of the following:
 - (i) revocation of an earthmoving permit;
 - (ii) the making of a cease and desist order in relation to the subject matter of the violation;
 - (iii) the imposition of a civil penalty, fixed by the Authority, not exceeding \$10,000.00 for each day on which the violation continues;
 - (iv) the institution of civil proceedings to restrain the violation; and



(v) any other action authorized by the National Environmental Protection Act 1984 or any other law:

§26.Public hearing

- a) When the Authority revokes a permit or a cease and desist order is made under regulation 25 b) (i) or (ii), or both, a public hearing shall be conducted by the Authority to determine the authenticity of the facts upon which the order was made.
- b) Adequate notice of the hearing, and an adequate opportunity to appear and be heard at the hearing, shall be given to all interested persons.

§27.Penalty for lack of permit

Any person required to have a permit and engaged in earthmoving activity without a permit shall be subject to a civil penalty of \$100.00 per day for each day the earthmoving activity is conducted without a permit.