5. 環境上の配慮についての州政府の要望

その1. （Department of Resources & Development）

1. 本浚渫工事の実施前に環境影響審査が求められる。
2. 環境影響評価書は工事許可証の発出前に州政府に提示されるべきこと。
3. 工事許可証の発出に係る環境配慮事項

A. 浚渫地域

1. サイト1＆2……この地域はサンゴの被覆度が高く多様性に富んでおり十分な配慮が求められる。観察によると生存サンゴは80～90%である。この被覆率は深度共に徐々に減少する。生存サンゴは7～14mで最大である。upper reef での主要な底質は種々のmacroalgaes seagrass etc.が生える石灰石である。
   a. 沈殿：流れのパターンが変化するので，濁水の方向を予測することは難しい。沈殿物の拡散を抑えるため1及び周辺のリーフを守るため汚濁防止膜を設置しなければならない。
   b. 難波船の除去：浚渫現場における難波船の撤去は，非浚渫領域を攪乱しない方法でなされなければならない。
   c. 爆砕：この地域の岩質は爆砕を必要とするものであるかもしれない。もしこれの通用を考えるものであれば，使用方法とその限界について詳しい検討が必要となる。
2. サイト3～6
   a. 沈殿：沈殿物の拡散を抑制するため適切な手段がとられる必要がある。
   b. 航路標識の再配置に当っては，環境影響に配慮して適切位置に配置されるべきこと。
3. サイト7
   a. 沈殿物の拡散を抑制するため適切な手段がとられる必要がある。
   b. 下水管の移動と再配置に留意されたい。下水管の計画は環境影響評価に記載されるべき。
4. サイト8～10

   提案する浚渫場所の近傍に，マングローブ林がありseagrass が存在する。沈殿物の拡散を防ぎ，にごりの増大を防ぐ特別の配慮が必要である。

B. 浚渫物質の輸送 — Earthmoving Regulation 2,3／C／8

1. 埋立物質を封じ込めるため擁壁の建設
2. 汚濁防止膜は埋立期間中実施されるべきである。
3. 沈殿池：これは浚渫作業から発生する汚濁水を受ける池をつくってaccelerated-

sedimentation を防止するものである。Earthmoving regulation 2,3／C／6 and 7 を参照のこと。

4. 中間段階及び最終段階における擁壁の安定 — これはマングローブ林，seagrass，サンゴを崩壊した場合の被害から守るために必要。

D. その他

1. にごり — プロジェクトの進捗の間中，浚渫現場でにごり調査がなされなければならない。
2. 州政府によるモニタリングを行うべきである。
3. 浚渫現場周辺を危険におとし入れる問題は，州政府機関に直ちに通告されるべきこと。

その2（Marine resources management division，Department of Resources and Development）

1. 底質図の作成 — 浚渫現場の自然環境についての情報を与える。
2. 潮流速についての調査 — 浚渫作業に起因するシルテーションについての情報を与える。

6. 先方の要請 1

DEPARTMENT OF RESOURCES & DEVELOPMENT
YAP STATE GOVERNMENT
FEDERATED STATES OF MICRONESIA

ENVIRONMENTAL CONSIDERATIONS: TOMIL HARBOR EXTENTION

The following regulations and concerns regarding the Tomil Harbor extention project have been collected and presented as requested by Yap State Department of Resource and Development. These regulations have been drawn up so as to ensure the protection of the land and water areas surrounding the proposed dredging sites.

Included:

1) Environmental considerations of proposed dredge project.

2) Regulations regarding Earth movement and dredging in the Federated States of Miconesia.

ENVIRONMENTAL CONSIDERATIONS

TOMIL HARBOR EXTENSION PROJECT

I. Environmental impact assessment is required before Tomil harbor dredging project begins.

II. Environmental impact statement must be submitted to Yap state EPA before the issuance of an earth moving permit.

III. Environmental concerns relating to issuance of an earth moving permit.

A. Dredge Areas

1. Sites 1&2 - A special concern exists for these areas due to their high diversity and percentage of coral cover. Observations showed 80-90% live coral cover on the outlying reef area. This cover decreases slightly with depth. Live coral cover was the greatest between depths of 7-14 meters. The major benthic substrate in the upper reef region is primarily limestone pavement associated with various seagrass, macroalgaes, and Scleractinians.

a. Sedimentation - Current patterns vary in this area making it difficult to predict direction of sediment flow. Sediment control devices must be positioned accordingly to contain all resulting sedimentation and to protect surrounding reef areas.

b. Removal of Wreck - Removal and disposal of the wreck from the dredge site should be in a manner that does not disturb nondredge areas.

c. Blasting - The substrate type of this area is such that blasting may be required. Further guidelines and restrictions will be provided if it is considered.

2. Sites 3-6 - See survey report for area description.

a. Sedimentation - Appropriate measures must be undertaken to contain sediment.

b. Appropriate sites should be selected for channel marker relocation with environmental impact in mind.

3. Site 7 - See survey report for area description.

a. Appropriate measures must be undertaken to contain sediment.

b. Concerns exist regarding displacement and future relocation of the effluent pipe. Plans involving the effluent pipe should be included in the EIS.

4. Sites 8- 0 - See survey report for area description.

a. Mangrove stands and seagrass patches exist in close proximity to these proposed dredge sites. Special consideration should be given to containing sediment and/or increased turbidity in these areas.

B. *Transport of dredge materials - See Earthmoving Regulation* 2.3/C/8.

C. Landfill areas

1. Construction of seawall for containment of fill. See Earthmoving Regulations 2.3/B/6 and 2.3/C/3.

2. Sediment restricting methods should be implemented during the process of filling.

3. Sedimentation ponds - These may be necessary to prevent accelerated sedimentation in waters receiving the effluent from the dredging operation. See Earthmoving Regulation 2.3/C/6 and 7.

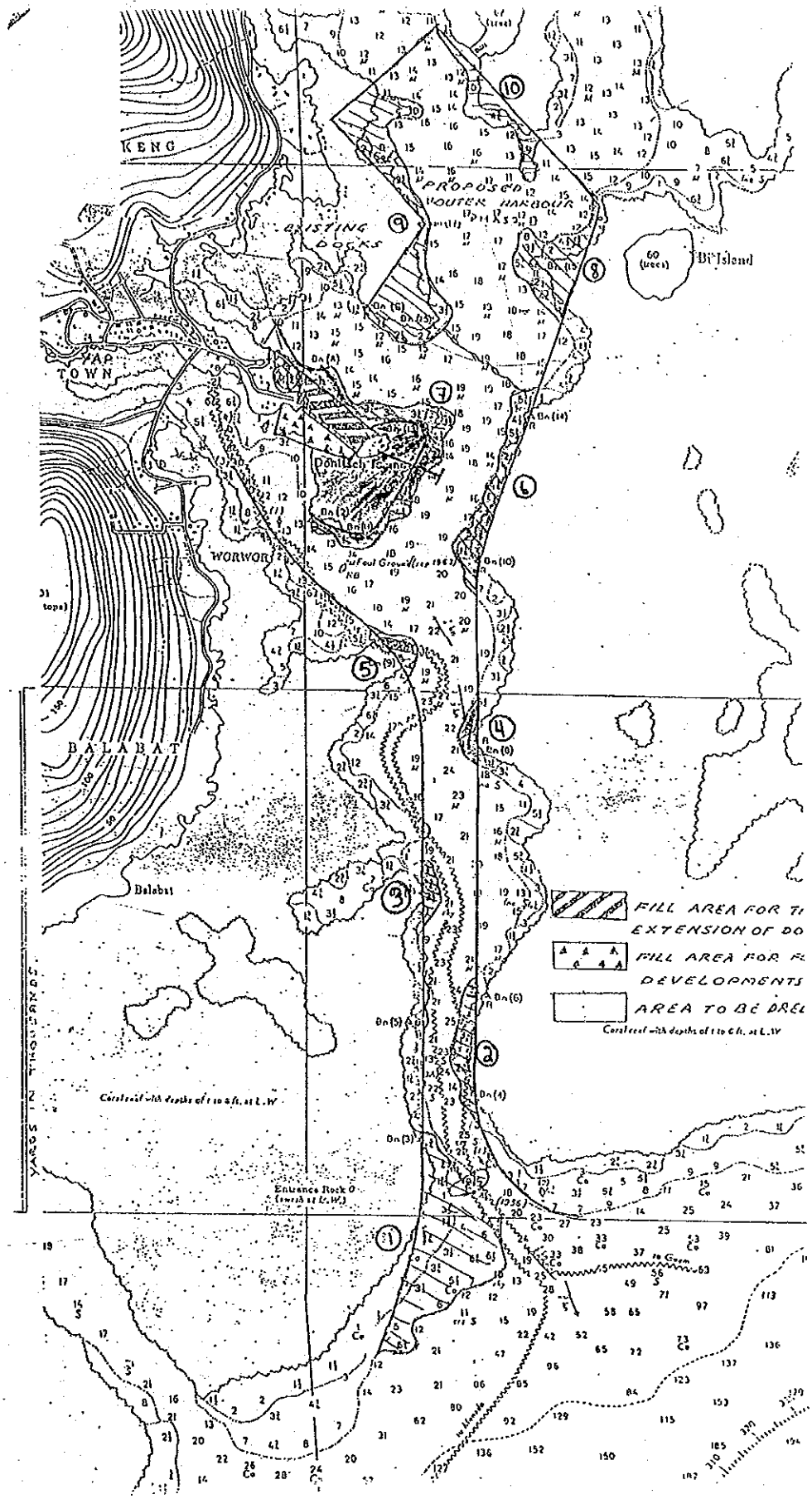
4. Interm and final stabalization - See Earthmoving Regulation 2.4/A.B and C. This is necessary to prevent damage to sensitive mangrove, seagrass and coral areas from an increased sediment load.

D. Other

1. Turbidity - Measurements should be taken at all dredging sites during the progression of the project.

2. Monitoring of the operation by a Yap State agency is highly recomending.

3. Any problems arising which may endanger areas surrounding the dredge site should immediately be brought to the attention of the appropriate government agency.


KENG
PROPOSED OUTER HARBOUR
EXISTING DOCKS
Bird Island
CAPE TOWN
WORWORSKOP
BALABAT
Balabat
FILL AREA FOR TI
EXTENSION OF DO
FILL AREA FOR R
DEVELOPMENTS
AREA TO BE DREL
Coral reef with depths of 1 to 6 ft. at L.W.
Coral reef with depths of 1 to 6 ft. at L.W.
Entrance Rock 0
(reefs at L.W.)

先方の要請 2

MARINE RESOURCES MANAGEMENT DIVISION

Department of Resources and Development

P.O. Box 251, Colonia, Yap

Federated States of Micronesia 96943

Information and Data: Yap Harbor Extension Project

Upon request, Marine Resources Management Division has gathered information regarding the proposed dredge and fill areas throughout Tamil harbor. Proper time was not available to conduct appropriate surveys. Information from past surveys (see bibliography) was assimilated to provide general information and data on proposed sites.

It is the reccomendation that further mapping of the benthic substrate, and Current studies be done in the proposed dredge areas. These studies are important for two reasons:

1. Mapping the benthic substrate provides information on the natural environment of the sites to be dredged.
2. Current studies provide information on the water flow of the proposed dredge areas.
   This information is significant because it details the flow of siltation caused by the dredging operation.

Given the time MRMD will be able to provide this information, if it is so desired. Any questions or comments, contact MRMD 350-2294.

Submitted by: MRMD

EARTHMOVING 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.

(2) 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 processed 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 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 a solid foundation, and to a level at least two fect 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 Required. 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: 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 upon 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 than 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 injuction 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;

(c) 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

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.

Date: 10/31/88

Dr. Eliuel K. Pretrick
Secretary
Department of Human Resources

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

Date: 10/31/88

Attorney General
Federated States of Micronesia

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.

Date: 11-7-88

John R. Haglelgam
President
Federated States of Micronesia

法 令 2

ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS

PART I. GENERAL PROVISION.

1.1 Authority.

These regulations are promulgated and issued by the Secretary of Human Resources pursuant to 25 F.S.M.C. 610 and 25 F.S.M.C. 702. These regulations have the force and effect of law.

1.2 Purpose.

The purpose of these regulations is to implement Section 13 of the Federated States of Micronesia Environmental Protection Act by establishing standard procedures for preparation of an environmental impact assessment statement prior to taking or funding any major action that may significantly affect the quality of the human environment. The Environmental Impact Assessment (EIA) process is intended to help the general public and government officials make decisions with the understanding of the environmental consequences of their decisions, and take actions consistent with the goal of protecting, restoring, and enhancing the environment. These regulations provide the directions to achieve this purpose.

In addition, these regulations are designed to:

(a) Integrate the EIA process into early planning of projects to insure timely consideration of environmental factors and to avoid delays; and

(b) Identify at an early stage the significant environmental issues reguiring further study and de-emphasize insignificant issues, thereby defining the scope of the EIA.

1.3 Definition.

(a) "Cumulative Impact" means the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

(b) "Effects: means:

(1) Direct effects, which are caused by the action and occur at the same time and place;

(2) Indirect effects, which are caused by the actions and are later in time or further removed in distance, but are still reasonably foreseeable.

Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Effects and impacts as used in these regulations have the same meaning. Effects may be ecological, aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative.

(c) "Environmental Impact Assessment" or "EIA" means the conduct of all measures necessary for compliance with the requirements of these regulations. EIA embodies the steps of identifications of potentially or real impacts from projects and their alternatives.

(d) "EIA Statement" means a detailed document setting forth the environmental effects and considerations pertaining to a project as required under 25 F.S.M.C. 702 (therein referred to as an "Environmental Impact Statement"). The term "EIA Statement" is used to distinguish documents prepared according to the requirements of these regulations from those prepared under U.S. NEPA requirements.

(e) "Environmental Impact Statement" means documents required by section 102(2) (c) of the U.S. National Environmental Policy Act (P.L. 91-190, as amended), applicable for U.S. Federal agencies' major actions in the FSM, pursuant to Article VI of the Compact of Free Association.

(f) "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

(g) "Human Environment" means the natural and physical environment and the relationship of people with that environment.

(h) "Impacts" see definition of "Effects".

(i) "Initial Assessment" means a concise, preliminary assessment of the environmental impacts of a project.

(j) "Mitigation" means:

(1) Avoiding the impact altogether by not taking a certain action or parts of an action.

(2) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

(3) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.

(4) Reducing or eliminating the impact over time by preservation or maintenance operation during the life of the action.

(5) Compensating for the impact by replacing or providing substitute resources or environments.

(k) "Practicable" means available or capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

(l) "Project Proponent" means the FSM National Government or its agencies or the recipient of funding from the FSM National Government or its agencies, that proposes to undertake any major action significantly affecting the quality of the human environment.

(m) "Scope" means the range of actions, alternatives, and impacts to be considered in an environmental impact assessment. Scoping is a process whereby the range of impact and alternatives to be considered in an EIA is defined.

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

PART II. RESPONSIBILITIES.

2.1 Project Proponents.

The project proponent conducts an EIA itself or contracts for its conduct, and is responsible entirely for its adequacy, and timely completion.

2.2 Secretary of the Department of Human Resources.

The Secretary receives EIA Statements and reviews them for compliance with 25 F.S.M.C. 702 and these regulations in terms of format,

adequacy of information and objectivity. The Secretary shall only authorize commencement of projects or release of funds for the proposed project if he determines that thr EIA Statement is sufficient. No permits shall issue until approval of the EIA Statement by the Secretary.

PART III. EIA PROCESS.

3.1 Timing.

The project proponent shall commence preparation of an EIA Statement as close as possible to the time the agency is developing or is presented with a proposal so that preparation can be completed in time for the final assessment statement to be included in any recommendation or report on the proposal. The statement shall be prepared early enough so that it can serve practically as an important contribution to the decisionmaking process and will not be used to rationalize or justify decisions already made. The EIA shall be conducted early enough to insure that the decision making process reflects environmental values, and that alternatives will not be foreclosed prior to completion of the EIA process. The EIA Statement shall not be used to rationalize or justify decisions already made.

3.2 Components of the EIA Process.

The environmental impact assessment process is made up of three sequential elements: Identification, Prediction, and Evaluation.

(a) Identification.

This involves the initial work of characterizing the proposed project and its alternatives, characterizing the existing environment, and developing a reasonable scope for the study.

(b) Prediction.

During this phase, the potential impacts selected for study are analyzed and quantified for each of the alternatives.

(c) Evaluation.

This is the culmination of the EIA based on the previous two steps, in which the predicted impacts are summed and compared for the alternatives considered.

3.3 Two Levels of Study in EIA Process - Description.

It is not the intent of these regulations to require an exhaustive environmental impact assessment of all projects large and small. The degree of EIA detail for a project depends upon the significance of its potential environmental impacts. An initial assessment (as required in Part 4) shall be conducted for projects that do not appear to have significant environmental effects. If it becomes apparent that a project may cause significant environmental impacts, either as a result of findings in the initial study or otherwise, a comprehensive EIA must be conducted and an EIA Statement prepared in accordance with procedures described in Parts 5 and 6. See Appendix A for examples of significant environment impacts.

PART IV. INITIAL ASSESSMENT.

4.1 Applicability.

For all projects subject to the requirements of these regulations, the project proponent shall conduct an Initial Assessment of the project, following the checklist format provided in appendix B. The initial assessment does not require an in-depth consideration of alternatives to the proposed actions. However, potential mitigation measures shall be addressed. If it is found that any aspects of the project, either individually or cumulatively, may cause a significant impact on the environment, then a more comprehensive EIA shall be undertaken as set forth in Part V of these regulations. All phases of project planning, implementation, and operation shall be considered in the initial assessment of the project.

4.2 Purposes.

The Initial Assessment functions dually to evaluate routine projects or projects for which it is uncertain whether there is potential for significant impacts; and as an initial screening and scoping process for major projects. The purposes of an initial study are to:

(a) Identify environmental impacts;

(b) Enable the project proponent to modify a project, mitigating potentially significant impacts before an EIA is conducted;

(c) Facilitate environmental assessment early in the design of project;

(d) Eliminate unnecessary EIA Statements.

4.3 Content.

An initial assessment shall contain in brief form:

(a) A description of project including the location of the project;

(b) An identification of the environmental setting;

(c) An identification of environmental impact by use of the checklist provided in appendix B;

(d) A discussion of ways to mitigate the significant impacts identified, if any;

(e) An examination of whether the project is compatible with zoning requirements or plans, if any;

(f) A determination by the project proponent (1) as to whether the project was found to have no significant impacts; (2) was found to have potentially significant impacts that will be mitigated to the point of insignificance; or (3) was found to have potentially significant impacts requiring a more in-depth EIA.

(g) The name of the person of persons who prepared or perticipated in the Initial Assessment.

4.4 Determination.

The Initial Assessment shall be submitted to the Secretary for review. The determination of whether a project may have a significant impact on the environment calls for careful judgment on the part of the project proponent, based to the extent possible on scientific and factual data. Significance of an activity may vary with the setting. See Appendix A. Where there is a difference of opinion on whether a particular impact should be considered significant, the Secretary shall determine whether the impact is sufficiently significant to require a comprehensive EIA.

PART V. COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT.

5.1 Decision to Conduct EIA.

It the project proponent or Secretary finds after an initial assessment that a project may have a significant impact on the

environment, the project proponent shall conduct or cause to be conducted a comprehensive environmental impact assessment, and prepare or cause to be prepared an EIA Statement. An EIA Statement shall be prepared whenever it can be fairly argued on the basis of substantial evidence that the project may have a significant impact on the environment, or when there is serious public controversy concerning potential environmental impacts of a project. Controversy not related to an environmental issue does not require the preparation of an EIA Statement.

5.2 EIA Procedures and Public Involvement.

When the project proponent determines that an EIA Statement will be required for a project, it shall follow the procedures contained in this section.

(a) Upon determining that an EIA will be required for a project, the project proponent shall send a notice that an EIA is being conducted to all public agencies responsible for resources affected by the project, and/or having jurisdiction by law with respect to the project, or to any person or organization that may be concerned with the impacts of the project. This notice shall request comments on the proposed scope for the EIA.

(b) The scope of the EIA will be developed by the project proponent based on information gathered in the Initial Assessment, comments received, and professional judgment.

(c) The project proponent shall prepare a draft EIA Statement. The contents of the draft EIA Statement are specified in Part 6 of these regulations.

(d) After completing the draft EIA Statement, copies shall be provided to the Secretary, public agencies having jurisdiction by law with respect to the project, and persons having special interest or expertise with respect to any environmental impact involved and any others notified pursuant to subpart 5.2(a).

(e) The Secretary shall evaluate the draft EIA Statement considering format, content, and objectivity, and provide comments to the project proponent.

(f) The project proponent shall provide at least a 30 day period for public agencies and the general public to review and comment

on a draft EIA Statement. The project proponent shall grant a reasonable extension of the comment period if the request is justified and received before the close of the comment period.

(g) A public hearing on the draft EIA Statement shall be held if the project proponent or Secretary determines it would facilitate public involvement or it is anticipated that there will be substantial controversy. Adequate notice shall be given of all public hearings in a timely manner.

(h) The project proponent and Secretary shall evaluate comments received from persons who reviewed the draft EIA Statement or attended a public hearing.

(i) The project proponent shall prepare a final EIA Statement, the contents of which are specified in Part 6 of these regulations.

(j) The project proponent shall certify that the final EIA Statement has been completed in compliance with these regulations, and shall provide the final EIA Statement to public agencies from whom funding, authorizations, or other approvals are being sought.

5.3 Project Approval.

When an EIA Statement has been prepared for a project, agencies having authority for its funding or approval shall not approve the project as proposed if the agency or agencies finds any practicable alternative or practicable mitigation measures, within its powers or the powers of the project proponent, that would substantially lessen any significant impact the project would have on the environment to an acceptable level. As used in this section, the term "acceptable level" means that:

(a) All significant environmental effects that can feasibly be avoided have been eliminated or substantially lessened.

(b) The agencies have found that any remaining, unavoidable significant impacts are acceptable considering the balance of the benefits of a proposed project against its unavoidable environmental risks.

(c) Where the decision of the agency allows the occurrence of significant impacts which are identified in the final EIA Statement but are not mitigated to a level of insignificance, the agency must state in writing the reasons to support its action based on the final EIA Statement and/or other information in the record. The statement of these reasons must be included in the record of the project approval.

(d) Final project approval shall not occur until approval of the EIA statement by the Secretary.

PART VI. CONTENTS OF ENVIRONMENTAL IMPACT ASSESSMENT STATEMENT.

Environmental Impact Assessment Statements shall contain the information outlined in this part. The recommended format for EIA Statements is as follows:

6.1 Summary.

Each statement shall contain a brief summary of the proposed action and its consequences in language sufficiently simple that the issues can be understood by the average person. The summary shall stress the major conclusions, areas of controversy, the issues to be resolved, the choice among alternatives, and how to mitigate the significant impacts.

6.2 Description, Purpose, and Need for the Project.

This shall include a statement of the objectives sought by the proposed project, a general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals and supporting utilities, and the precise location and boundaries of the proposed project shown on a detailed, preferrably topographic, map.

The description of the project should not supply extensive detail beyond that needed for evaluation and review of the environmental impacts, but shall include all portions and phases of the project.

6.3 Description of the Environmental Setting.

The EIA Statement shall include a description of the environment in the vicinity of the project, as it exists before the commencement of the project, from both a local and regional perspective. Special

emphasis shall be placed on environmental resources to the region, including historical sites and endangered species.

Specific reference to related projects in the region, both public and private, both existent and planned, shall also be included, for purposes of examining the possible cumulative impacts of such projects.

The EIA Statement shall discuss any inconsistencies between the proposed project and applicable general plans and regional plans,

6.4 Environmental Consequences of Alternatives Including the *Proposed Project.*

The EIA Statement shall present the environmental impacts of the proposal and the alternatives in comparative form, thereby defining the issues and providing a clear basis for choice among options by the reviewers. The section shall:

(a) Rigorously explore and objectively evaluate all reasonable alternatives, including the alternative of no action;

(b) Describe each alternative in detail so that the reviewers can evaluate their comparative merits:

(c) Identify the project proponent's preferred alternative or alternatives;

(d) Include appropriate mitigation measures to minimize the significant environmental impacts;

(e) *Identify any significant environmental impacts that cannot* be avoided;

(f) Describe the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity; and

(g) Identify any irreversible or irretrievable commitments of resources from the proposed project.

All phases of the proposed project shall be considered when evaluating its impact on the environment, including, but not limited to, planning, acquisition, development, and operation. The discussion shall include direct and indirect significant impacts of the proposed project on the environment, including relevant specifics of the areas,

the resources involved, physical changes, alterations to ecological systems and changes induced in population, the human uses of the land, and other aspects of the resource base including, but not limited to, scenic quality and public utilities (power, water, sewer, roads, etc.).

6.5 Organizations and Persons Consulted.

The EIA Statement shall contain a list of names of the persons who organized and prepared the report, their qualifications, and a listing of organizations and persons who were consulted.

6.6 Standards of Adequacy of the EIA Statement.

The EIA Statement shall be prepared with a degree of analysis sufficient to enable the project proponent to make a decision which takes account of environmental consequences. An evaluation of the environmental affects of a proposed project and its alternatives need not be exhaustive, but its sufficiency is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIA Statement inadequate; the key element is full disclosure of all available information.

The Secretary shall determine whether the EIA Statement is sufficient to support a decision to approve release of funds or authorization of the proposed project. In the event that the statement is not sufficient or is not objective in its analysis, the Secretary shall notify the project proponent within 30 days after the project proponent files the final EIA Statement. The notification shall set forth the specific nature of the objection.

PART VII. Appeal from Agency Action.

Appeals from determinations of the Secretary shall be taken pursuant to procedures set forth in the Federated States of Micronesia Administrative Procedures Act. 17 F.S.M.C. 108 et seq.

APPENDIX A

EXAMPLES OF SIGNIFICANT IMPACTS

A project will normally have a significant impact on the environment if it will:

1. Conflict with adopted plans and established uses of the community where it is to be located.
2. Have a substantial, demonstrable negative aesthetic effect.
3. Substantially affect a rare or endangered species of animal or plant or the habitat of such species.
4. Interfere substantially with the movement of any resident or migratory fish or wildlife species.
5. Substantially diminish habitat for fish, wildlife, or plants.
6. Breach standards relating to solid waste or litter control.
7. Substantially degrade water quality.
8. Contaminate a public water supply.
9. Substantially degrade or deplete ground water resources.
10. Interfere substantially with ground water recharge.
11. Extend a sewer line with capacity to serve new development.
12. Encourage activities which result in the use of large amounts of fuel, water, or energy.
13. Use fuel, water, or energy in a wasteful manner.
14. Disrupt or adversely affect an archaeological site or a property of historic or cultural significance.
15. Induce substantial growth or concentration of population.
16. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system.
17. Displace a large number of people.
18. Increase substantially the ambient noise levels for adjoining areas.
19. Cause substantial flooding, erosion or siltation.
20. Expose people or structures to major geological hazards.
21. Create a potential public health hazard or involve the use, production or disposal of materials which pose a hazard to people or animal or plant populations in the areas affected.

22. Violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations.

23. Convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land.

24. Interfere with emergency response plans.

APPENDIX B

INITIAL ASSESSMENT ENVIRONMENTAL CHECKLIST

Environmental Impacts

1. EARTH. Will the proposed project result in:

	YES	MAYBE	NO
a. Destruction, covering or modification of any unique geologic or physical features?	____	____	____
b. Creation of steep slopes or other unstable earth conditions?	____	____	____
c. Any potential for increased wind or water erosion of soils, either on or off the site?	____	____	____
d. Changes in the channel of a stream, or the bed of the ocean, lagoon?	____	____	____
e. Exposure of people or property to geological hazards such as landslides, ground failure, or similar hazards?	____	____	____

2. AIR. Will the proposed project result in:

a. Substantial air emissions or deterioration of existing air quality?	____	____	____
b. Creation of objectionable odors?	____	____	____

3. WATER. Will the proposed project result in:

a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?	____	____	____
b. Changes in absorption rates, drainage patterns, or the amount of surface runoff?	____	____	____
c. Alterations to the course or flow of flood waters?	____	____	____

	YES	MAYBE	NO
d. Discharge into surface waters or any alteration of surface water quality including but not limited to temperature, dissolved oxygen, bacteria, or turbidity?	____	____	____
e. Contamination of ground waters or wells, either from salt water intrusion or surface activities?	____	____	____
f. Change in the quantity of ground waters, either through direct additions or withdrawal, or through interception of an aquifer by cuts or excavations?	____	____	____
g. Substantial reduction in the amount or quality of water otherwise available for public water supplies?	____	____	____
h. Exposure of people or property to water related hazards such as flooding or tidal waves?	____	____	____
4. PLANT LIFE. Will the proposed project result in:			
a. Destruction of any upland or mangrove forest communities?	____	____	____
b. Destruction of other important plant communities, such as sea grasses or plants having potential commercial value?	____	____	____
c. Reduction of the numbers of any unique, rare or endangered plant species?	____	____	____

	YES	MAYBE	NO
d. Introduction of new species of plants into an area or result in a barrier to the normal replenishment of existing species?	____	____	____
e. Reduction in acreage of any agriculture crop?	____	____	____
5. ANIMAL LIFE. Will proposed project result in:			
a. Destruction of any coral reef areas?	____	____	____
b. Reduction of the numbers of any unique, rare, or endangered animal species?	____	____	____
c. Introduction of new animal species into an area, or result in a barrier to the migration or movement of animals?	____	____	____
d. Substantial deterioration of fish or wildlife habitat?	____	____	____
6. NOISE. Will the proposed project result in:			
a. Increase in existing noise levels or exposure of people to severe noise levels?	____	____	____
7. LAND USE. Will the proposed project result in:			
a. Substantial alternation of the present or planned land use of an area?	____	____	____
8. NATURAL RESOURCES. Will the proposed project result in:			
a. A noticeable increase in the rate of use of any natural resources?	____	____	____
b. Substantial depletion of any non-renewable natural resources?	____	____	____
9. RISK OF UPSET. Will the proposed project result in:			

	YES	MAYBE	NO
a. A risk of an explosion or the release of hazardous substances including but not limited to oil, pesticides, chemicals or radiation, in the event of an accident or upset conditions?			
b. Possible interference with an emergency response plan?			
10. POPULATION. Will the proposed project result in:			
a. Relocation or altered, distribution, density, or growth rate of the human population of an area?			
11. HOUSING. Will the proposed project result in:			
a. Changes in existing housing or create a demand for additional housing?			
12. TRANSPORTATION. Will the proposed project result in:			
a. Generation of substantial additional vehicular movement?			
b. Substantial impact on roads and existing transportation system?			
c. Alteration to present patterns of movement of people and/or goods?			
13. PUBLIC SERVICES. Will the proposed project effect or result in the need for new or altered services in the following areas:			
a. Police or fire protection?			
b. Schools?			
c. Parks or other recreational facilities?			
d. Hospital?			
e. Other government services?			

	YES	MAYBE	NO
14. UTILITIES. Will the proposed project result in the need for new systems, or substantial changes in the following:			
a. Power?	____	____	____
b. Communications?	____	____	____
c. Water?	____	____	____
d. Sewage Disposal?	____	____	____
e. Solid water disposal?	____	____	____
15. HUMAN HEALTH. Will the proposed project result in:			
a. Creation of any health hazard or potential health hazard?	____	____	____
b. Improvement of human health?	____	____	____
16. AESTHETICS. Will the proposed result in:			
a. Obstruction of any scenic vista?	____	____	____
17. RECREATION. Will the proposed project result in:			
a. Changes in the quality or amount of existing recreational opportunities?	____	____	____
18. CULTURAL RESOURCES. Will the proposed project result in:			
a. Alteration or destruction of archaeological sites?	____	____	____
b. Adverse physical or aesthetic effects to a historic site?	____	____	____
c. Potential to cause a physical change which would affect unique cultural values?	____	____	____
d. Restriction of existing religious or sacred uses within the affected area?	____	____	____
19. Others (please specify)			

7. 環境配慮について先方からの回答

Department of External Affairs
Federated States of Micronesia

DEA/ALA-248-89
November 10, 1989

The Department of External Affairs of the Federated States of Mioronesia presents its compliments to the Embassy of Japan to the Federated States of Micronesia and has the honour to refer to the Yap Harbour Development Project now under consideration by the Government of Japan.

Further to the Memorandum of Understanding of October 13, 1989 signed by Mr. Takehiko Tsujigaki, JICA Team Leader of the Preliminary Survey Team, and Mr. Constantine Yinug, Director of Yap State Office of Planning and Budget, the Department of External Affairs is pleased to submit the minimum Environmental Protection Agency (EPA) requirements for consideration under which the surveys for the Project will be undertaken.

The Department has the further honor to request the Government of Japan to include in the Basic Design Study Team's term of reference a provision for a technical expert to undertake and to produce an environmental impact statement (EIS) for blasting of a certain portion of another channel located on the west side of Yap Island. Yap State Government will be responsible for providing dynamites as well as for the execution of the channel blasting itself. It only needs an EIS to be produced as required.

The Department of External Affairs avails itself of this opportunity to renew to the Embassy the assurance of its highest consideration.

Department of External Affairs

Palikir, Pohnpei

Attachment A

MINIMUM REQUIREMENTS
TO BE CONSIDERED
UNDER THE SURVEYS TO BE UNDERTAKEN
AS PER ITEMS 2 AND 3
OF ATTACHMENT 1
OF THE
MEMORANDUM OF DISCUSSIONS
ON THE
YAP HARBOR EXTENSION PROJECT

1. The Besic Design Study Team will recomend on adequate sedimentation control plan for the identified dredging oreas and for the landfill site. Such plan to include list and type of equipments (eg. silt screen) appropriate for sedimentation containment purposes.

2. In the event that blasting of certain parts of the channel would be required, the Team should recomend measures that can be taken that would minimize the effect on the surrounding areas.

3. Section 2.3.C.8 of the Earthmoving Regulations requires that the vessel used in hauling dredged materials should be such that it is tight and secure so as not to allow accelerated sedimentation.

A. The Team is to recomend appropriate measures that can be taken to prevent accelerated sedimentation during the houling of dredged materials.