

***Recommendations from the Assessment of
Selected Development Controls
on Guam***

RECOMMENDATIONS FROM THE ASSESSMENT OF
SELECTED DEVELOPMENT CONTROLS ON GUAM

Bureau of Planning

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DEVELOPMENT CONTROLS ON GUAM

The following recommendations are taken from the text of the "Assessment of Selected Development Controls on Guam", completed by the Bureau of Planning. Complete explanations as to the problems perceived, which are the basis for these recommendations, are found within the assessment.

Problems responded to in the assessment include:

- 1) Short-term Agricultural Leases Within the Territorial Seashore Park;
- 2) The Clearing and Grading Permit Process;
- 3) Development Controls at the Department of Public Works;
- 4) Development Controls Affecting the Northern Aquifer; and
- 5) Territorial Planner's Discretionary Powers.

A. SHORT-TERM AGRICULTURAL LEASES WITHIN THE TERRITORIAL SEASHORE PARK

RECOMMENDATIONS:

1. Legal authority, either Executive Order or Public Law, should be drawn up establishing leasing responsibility for short-term agricultural leases specifically.
2. The four agencies delineated as joint managers of the Territorial Seashore Park by Executive Order 78-24 should cooperatively develop rules and regulations pertaining to allowable and disallowable utilization of land leased within the Park.
3. The Bureau of Planning will request the Governor to declare a moratorium on agricultural leasing within the Park until such time as leasing authority is cleared up and until rules and regulations are drafted and adopted.
4. The Bureau of Planning will request that DLM and Public Works enforce the provisions of the current leases.

B. CLEARING AND GRADING PERMIT PROCESS

RECOMMENDATIONS

The Guam Coastal Management Program (GCMP) recommends that the following be initiated in order to more effectively manage Guam's land and resources with regards to clearing and grading activities;

1. The Department of Public Works should initiate procedural changes to consolidate building permits and clearing and grading permits to enable concurrent review of site preparation and building plans. A determination could then be made regarding the need for TPC or other type of clearance. In effect, this would:
 - a. reduce the financial risks that might otherwise be taken by the developer who prepares a site and is not given TPC or other agency approval to proceed with the project;

- b. save existing site environments from unnecessary clearing and grading;
 - c. facilitate a more comprehensive review by minimizing pressure on the Department to consider financial hardship of the developer;
 - d. assist in ensuring that applicants are held to the stated intended use of the property.
2. The Department of Public Works should institute a more aggressive enforcement program which should include scheduled clearing and grading inspections. There should also be a systematic approach to routine inspections to ensure the enforcement of land-use regulations. This effort should include regular monitoring within manageable section areas.
3. There should be increased effort by the Department of Public Works and the Guam Environmental Protection Agency to educate the public on the effects of excessive grading, the need for securing permits and penalties for illegal clearing and grading activities. Both print and electronic media should be utilized to bring public attention to the seriousness of unauthorized site preparation activities. Applicants can also be made more aware of permit requirements through meetings with agency personnel and through the use of handouts.

C. DEVELOPMENT CONTROLS AT DEPARTMENT OF PUBLIC WORKS

RECOMMENDATIONS

Application Review and Issuance of Building Permits

- 1) Grading procedures should require all applicants to fully complete the application as described in the permit application checklist and the checklist should be permanently attached to the proposed applications.

- 2) The Permit review procedure should require all applications to be reviewed by the Department of Land Management and the technical staff at DPW.
- 3) Legislation should be proposed to amend the Building Law for the purpose of deleting the special permit provision. In the interim, DPW should not issue special permits.

Inspection and Enforcement

- 1) The Building Permit and Inspection Division's staff responsibilities should be revised to include designated inspectors permanently assigned the responsibility of enforcement of land use laws. These inspectors should be qualified and trained to effectively accomplish this responsibility; and
- 2) Should coordinate with DLM on all TPC matters including the inspection and enforcement of TPC conditions.
- 3) Enforcement program should be improved in regards to follow through on land use requirements and enforcing existing violations not related to active or pending building permits.

D. DEVELOPMENT CONTROLS AFFECTING THE NORTHERN AQUIFER

RECOMMENDATIONS

1. Guam Environmental Protection Agency (GEPA) should develop legislation that would amend the Subdivision Law which would:
 - a) Prohibit further parental subdivisions in the northern aquifer recharge areas for properties that do not have access to a public sewer system; and
 - b) Prohibit the waiver of sewer connection requirements for subdivision proposals within the northern aquifer recharge area.

2. GEPA should develop legislation to amend Section 17200 of the Zoning Law regarding agricultural zone to establish a minimum of one dwelling unit per 20,000 square feet in areas which do not have a public sewer system and are within the northern aquifer recharge area.
3. GEPA should coordinate with the Governor's Office to promulgate an executive order to:
 - a) Designate ponding basins as the recommended method for surface runoff storage and disposal and a method of recharge to the northern aquifer.
 - b) Adapt the use of dry well injection as an alternate method of surface runoff disposal where the use of a ponding basin is not feasible.
 - c) Utilize storm drains with seashore discharge only when alternatives (a) and (b) are not feasible.
4. The Territorial Planning Commission should adopt a policy to discourage (not allow variance or conditional uses) all other development over the northern aquifer recharge areas unless a public sewer system is available.

E. TERRITORIAL PLANNER'S DISCRETIONARY POWERS

RECOMMENDATIONS

This analysis will be transmitted to the Director of the Department of Land Management, with Bureau of Planning's request for stricter compliance to Executive Order 78-2.

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ASSESSMENT OF SELECTED DEVELOPMENT

CONTROLS ON GUAM

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INTRODUCTION

Guam's land-use laws, and their effective implementation, are of primary importance to the Guam Coastal Management Program (GCMP). These laws are designed to protect our natural resources and to provide for development which enhances the quality of our communities. However, these laws must be supported by a development control system that oversees and enforces the provisions of these land-use laws.

The Government of Guam has the framework for a sophisticated development control system in place. Review, permitting and enforcement agencies are well established and would appear to have the legal mandate necessary to ensure compliance with the laws, while affording some flexibility for interpretation of individual cases. A cursory review of both the land-use laws and the development control system would indicate that the legal network is sufficient for the purpose. Yet, major problems exist which result in degradation of the environment and bring into question the effectiveness of the system as a whole.

The Assessment of Selected Development Controls on Guam, which follows, is an attempt to review both the pertinent laws regarding development and the development control system relative to those laws, in order to pinpoint weak areas and suggest methods of correction. Originally envisioned as a study of the entire development system, this study has instead concentrated on five areas of immediate concern, because of the constraints of time and limited personnel available for this study. These five areas are:

- 1) "Short-Term Government Leases Within the Territorial Seashore Park."

This study was necessitated by unauthorized construction which has occurred and which continues within the Territorial Seashore Park;

- 2) "Clearing and Grading Permit Process." This study was prompted by the fact that clearing and grading permits are obtained prior to approval of planned projects, and have resulted in environmental degradation;
- 3) "Development Controls at Department of Public Works." As the agency with the greatest responsibility for enforcement of land-use laws, it is necessary to understand Public Works' authorities and ability to enforce those authorities;
- 4) "Development Controls Affecting the Northern Aquifer." This study looks at controls in that area of Guam that is experiencing the greatest growth rate and contains the major, freshwater ground lens that supplies water islandwide; and
- 5) "Territorial Planner's Discretionary Powers." This study is a follow-up on a potential problem uncovered in the initial "TPC Monitoring and Enforcement Report for June 1 - August 31, 1982."

Resolution of the problems discussed in these five studies would be a major step in correcting the entire system of development control, and could conceivably be the impetus for procedural and authority review by the various lead agencies, which would result in further refinement and correction in areas not considered in this report.

SHORT-TERM GOVERNMENT LEASES WITHIN THE TERRITORIAL SEASHORE PARK

There has been perceived to be a problem in regard to short-term (one year) government agricultural leases on land located within the Territorial Seashore Park. While the leasing of park land for agriculture is probably inconsistent with the intent of the park, the Guam Coastal Management Program (GCMP) feels the problem is not in the use of this land for agricultural purposes, but in the fact that permanent structures and utility improvements have been allowed on this land, thereby degrading the park. It was originally believed that this study would point to lack of enforcement as the key to the problem, and it certainly is a major part of the problem, but that, in fact, is only one part of the total situation in question. A review of the laws pertaining to leasing appears to indicate a lack of proper authority for leasing of government land by Department of Land Management for agricultural purposes. Following is a review of pertinent laws and Executive Orders, with discussion as to relationship to other legislation, or departmental adherence to the provisions of the legislation. This review is intended to give an indication of the complexity and confusion surrounding the question of park-land usage and authority.

PUBLIC LAW 15-6:

Prior to the enactment of P.L. 15-6 on February 28, 1979, there was no legal authority which allowed the Department of Land Management to lease government land for agricultural purposes, but that department did enter into agricultural leases nonetheless. The agricultural leases entered into by Department of Land Management prior to 1975 would appear to be invalid, while those entered into between 1975 and 1979 were forgiven by P.L. 15-6 (following discussion). P.L. 15-6, in law and in practice is as follows:

"Section 4 (a) Notwithstanding any provision of law, rule or regulation to the contrary, the Government of Guam is authorized to

lease government-owned property for a term not exceeding fifty (50) years for agricultural purposes."

Discussion: There is no one agency specified to execute these leases. However, the Department of Land Management (DLM) and the Office of the Attorney General (in an opinion rendered on 21 December, 1982) utilize the ambiguity of this section to imply DLM's authority.

(b) No portion of the leased land shall be sub-leased without the written consent of the Governor and approved as to form by the Attorney General."

No Discussion.

"(c) All leases shall be executed by the Governor, attested by the Lieutenant Governor and be approved as to form by the Attorney General."

Discussion: This procedure is not being followed in any of its stipulations.

"(d) A copy of every executed lease shall be filed with the Department of Administration."

Discussion: This provision is not being complied with. Leases are only being filed at Department of Land Management.

"(e) The lease shall be approved by the Legislature as provided in Section 3 of P.L. 12-61."

Discussion: This Provision is not being complied with.

"(f) The provisions of this Section shall be retroactive in effect to the effective date of P.L. 12-226 and any lease entered by the Government of Guam for land to be used for agricultural purposes following the effective date of P.L. 12-226 and prior to enactment of this Act shall be deemed authorized by law.

Discussion: It is assumed that this provision refers to the effective date of Section 1 of P.L. 12-226, which is January 1, 1975.

If P.L. 15-6 is the authority for leasing of government land by DLM for agricultural purposes, then the non-compliance of this law by DLM appears to nullify the validity of the leases entered into under this law.

PUBLIC LAW 15-18

Enacted on April 18, 1979, this law would appear to abrogate DLM's leasing functions for agricultural land. Section 1 of this law reads:

"The Department of Land Management, subject to approval by the Governor, is authorized to declare available for lease under the provision of the Act government real property as may be suitable for agriculture and which is not required for public use or reserved for other purposes by any other provision of law. Such land shall then be transferred for administrative purposes to the Department of Agriculture for lease in accordance with the provisions of this Act to qualified persons for the purposes of agriculture."

Discussion: This law would appear to grant all agricultural leasing functions to Department of Agriculture. It also designates, "only those lands not required for public use or reserved for other purposes...."

This section should be reviewed in conjunction with Executive Order 78-42, which states:

"....establish the Guam Territorial Seashore Park ... to be comprised only of the 8,885 land... acres, more or less, of Government of Guam real estate, to be jointly managed by the Department of Parks and Recreation, Department of Agriculture, Department of Land Management, and the Guam Environmental Protection Agency....".

Discussion: As this land is "reserved for other purposes," and "required for public use," it would appear that government land within the Territorial Seashore Park is not to be made available for agricultural leasing purposes, in accordance with provisions of P.L. 15-18. Further, this Executive Order required joint management by four agencies. The agricultural leasing program, to date, has not been performed with consultation of all four mandated agencies.

The plethora of laws regarding leasing, of which only the major ones are listed in this report, have created a confusing situation and contradictions in interpretation. This situation should be resolved before any further leasing within the Park is allowed.

ENFORCEMENT:

The Bureau of Planning does not necessarily oppose, a priori, agricultural leases within the Park. However, as stated earlier, the Bureau is adamantly opposed to the erection of permanent structures and utility improvements. While there do not appear to be any clear-cut regulations regarding disallowable improvements, the leasing form which has been used by DLH (in reality a land-use permit), does state; "No structure may be erected or placed on the land designated herein without the consent of the Director of Land Management or his authorized representatives, as designated, and the proper building permit procured in accordance with law."

The fact that permanent structures exist on some of the lands leased under this agreement, and the fact that DLM is aware of these structures but has done nothing to either void the lease, or direct the removal of the structures, indicates DLM's reluctance to demand compliance with the rules and regulations they themselves have developed, and brings into serious question DLM's ability to enforce rules and regulations.

Department of Public Works must also share part of the responsibility for lack of enforcement, as it is that agency's responsibility for enforcing the laws requiring building permits before construction.

Insofar as utility improvements on these leased lands is concerned, the fault appears to, once again, lie with DLM rather than Guam Power Authority or Public Utility Agency of Guam. These agencies request DLM approval, and receive it, prior to installation of utilities. At that point DLM should be denying the request, based on the lease agreement. Approval of utility improvements has served to aggravate the problem of unauthorized land use and makes enforcement more difficult.

RECOMMENDATIONS:

1. Legal authority, either Executive Order or Public Law, should be drawn up establishing leasing responsibility for short-term agricultural leases specifically.
2. The four agencies delineated as joint managers of the Territorial Seashore Park by Executive Order 78-24 should cooperatively develop rules and regulations pertaining to allowable and disallowable utilization of land leased within the Park.

3. The Bureau of Planning will request the Governor to declare a moratorium on agricultural leasing within the Park until such time as leasing authority is cleared up and until rules and regulations are drafted and adopted.
4. The Bureau of Planning will request that DLM and Public Works enforce the provisions of the current leases.

CLEARING AND GRADING PERMIT PROCESS

In numerous instances in the past, clearing and grading activities have resulted in unnecessary, irreversible damage to the environment. Excessive site grading operations have caused extensive erosion, resulting not only in the removal of productive top soil, but in the destruction of wildlife habitat. The degradation of the quality of our streams and marine waters have also been attributed to accelerated soil erosion.

This report is an assessment of procedures currently practiced by the Department of Public Works and Guam Environmental Protection Agency which are responsible for the administration and enforcement of clearing and grading permits. Following a summary of existing review procedures and authorities of the two agencies is a discussion of perceived shortcomings with the clearing and grading process. In conclusion, recommendations for more effective management of site preparation activities are advanced.

REVIEW AUTHORITIES

Public Law 1-88, established the Building Law of Guam and mandated responsibility for its administration and enforcement to the Department of Public Works (DPW). The Building Law was subsequently amended by Public Law 14-112 to include portions of the 1976 edition of the Uniform Building Code.

As defined in Chapter 70, Section 7003 of the Uniform Building Code, permits are required for all grading activities except:

- a) Grading in an isolated, self-contained area if there is no danger apparent to private or public property.

- b) An excavation below finished grade for basements and footings of a building, retaining wall or other structure authorized by a valid building permit. This shall not exempt any fill made with the material from such excavation nor exempt any excavation having an unsupported height greater than 5 feet after the completion of such structure.
- c) Cemetery graves.
- d) Refuse disposal sites controlled by other regulations.
- e) Excavations for wells, tunnels or utilities.
- f) Mining, quarrying, excavating, processing, stockpiling of rock, sand, gravel, aggregate or clay where established or provided for by law, provided such operations do not affect the lateral support or increase the stresses in or pressure upon any adjacent or contiguous property.
- g) Exploratory excavations under the direction of soil engineers or engineering geologists.
- h) An excavation which (a) is less than 2 feet in depth, or (b) which does not create a cut slope greater than 5 feet in height and steeper than 1 1/2 horizontal to 1 vertical.
- i) A fill less than 1 foot in depth, and placed on natural terrain with a slope flatter than 5 horizontal to 1 vertical, or less than 3 feet in depth, not intended to support structures, which does not exceed 50 cubic yards on any one lot and does not obstruct a drainage course.

Through P.L. 9-76, the Water Pollution Act, the Guam Environmental Protection Agency (GEPA) was vested with the responsibility to conserve, protect and improve the quality and potability of Guam's water resources. This authority gave rise to Guam Soil Erosion and Sediment Control Rules and Regulations currently enforced by the agency. These regulations apply to all grading activities as defined in Chapter 70, Section 7003 of the Uniform Building Code with two additional exceptions:

- a) Field plowing or filling for agricultural purposes; and
- b) Earthmoving activity for the purpose of erecting a one or two-family residence.

EXISTING PERMIT REVIEW PROCESS

All developments applications are obtained and filed at the Building Permits and Inspection Division at DPW. Personnel at the counter determine which permits are required and what plans or specifications should be provided. All site preparation applications except those for plowing or filling for agricultural purposes or site preparation activities for erecting a one or two-family residence are routed to Guam Environmental Protection Agency for review of erosion control plans to check possible water and air pollution problems. Review of these permits are conducted by GEPA's Community Wastewater Program staff with technical assistance from the agency's SDRC representative. GEPA conditional clearance is given in the form of a letter with conditions listed and a copy provided of Air Pollution Control Standards and Guam Erosion and Sediment Control Rules and Regulations. Grading permit applications are then forwarded to the Hydraulics Division of DPW for flood control review. A final review of clearances and plans is conducted by the Building Permits and Inspection Division which issues the permit.

PROBLEM IDENTIFICATION

There are two major areas of concern to the Guam Coastal Management Program in the clearing and grading permit review process. The first is the lack of review by the Department of Land Management which results in numerous problems which affect not only the environment, but the applicant and reviewing agencies as well. The second area of concern is the monitoring and enforcement of grading permits.

Clearing and grading are the first physical steps in the construction process. It is logical that grading not be allowed before a total project review is conducted to ascertain conformance to existing land use laws, particularly zoning regulations. However, the correlation between site preparation and the final development is not reflected in the permit review process. Under existing

procedures it is possible to secure a grading permit for development that is not permitted within a particular area.

The omission of the Department of Land Management in the review process is a serious shortcoming in the management of land use activities. The Planning Division of this department is the designated agency for requiring development compliance with such land use ordinances as the Zoning and Subdivision Laws and Resort Hotel Zone, Flood Hazard Area and Wetlands Rules and Regulations. The Department of Land Management, however, does not review grading applications to ensure that the final development is a permitted use within a particular zone.

The existing review process places unnecessary financial hardship on the applicant. Because building and site preparation permit applications undergo separate review procedures, the applicant is often unaware of Territorial Planning Commission or other agency clearances that may be required. Current clearing and grading permit procedures allow for site preparations to begin once a grading permit is issued. If the project does not receive TPC or other agency approval to proceed, the developer may incur unnecessary grading costs.

Another serious problem arises from this situation. The Territorial Planning Commission is often requested to approve variances or conditional use applications for projects on lands which have already been excavated and/or filled. This practice forces the TPC to consider in the review process the "financial hardship" of the applicant and almost always results in favorable review of the application. As evidenced in various "after-the-fact" grading cases, these decisions tend to benefit the developer and are not made in the public's best interest.

From a resource protection point of view, the unnecessary grading of a site is the most serious problem resulting from the existing permit review process. The degradation of the quality of Guam's air, land and water resources are serious effects of accelerated soil erosion. Although the majority of the 105 clearing and grading permits issued in 1981 were for small projects or in areas where erosion potential is low, the cumulative effect of these clearing and grading activities could have major impact on our natural resources.

Inadequate monitoring and permit enforcement constitute the second major area of concern to the Guam Coastal Management Program. Efforts on the part of both Guam Environmental Protection Agency and the Department of Public Works for routine inspection appear haphazard. There is no systematic approach to investigating an area for possible violations. Guam Environmental Protection Agency has only recently begun to keep a log of clearing and grading activities.

There still appears to be confusion on the part of the developer regarding the type of activities allowed under a particular type of permit. Clearing permits allow for removal of site vegetation without major earthmoving. Grading permits are required for excavation and/or filling. The applicant must be made to understand the difference between these types of permits. Although conditions for GEPA clearances are provided in writing to the applicant, these should be reiterated upon clearance issuance.

Unless concerted efforts are made to educate the public regarding these permits, developers will continue to plead ignorance to these land use regulations. Public awareness efforts would also reduce the reluctance of enforcement agencies to prosecute violators to the fullest extent of the law.

RECOMMENDATIONS

The Guam Coastal Management Program (GCMP) recommends that the following be initiated in order to more effectively manage Guam's land and resources with regards to clearing and grading activities:

1. The Department of Public Works should initiate procedural changes to consolidate building permits and clearing and grading permits to enable concurrent review of site preparation and building plans. A determination could then be made regarding the need for TPC or other type of clearance. In effect, this would:
 - a. reduce the financial risks that might otherwise be taken by the developer who prepares a site and is not given TPC or other agency approval to proceed with the project;
 - b. save existing site environments from unnecessary clearing and grading;
 - c. facilitate a more comprehensive review by minimizing pressure on the TPC to consider financial hardship of the developer;
 - d. assist in ensuring that applicants are held to the stated intended use of the property.
2. The Department of Public Works should institute a more aggressive enforcement program which should include scheduled clearing and grading inspections. There should also be a systematic approach to routine inspections to ensure the enforcement of land-use regulations. This effort should include regular monitoring within manageable section areas.

3. There should be increased effort by the Department of Public Works and the Guam Environmental Protection Agency to educate the public on the effects of excessive grading, the need for securing permits and penalties for illegal clearing and grading activities. Both print and electronic media should be utilized to bring public attention to the seriousness of unauthorized site preparation activities. Applicants can also be made more aware of permit requirements through meetings with agency personnel and through the use of handouts.

DEVELOPMENT CONTROLS AT DEPARTMENT OF PUBLIC WORKS

The Department of Public Work's Building Permit and Inspection Division has two main responsibilities for development control. They are: 1) application review and issuance of building permits; and 2) inspection and enforcement of building laws and and land use laws. In the following assessment, the responsibilities have been reviewed as to existing procedure and problems hindering the procedures have been identified. At the conclusion of this assessment, specific recommendations are presented to alleviate the identified problems.

APPLICATION REVIEW AND ISSUANCE OF BUILDING PERMITS

The building permit system is a major development control responsibility of the Department of Public Works (DPW). In order to acquire a building permit, a developer must first file an application with the Building Official at Building Permit and Inspection Division. The information to be submitted in the application is determined by the type of project and the discretion of the building official. In many cases, applications are reviewed by other departments to check compliance with the laws under their jurisdiction. The building official identifies which agencies are to be contacted for their approval and the applicant is responsible for obtaining these approvals. Agencies that may require review and approval are:

1. Department of Land Management - land-use laws.
2. Guam Environmental Protection Agency - environmental laws.
3. Department of Public Health & Social Services - health code.
4. Guam Power Authority - power availability.
5. Public Utility Agency of Guam - water and sewer availability.
6. Fire Department - fire code.
7. Department of Parks & Recreation - historical site clearance.
8. Bureau of Planning - federal consistency.

If the Building Official is satisfied that the work described in an application for a building permit and the plans filed conform to the requirements of the building laws and land use laws, and there are no agency objections, he will issue a permit to the applicant.

The Building Official currently has the authority to issue permits to start construction before the entire plans and specifications for the whole building or structure have been approved provided adequate information and detailed statements have been filed complying with all pertinent requirements applicable to the portion of the building being constructed. The holders of such permits proceed at their own risk without assurance that the permit for the entire building or structure will be granted.

PROBLEM IDENTIFICATION

The building official designee at the counter determines the information that will be required to be filed by an applicant for a permit. To assist the counter person, a checklist has been developed for identifying informational requirements by type of developments. This checklist, however, is not being implemented consistently, and the Building Official may accept applications with insufficient information or without support data. This will impede DPW and other agencies to conduct proper reviews, which may result in projects being approved by agencies without full knowledge of possible problem areas. Sufficient information must be provided so that the various agencies and DPW personnel can review the application properly in light of their mandated responsibilities.

Another perceived shortcoming relative to this process is that the building official, if satisfied with the plans and determines that they conform with the requirements of the building law and land use laws, can issue a building permit without the review of other departments. The responsibility of determining an application for conformity with the building law and all the land use laws

is beyond the capacity on one agency let alone one person. The importance of utilizing other departments in the review process is that agencies responsible for administering applicable laws under their jurisdiction have personnel who are trained and have experience in reviewing developments for conformity.

The last problem identified in this process is that the building official may issue a special permit for the construction of part of a building before the entire plans and specifications for the whole building have been approved. A subsequent review by another department or within DPW may find the application unsatisfactory and disapprove the entire project after the developer has already incurred construction cost. Therefore, the most effective way of controlling development is by reviewing all pertinent information for the entire proposed project. Special permits defeat the purpose of the review process and should be omitted from the building law.

INSPECTION AND ENFORCEMENT

The other major development control responsibility of the Department of Public Works (DPW) is inspection and enforcement. In implementing this responsibility, DPW has a staff of building inspectors and sign inspectors. The building inspector is responsible for the inspection and enforcement of the building law and land use laws. The sign inspector is responsible for the inspection and enforcement of the sign regulation in the zoning law.

In carrying out these responsibilities, the inspectors utilize two types of inspection procedures; scheduled inspections and routine inspections.

Upon receiving a building permit, the developer is informed by the building official that filing for scheduled inspections, which is done during various phases of construction, is mandatory before a certificate of occupancy can be issued. For each scheduled inspection the site must conform with the approved plans and the permit application before construction can proceed to its next phase. If inspection records indicate that all scheduled inspections have been approved and conditions imposed by other agencies or TPC have been complied with, then a certificate of occupancy can be issued. Attached is a copy of the scheduled inspection form.

If there are no scheduled inspections, the inspectors will go on routine inspections. The purpose of routine inspections is for inspectors to survey their respective area through visual contact to ascertain compliance of all laws which they are responsible for enforcement.

The Building Official has the overall responsibility to enforce building laws and land use laws. There are several mechanisms that the Department of Public Works currently implements to enforce building laws and land use laws. One such procedure is the stoppage of work for non-compliance. Upon notice from the

building official, through inspections, that work on any building is contrary to the provisions of the building laws and land use laws, such work will be immediately stopped. The stopwork order is in writing and states the condition which must be complied with before work can resume. The building official may require that work be stopped on an oral notice, pending issuance of a written order, in instances where he deems immediate action is necessary for public safety.

Another procedure used to enforce applicable laws by DPW is the revocation of permits. The building official may revoke a permit or approval (1) in cases of any false statement or misrepresentation as to a material fact in any application or plans and specifications in which the permit was issued or approval given, (2) in any cases in which a permit was issued in error and conditions are such that a permit should not have been issued, and (3) in any cases where a building permit owner refuses to comply with a stop work order issued by DPW.

One last mechanism used for enforcement is the authority of the building official to deny issuance of a certificate of occupancy. If after inspection it is found that the proposed work has not been completed in accordance with the building permit or the provisions of the building law, the building official can refuse to issue a use permit and shall order the work completed to comply with the building permit. The building official may issue a temporary use permit for any portion of the premises which may be safely occupied prior to the issuance of a certificate of occupancy.

Through any of the enforcement procedures that is provided by law, a developer in violation would receive a notification to comply within a time period of usually three days. Attached is a copy of the notice of violation form.

PROBLEM IDENTIFICATION

The inspection procedure is an important mechanism that is used to determine if a development is in accordance with both the building law and land use laws. This mechanism, however, emphasizes the building law and not the land use laws. This is evident by the staff of inspectors. The building inspectors, while responsible for enforcing these laws, are primarily trained in the technical aspects pertaining to actual construction. This, along with the building permit and inspection division emphasis on the building law, results in the lack of attention to land use. The sign inspectors are responsible for enforcement of the sign regulation solely and should be used to assist in land use enforcement.

Another indication showing a lack of concern towards land use laws can be found in the scheduled inspections. Conditions set forth by Territorial Planning Commission are not being incorporated in the procedure for scheduled inspections. Most of the developments requesting conditional use or variance approval from TPC have conditions imposed upon them. These conditions have to be complied with before a certificate of occupancy can be issued.

Since conditional use and variance approval from TPC is a departure from uses permitted in the Zoning Law, TPC's conditions are very important because the commission's conditions provide mitigation measures to prevent any adverse impact on the community. Therefore, TPC conditions should have a high consideration on DPW's inspection procedures.

In addition to the apathy for land use laws in the inspection procedure, enforcement of land use laws are almost non-existent. It has been observed that violations of land use laws such as:

- 1) Conversion from one use to another use without filing for a change of certificate of occupancy and/or TPC approval.

- 2) Issuing a certificate of occupancy prior to compliance to TPC conditions.
- 3) Adding another use to an existing use without filing for a change of certificate of occupancy and/or TPC approval.
- 4) Extension of buildings beyond the setback requirement without TPC approval.
- 5) Allowing a non-permitted use without TPC approval;

are all occurring without much enforcement from DPW. All of these violations signify a lack of concern by DPW regarding land use laws.

RECOMMENDATIONS

The Department of Public Works should implement the following recommendations:

Application Review and Issuance of Building Permits

- 1) Operating procedures should require all applicants to fully complete the application as described in the permit application checklist and the checklist should be permanently attached to the proposed applications.
- 2) The Permit review procedure should require all applications to be reviewed by the Department of Land Management and the technical staff at DPW.
- 3) Legislation should be proposed to amend the Building Law for the purpose of deleting the special permit provision. In the interim, DPW should not issue special permits.

Inspection and Enforcement

- 1) The Building Permit and Inspection Division's staff responsibilities should be revised to include designated inspectors permanently assigned the responsibility of enforcement of land use laws. These inspectors should be qualified and trained to effectively accomplish this responsibility; and
- 2) Should coordinate with DLM on all TPC matters including the inspection and enforcement of TPC conditions.
- 3) Enforcement program should be improved in regards to follow through on land use requirements and enforcing existing violations not related to active or pending building permits.

DEVELOPMENT CONTROLS AFFECTING THE NORTHERN AQUIFER

The entire northern half of the island with its southern boundary running from Pago Bay across to Adelup Point has been identified as the Principal Source Aquifer. Any development over this water lens area without adequate consideration for aquifer recharge, surface runoff, sewage, and other waste treatment and disposal poses a threat to Guam's groundwater resources. This study evaluates the development controls affecting the water lens, identifies problem areas and recommends control improvements.

EXISTING CONTROL MEASURES

Development controls which protect the groundwater aquifers are responsibilities of the various regulatory agencies and TPC. These statutory responsibilities generally implement environmental and land use laws and policies. Discussions of each of these control measures exercised by the agencies and commissions follow:

Zoning Law and Regulations

Public Law 1-88, Title XVIII established regulations and mechanisms in order to encourage the most appropriate use of land; provide adequate open space around buildings; prevent undue concentrations of population; assure provision for schools; commercial, industrial and recreational activities and infrastructures. In order to achieve these objectives, eight zones were established with an assigned list of permitted and conditional uses.

The vast majority of land is zoned agricultural within the northern aquifer areas. The zoning law establishes low density development criteria (1/2 acre or 20,000 square feet per lot) for agricultural zones thereby providing considerable protection to the northern aquifer area.

Subdivision Laws and Regulations

Public Law 6-134, Title XIX provides for the control and regulation of land subdivision necessary for the orderly growth and development of the Territory; to secure adequate provisions of water supply, drainage, sanitary sewerage and other health requirements. Following are some of the required improvements under the subdivision law which affect the northern lens:

Storm Water Drainage -

Storm drainage facilities shall be provided in all subdivisions in accordance with plans prepared by the subdivider conforming to criteria established by the Commission. These facilities shall be designed to dispose of normal storm waters falling on the subdivision without hazard of flooding, inconvenience of ponding, and erosion of public or private land.

In addition to storm drains GEPA is requiring two additional types of disposal methods which help to recharge the northern lens. These are ponding basins and underground injection via dry wells. Ponding Basin Design Standards and Procedures has been developed and published by the Department of Public Works. The use of ponding basins for storm water disposal is made possible by the relatively high permeability of the limestone in the north and is the most acceptable method for disposal of surface runoff. The primary purpose of ponding basins is a temporary storage and disposal of storm water runoff and also to recharge the aquifers.

Underground injection via dry well is another effective method of storm water disposal. However, because of potential contamination of the water lens, GEPA discourages the use of dry wells unless the structure is located in the "recharge" areas near the coast. Dry well injection requires a permit from GEPA.

Sanitary Sewage Disposal -

When sanitary sewers are provided in a subdivision, they shall be in conformity to plans prepared by the subdivider satisfactory to the Commission. When sewers are placed within a subdivision, the minimum permissible lot size shall be as determined by the applied zoning district, or in the absence of zoning, shall be not less than seven thousand (7,000) square feet. In subdivisions where sanitary sewers are not provided, the minimum permissible lot size shall be determined by the slope and characteristics of the subdivision soil and subsoil but in no event shall be less than is established by the applied zoning district, or in the absence of zoning, seven thousand (7,000) square feet. Lot sizes, including area and minimum widths and depths shall be related to the ability of the subdivision lands to accept the anticipated septic tank effluent whereby no sanitary problem will be created.

These zoning and subdivision laws and regulations establish mechanisms whereby development should be controlled to minimize or mitigate negative impacts on the island's water resource. These laws and regulations are implemented through SDRC review processes, TPC permits and DPW permitting, monitoring and enforcement activities. These laws and regulations should provide adequate control measures for development, land-use densities, surface runoff and the necessary infrastructures however, other regulations provide means for some development to circumvent the objectives of zoning and subdivision laws.

Other more specific measures which directly control or prevent discharge into the groundwater lens are provided under the various GEPA laws and regulations which establish guidelines for handling and disposal of wastewater, surface runoff, solid waste and hazardous waste. Discussion of each of these methods are presented below.

Principle Source Aquifer

Because of the concern for the integrity of the groundwater lens, all of northern Guam and the Pago and Fonte River basin area was recently designated as the "Principle Source Aquifer" by the U.S. EPA. This means that no project which involves Federal funds could be started without a review to insure that the project will not affect the aquifer.

Most of the urbanized areas within the Principle Source Aquifer have sewer collectors and treatment facilities with ocean outfalls. The Wastewater Facilities Plan prepared by GEPA under Section 201 of the Clean Water Act of 1977 provides for upgrading and expansion of sewer facilities into other communities as needed.

Other Wastewater Disposal Controls

In addition to the above wastewater programs, the Toilet facilities and Sewage Disposal Regulations require all new buildings to be connected to a public sewer system when the system is available, or connect to an on-site disposal system (septic tank and leach field). GEPA is responsible for review and issuance of permits for public sewer connection, the construction of septic tank systems and animal waste treatment and disposal systems. These regulations also require that no occupancy permit shall be issued by DPW without GEPA sewage disposal clearance.

Another on-going activity is a village house-to-house sewer survey carried out by GEPA. All buildings are required to connect to the public sewer in areas where it has been available for 5 or more years even though an existing on-site disposal system (septic tank) appears to be adequate. This is an effort to minimize sewage underground disposal where it might contaminate the water lens.

Solid Waste Collection and Disposal Permits

Public Law 14-37 gives the responsibility for Solid Waste Management and litter control of GEPA. This law authorizes the agency to issue permits for solid waste collection, transportation, processing and disposal activities.

Solid Waste Transfer Stations

There are two solid waste transfer stations on the island; one in Malojloj in the southern part of the island and another in Dededo in the north. These facilities have helped to eliminate illegal open dumping in Dededo over the recharge area and has helped reduce the number of illegal open dumping and littering around the island.

Hazardous Waste

Although Guam intends to apply for Interim Authorization for management of a program (pursuant to the Resource Conservation and Recovery Act of 1976), at present there is no Hazardous Waste Management Program ^{based on federal authority} on Guam. However, there are three Territorial statutes affecting hazardous waste management, which are described below:

- a) Public Law 14-37 defines hazardous wastes and authorizes an investigation to set standards for storage, treatment and disposal of such wastes. Handling of hazardous wastes in any manner that would degrade the environment or create a health or safety problem is prohibited.

- b) Anything affecting water quality, whether of ground, surface or marine waters, is covered by the Water Pollution Control Act (P.L. 9-76).

At present, hazardous waste violations for things such as oil, pesticides and other chemicals have been enforced under this Act by the GEPA.

- c) The Pesticide Regulations (based upon the Guam Pesticide Act) prohibit storage or disposal of pesticides in any manner that might create a hazard. They state that reusable empty containers may only be refilled with the same pesticide they initially contained unless authorized for other reuse by the Administrator of GEPA, and unusable empty containers must be cleaned, crushed and buried at least one foot deep and away from any groundwater system.

IDENTIFIED DEVELOPMENT CONTROL PROBLEMS

While the previously mentioned laws provide the legal mechanisms for development controls there are shortcomings in the system which need to be corrected. The following control problems were identified during the evaluation.

Subdivision Law

The subdivision law which provides development controls also contains provisions for certain development activities which have negative impacts on the northern aquifer. These are listed below:

Parental Subdivision -

Under the parental subdivision designation, a property owner is allowed to subdivide his land into 10,000 square foot lots, regardless of the existing zoning of the area, and distribute them to his children or descendants without the required subdivision improvements such as storm water and sewage disposal. In an agricultural subdivision this provision allows for medium density residential without subdivision improvements.

Improvement Variance -

Section 18500 of the subdivision law establishes provisions whereby a property owner may petition TPC for variance to subdivision improvement which includes sidewalk, curb and gutters, paved streets and connection to a public sewer system. Many of the variance requests are for minor projects such as lot parcelling or small subdivisions. Because many of these project sites are far removed from planned and developed areas that has the necessary infrastructures in-place these requests are generally approved based on unrealistic and economic hardships caused by providing these improvements. Liberal granting of such variances however, reduces the effectiveness of the subdivision development controls.

Surface Runoff -

Inadequate planning, handling and disposal of surface runoff from development sites in the northern Guam could have a negative impact on the water lens. The northern aquifer area is composed of largely coralline limestone which allows surface runoff to readily infiltrate and replenish the water lens. The use of storm drains that discharge into coastal waters could impact the quality of the groundwater by decreasing recharge and increasing the risks of saltwater intrusion into the lens.

Dry well injection, another surface runoff disposal method, should be used with caution. Existing dry wells are located mainly on military property at Andersen Air Force Base and Northwest Field. Most of them are 200 feet deep but none open below the water table. Surface runoff carrying contaminants from development areas and streets threatens the water lens. To what extent the water is filtered depends upon the composition of material below the bottom of the dry well and the top of the water lens. Because of the depth of a dry well and the limited filtering, it is assumed that the use of dry wells is less desirable for disposal of surface runoff, particularly over the parabasal aquifer.

Zoning Law

The Zoning Law establishes a minimum lot size of 20,000 square feet in an agricultural zone. Section 17200 of the law however, allows construction of one dwelling unit per 10,000 square feet in the agricultural zone which does not require subdivision improvements. In addition, Section 17501(k) of the law permits the owner of a lot in an agricultural zone to parcel not less than 10,000 square feet of the area for a single residence provided that no further parcelling of the remaining lot be permitted.

The provision of Section 17501(k) is appropriate if it is applied to a large tract of land whereby low density character of a rural area is still maintained, even after the parcelling. However, if it is applied to 1/2 acre (20,000 square feet) lots in an agricultural subdivision the result will be two (2) substandard 10,000 square feet house lots, and conceivably, every lot in the subdivision could be parcelled in the same manner and still continue to use an on-site sewage disposal method. Subsequently, this subdivision practice increases density to a higher level than intended in the agricultural zone. An example is the Hemlani Subdivision, situated across from NCS and within the northern aquifer, which was approved in early 1970, and since has become a residential community without public sewer system and proper drainage system.

Higher Intensity Land-Use -

There are areas along major roadways and outskirts of villages within the northern aquifer which are zoned for high density development such as residential (R-1 and R-2), commercial and Planned Unit Development (PUD) but lack the necessary sewerage and other infrastructures. Proposed development within these areas, with the exception of PUD, would rely on on-site sewage disposal system.

Solid and Hazardous Waste

Indiscriminate disposal of solid and hazardous waste over the northern aquifer undoubtedly causes concerns for protection of the northern lens. These concerns however, are primary subjects of the recently completed Northern Guam Lens Study by Guam Environmental Protection Agency. This study provides specific and detail conclusions and recommendations and are therefore, not included in this assessment. The Northern Guam Lens Study is being reviewed by Federal and local agencies and private interests before adoption as an element of the Guam Comprehensive Development Plan.

RECOMMENDATIONS

1. Guam Environmental Protection Agency (GEPA) should develop legislation that would amend the Subdivision Law which would:
 - a) Prohibit further parental subdivisions in the northern aquifer recharge areas for properties that do not have access to a public sewer system; and
 - b) Prohibit the waiver of sewer connection requirements for subdivision proposals within the northern aquifer recharge area.
2. GEPA should develop legislation to amend Section 17200 of the Zoning Law regarding agricultural zone to establish a minimum of one dwelling unit per 20,000 square feet in areas which do not have a public sewer system and are within the northern aquifer recharge area.
3. GEPA should coordinate with the Governor's Office to promulgate an executive order to:
 - a) Designate ponding basins as the recommended method for surface runoff storage and disposal and a method of recharge to the northern aquifer.
 - b) Adapt the use of dry well injection as an alternate method of surface runoff disposal where the use of ponding basin is not feasible.
 - c) Utilize storm drains with seashore discharge only when alternatives (a) and (c) are not feasible.
4. The Territorial Planning Commission should adopt a policy to discourage (not allow variance or conditional uses) all other development over the northern aquifer recharge areas unless a public sewer system is available.