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PERMITS AND REGULATORY  
REQUIREMENTS FOR  
AQUACULTURE IN HAWAII

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## **A. INTRODUCTION**

Aquaculture is currently the fastest growing sector of agriculture in the United States. Hawaii has been and continues to be one of the leaders in aquaculture. Every aquaculture operation in Hawaii is subject to various Federal, State and County permits and regulatory requirements. These requirements relate to the siting and location of the operation, its use of resources such as water, its effect on the environment, sanitation, and other matters. These regulations are often complex, with overlapping jurisdiction between agencies and levels of government. Indeed, a frequent complaint from aquaculture developers and operators is that they are burdened by excessive regulation which is not necessarily sensitive to the needs and benefits of aquaculture. Regulators may have a very different view. In any event, as aquaculture becomes more widespread, it will receive increased public attention and increased scrutiny by regulators.

For the developer, operator, regulator or anyone else interested in aquaculture, it is useful to have an overview of the laws and regulations which pertain to aquaculture. This Guide Book is intended to provide such an overview for aquaculture development and operation in Hawaii.

The State of Hawaii strongly encourages aquaculture development. It has established several programs to assist existing and potential farmers. The Aquaculture Development Program in the Department of Land and Natural Resources is available to assist aquaculturists and potential aquaculturists. It can provide information and access to resources and technical assistance available from the State and Federal government. Early consultation with their staff may help a farmer avoid many regulatory obstacles and save considerable time and money.

## **B. HOW TO USE THIS GUIDEBOOK**

Section C of this Guidebook provides a summary overview of several general areas of regulation which are critical to aquaculture siting and operation. Separate sections describe regulations concerning land use and coastal resources; wetlands and waterways; effluent regulations; regulations concerning health and sanitation of aquaculture food operations; and general business requirements. Section D provides a brief discussion of issues that are of particular significance to the revitalization and use of traditional Hawaiian fishponds. Section E gives a summary of how the various permitting requirements fit together in terms of order, consolidation and coordination with other permits. A review of Sections C, D, and E should provide a basic understanding of how the permits, regulatory requirements, and jurisdictions fit together.

Finally, Section F provides a synopsis of over twenty Federal, State and County permits and regulatory schemes which may apply to aquaculture. Each synopsis includes a brief description of the purpose, legal basis, administering agency, information required of permit applicants and other pertinent information.

This Guidebook is annotated with citations to laws, regulations and rules. It is not, however, intended to be a definitive legal work on any particular permit or regulation or the applicability of permits and regulations to any particular aquaculture site or operation. It does not discuss County zoning ordinances as their application is site and county specific.

## C. THE REGULATORY SCHEME

### 1. Land Use Regulation and Coastal Zone Management

In 1961, the Hawaii State Legislature passed the Land Use Law (Chapter 205, Hawaii Revised Statutes (HRS)) to address the increase in urban development and the preservation of prime agricultural land. The Land Use Law provides the basic framework for land use regulation in the State and provides the delineation between the jurisdiction of State and County government. The Hawaii Coastal Zone Management Act (Chapter 205A, HRS) provides an additional regulatory management scheme for activities in the near shore areas and coastal zone.

#### Land Use Law

The Land Use Law divided the state into four land use district classifications: Urban (five percent of the State's land area); Agriculture (forty-seven percent); Conservation (forty-seven percent); and Rural (less than one percent).<sup>1</sup>

The Urban District includes lands presently in urban use and a reserve for foreseeable urban growth. Uses are permissive only, with the counties issuing permits for development through their ordinances or regulations. §205-2, HRS.

The Agricultural District includes lands used for cultivation and grazing as well as related uses. The permissible uses in this district are extensive, and include aquaculture. Other uses require a special permit. Special permits are handled by the respective county for uses requiring less than fifteen acres. Special permits for projects larger than fifteen acres are handled by the State Land Use Commission.

The Conservation District includes areas necessary for

“protecting watershed..., preserving scenic and historic areas; providing park lands, wilderness and beach reserves; conserving endemic plants, fish and wildlife;... forestry; open space areas whose existing openness, natural condition, or present state of use, if retained, would enhance the present or potential value of abutting or surrounding communities, or would maintain or enhance the conservation of natural or scenic resources; areas of value for recreational purposes; other related activities; and other permitted uses not detrimental to a multiple use conservation concept.” §205-2(e), HRS.

The Conservation District includes large areas of shoreline lands, and most submerged offshore lands and outlying small islands. Most traditional Hawaiian fishponds are in the Conservation district.

The Conservation District is broken down into four subzones: Protective, Limited, Resource, and General. Aquaculture is a permitted use within the Resource and General subzones.

Prior to any use of land in the Conservation District, a Conservation District Use Application (CDUA) must be submitted and approved by the Board of Land and Natural Resources (BLNR) within the State Department of Land and Natural Resources (DLNR). §183-41 HRS.

The Rural District consists primarily of small farms and rural subdivisions on Maui and Kauai.

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<sup>1</sup> State of Hawaii, Department of Business, Economic Development & Tourism, The State of Hawaii Data Book, 1990.

## Coastal Zone Management Program

The Coastal Zone Management Act, Chapter 205A, HRS, provides an additional regulatory scheme for management of activities in the coastal zone and near shore areas. The Coastal Zone Management Program (CZMP) involves the management of Special Management Areas (SMA) and Shoreline Setback areas by the counties and the review of Federal activities for consistency with the CZMP by the Coastal Zone Management Program within the Office of State Planning.

SMA's are shoreline and coastal water related land inland from the "shoreline" which have been designated by counties. No development can occur within the SMA unless a permit is obtained from the County. Permits will be granted only if the development will not have substantial adverse impacts on the environment and is consistent with the State's CZMP and the County general plan and zoning ordinances.<sup>2</sup>

State statute also designates a Shoreline Setback from 20 to 40 feet back from the shoreline (counties can extend the setback requirement further by ordinance). Construction or land disturbing activity is prohibited within the Shoreline Setback area unless a Shoreline Setback Variance is obtained from the County.

When Federal agencies are involved in projects in the coastal zone (the entire state, except the forest reserves, is included within the coastal zone definition) through funding, permit approval (e.g., a Department of Army permit), or direct activity, the Federal agency must get a certification from the CZM Program that the proposed activities are consistent with the State's CZMP.

The regulations and regulatory schemes described above constitute the primary land use and coastal management regulations in Hawaii. However, many other environmental and operational regulations which are discussed below may also apply to aquaculture activities.

## **2. Wetlands and Waterways**

Wetlands have been identified at all levels of government as having numerous beneficial functions. Some of these functions are: providing floodwater storage, preventing erosion and providing sediment control, providing critical wildlife habitat, recreational opportunities and open space and aesthetic values. As a result of the wide array of benefits derived from wetlands, they are the subject of significant regulatory protection by the Federal, State and County governments.

The primary regulators of wetlands development at the Federal level are the U.S. Army Corp of Engineers (ACOE) and the U.S. Environmental Protection Agency (EPA). State and County governments also regulate wetland development through the Coastal Zone Management Program and Special Management Area permits.

The ACOE has been involved with wetlands regulation since 1899 under Section 10 of the Rivers and Harbors Act of 1899 which gave it jurisdiction over navigable waters. For Section 10 purposes, navigable waters are those waters that are subject to the ebb and flow of the tides and/or

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<sup>2</sup> §205A-22, HRS, as amended, specifically exempts aquaculture and mariculture from the definition of development, as do the SMA regulations of the counties. However, the exemption is qualified in the regulations, such that if the activity is or may become part of a larger project, the cumulative impact of which may have a significant environmental or ecological effect on the SMA the activity will be defined as "development." Construction of facilities which are ancillary to the aquaculture operation, such as storage facilities, maintenance buildings, research offices, and restaurants may also not be considered exempt. It is, therefore advisable to check with the County administering agency to determine the practical scope and effect of the exemption on any particular project.

are presently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce. Under Section 404 the Federal Water Pollution Control Act Amendments of 1972 (Clean Water Act), the ACOE and the EPA jurisdiction over discharge of dredged or fill materials into the "waters of the United States." "Waters of the United States" was expanded to be a much broader term than "navigable waters." It includes all navigable waters, plus, all other waters such as lakes, rivers, streams, mud flats, sand flats, wetlands, wet meadows, natural ponds, the use, degradation or destruction of which could affect commerce. The regulatory definition specifically includes any body of water from which fish or shellfish are or could be taken and sold. Under Section 404, a permit is required from the ACOE (a Department of the Army permit) prior to the discharge of any dredge or fill material in wetlands or other waters.

One of the controversial aspects of wetlands regulation is determining what constitutes a wetland. Currently, there is an active debate within the Federal government concerning the working definition of wetlands. In 1989 and 1991, the ACOE, EPA, U.S. Fish and Wildlife Service, and Soil Conservation Service jointly issued new manuals for delineating wetlands. As of this writing these new manuals have not been adopted. However, it is likely that new guidelines and definitions will be adopted with the change in the Federal administration in 1993. It is the responsibility of the ACOE District Engineer to make the initial determination of whether a project will affect a wetland. It is prudent to check with the ACOE early to obtain its determination.

The State and County governments may utilize their own definitions or have their own interpretation of what constitutes a wetland. It is therefore also prudent to check with the Coastal Zone Management Program and if the project is within a Special Management Area, the County planning department (Department of Land Utilization, City and County of Honolulu) if there is any question concerning the existence of a wetland.

The discharge of dredged and fill materials is also interpreted broadly. In addition to the placing of fill materials such as dirt or rubble into a wetland, placing of pilings or other structures, and the clearing of land with mechanized equipment have been deemed to be discharges requiring a permit.

Maintenance and repair of existing structures are for the most part exempt from the Department of Army (DA) Permit requirements.

In the process of considering an application for a DA permit, the application will be circulated to other Federal agencies, such as the U.S. Fish and Wildlife Service and the National Marine Fisheries Service for endangered species concerns, and the Advisory Council on Historic Preservation for historic and archaeological concerns. The ACOE must also obtain a determination from the State that issuance of the permit will be consistent with the State Coastal Zone Management policies and with the State Water Quality standards. The permit cannot generally be issued without these determinations by the State.

Issuance of a DA Permit is based on a "public interest review" which evaluates the probable impacts of a project, including its cumulative impacts, and its intended use. This decision process requires a balancing of the reasonable benefits which can be expected to accrue from an activity against its reasonably foreseeable detriments. All factors which may be relevant to a proposed activity are required to be considered including, but not limited to, conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply, water quality, energy needs, safety, property ownership and in general the needs and welfare of the people.

The decision whether to authorize a project, and if so, the conditions under which it will be permitted to occur, will then be determined by the outcome of this "general balancing process." The EPA has the authority to make the ultimate determination on permit issuance. However, in most instances, it does not countermand the ACOE determination.

### 3. Effluent Discharge<sup>3</sup>

One of the greatest concerns of aquaculture operators centers around regulatory requirements pertaining to effluent discharge. Aquaculture facilities that discharge directly into natural waters will usually come under the jurisdiction of a number of agencies at the Federal, State and County level. For example, a discharge ditch constructed between a facility and the shoreline will necessarily pass through the County Special Management Area, the County Shoreline Setback, and possibly the State Conservation District. The ditch is likely to terminate at or near the shoreline, inside the State Conservation District and within the jurisdiction of the Army Corps of Engineers. The Army Corps jurisdiction has been discussed in the Wetlands section above. The Special Management Area Permit, Shoreline Setback Variance and Conservation District Use Application have been discussed in the Land Use and Coastal Management section above. This section focusses on other regulatory schemes which relate directly to the permitting and monitoring of aquaculture effluent discharges.

#### Federal National Pollution Discharge Elimination System Permit (NPDES)

Under the Clean Water Act of 1977, no "point source" discharge of pollutants into any waters is allowed without a permit issued under National Pollutant Discharge Elimination System (NPDES) guidelines. An NPDES permit can be issued by the U.S. Environmental Protection Agency (EPA) or by an authorized state agency. In Hawaii, the authorized agency is the State Department of Health (DOH).

The EPA has established Federal discharge standards. These discharge standards are quite broad, since they are applied to virtually all domestic and industrial wastewater, as well as hazardous and toxic chemicals. The EPA has set up specific discharge standards for aquaculture activities that take place in open waters. Aquaculture facilities located inland from the coast in enclosed ponds, are generally considered as "concentrated aquatic animal production facilities" -- the administrative equivalent of agricultural feed lots. In 1979, NPDES regulations for concentrated aquatic animal production facilities were redefined, exempting from NPDES permits (on a case-by-case basis) warm water facilities producing less than 100,000 pounds of animals per year, and facilities discharging during fewer than 30 days per year. However, most large aquaculture facilities exceed this level of production. In addition, even facilities which are small enough to qualify for the federal exemption must still conform to the state water quality standards.

Permission to discharge effluent from an aquaculture facility into a natural body of water (or man-made body of water which flows into a natural body of water) is obtained in the form of an NPDES permit issued by the DOH. This permit is issued for a set time period and specifies limits on discharge volume and on effluent concentrations that are anticipated to exceed state water quality criteria for the receiving body of water. The NPDES permit may also specify limits for chemicals potentially hazardous to marine life.

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<sup>3</sup> Materials in this section are taken largely from, Aquaculture Effluent Discharge Program: Year 1 Final Report, published by the Center for Tropical and Subtropical Aquaculture, February, 1990, (revised and reprinted July, 1990).

For particular facilities, the limits are currently established through negotiations between the discharger and the DOH. The most important considerations are the ability of the receiving environment to assimilate the waste and the practicality of treatment to reduce concentrations of various effluents prior to discharge. Once the NPDES permit is granted, the discharger is required to monitor effluent volume and concentration.

### Hawaii State Water Quality Standards

Pursuant to the Clean Water Act of 1977, the State of Hawaii, through the DOH, has adopted specific water quality regulations. The state regulations that may apply to aquaculture discharges in state waters are described in detail in Title 11, Chapter 54 of the Hawaii Administrative Rules (HAR).

In general, these standards are designed to preserve "ambient" conditions in streams, wetlands, and the ocean around Hawaii. Historically, these standards have been applied based on the assumption that any change from ambient conditions is detrimental. Thus, ambient conditions for a particular project are generally defined as "water quality conditions that would occur in the receiving waters if these waters were not influenced by the proposed new human activity." Because Hawaii's coastal waters are generally low in nutrients and suspended material, the State's standards for these pollutants in the marine environment are relatively strict.

According to State law, no project is allowed to lower the water quality below the State standards unless this change is "justifiable as a result of important economic or social developments, and will not interfere with an ongoing legal use of the waters." §11-54-01.1 HAR. Section 11-54-04 HAR provides, as a basic criterion, that "All waters shall be free of substances attributable to domestic, industrial, or other controllable sources of pollutants."

For regulatory purposes, Hawaii's marine waters have been divided into those which are relatively pristine (Class AA), and those which are not as pristine (Class A). In Class AA areas, no Zones of Mixing are allowed, which severely limits the possibility of obtaining a discharge permit. Specific Class AA regions around each island are listed in §11-54-03(b), HAR. All areas not specifically listed as Class AA are assigned to Class A. In Class A areas, the discharge of pollutants can be permitted, with due consideration for environmental impact and public interest. One should check the Department of Health maps to determine the classification of any specific body of water or area of coastal water.

State law provides separate regulations for discharges into different types of aquatic environments, each involving a different set of parameters to be measured and standards which must be met. These environments include: 1) inland waters; 2) estuaries; 3) bays; 4) open coastal waters; and 5) oceanic waters.

New "industrial discharges" (most new aquaculture discharges would come within the regulatory definition) in estuaries and bays have been significantly curtailed by State regulation, and are limited to a few already developed areas.

### Zones of Mixing (ZOMs)

State and Federal regulations require that all effluent be treated before disposal, using the "Best Available Technology" that is feasible from an economic and technical standpoint. In cases where the "best available" treatment cannot yield an effluent clean enough to meet State standards, a Zone of Mixing (ZOM) can be established and permitted by DOH to allow "initial dilution" of the effluent. §11-54-09, HAR.

A ZOM is a defined area around a point of discharge where concentrations of pollutants are allowed to be higher than those specified in State standards. Beyond the boundary of the ZOM, concentrations of all pollutants must remain below the appropriate criteria for the receiving water. In practice, many state waters do not meet the specified standards for some parameters under "natural" conditions. In such areas, pre-discharge monitoring is important to establish that the discharger is not responsible for violations of ZOM permit restrictions.

Since the ZOM is a form of variance, it can only be issued if the DOH determines that:

- the project is in the public interest;
- there is no substantial danger to human health and safety;
- serious hardship (without compensating public benefits) would result from requiring the discharge to comply with State water quality standards;
- the discharge does not violate the "basic discharge standards" applicable to all waters;
- the discharge will not unreasonably interfere with other actual or probable uses of the water area; and
- the discharge has received or will receive the best degree of treatment or control.

Section 11-54 09(c)(5), HAR. State law requires that a public hearing be held before a ZOM can be issued. This hearing can also double as the hearing for the NPDES permit, if necessary.

The process of defining a site-specific ZOM can be one of the more difficult steps in obtaining a permit for an aquaculture discharge.

Zones of Mixing are most easily applied to offshore projects, such as municipal waste outfalls. In these cases, it is relatively easy to model plume dispersion, and such outfalls are often relatively far away from "sensitive receivers" (i.e., unique natural areas and popular recreational areas). However, because offshore outfalls are extremely expensive to design and construct, most aquaculture effluent is discharged near the shoreline. The resulting nearshore effluent plumes are much more difficult to model and monitor than those offshore. Mixing rates and plume dispersion are influenced by many factors, including wind, waves, tidal currents, bottom contours, and nearby terrestrial runoff. In addition, the nearshore biotic environment is generally more heterogeneous than offshore, so environmental impacts are relatively difficult to forecast.

For these reasons, extensive oceanographic studies are often necessary to determine appropriate ZOMs for nearshore discharges. Such studies may need to consider a variety of factors, including the distribution of sensitive aquatic or marine environments, valuable marine resources in the area, and the location of popular recreational sites, in relation to the discharge point.

Zone of Mixing permits must be renewed and reevaluated at least every five years. If better treatment technologies or new information become available, the ZOM may be modified to require new technologies.

#### Section 401 Water Quality Certification

A Section 401 Water Quality Certification is a prerequisite for obtaining a Department of the Army (DA) permit (described above). In essence, the applicant certifies that the proposed project will comply with State and Federal water quality regulations and must submit to the DOH appropriate data in support of this claim. Such data would include estimates of discharge quantity and quality, and a demonstration that the best practicable methods of effluent treatment or control will be used. §11-54-9.1, HAR. These data are reviewed by DOH, which publishes the proposed Water Quality Certification for public comment prior to its issuance.

### Conservation District Use Permit

As discussed above, the Conservation District covers submerged lands seaward from the shoreline. Construction and operation of a discharge ditch or pipe between an aquaculture facility and the shoreline (or an offshore discharge pipe) requires a permit from the Department of Land and Natural Resources (DLNR) through a Conservation District Use Application (CDUA). Construction activities in the ocean will also require an Ocean Waters Work Permit from DLNR. In practice, these two permits can be processed simultaneously.

Generally, information which accompanies a CDUA for a discharge or outfall must be quite detailed and focus on marine resources and benthic ecology. The requirements for these permits, as well as those for the SMA permit prescribe that a detailed Environmental Assessment or Environmental Impact Statement must be prepared for an aquaculture discharge into the marine environment. The field studies and preparation of this assessment document, which can also accompany a Department of the Army permit application, represent a major "initial cost" involved in obtaining the permits for an aquaculture facility.

### Underground Injection Control

If an aquaculture operation discharges its effluent into an underground injection well, it will not need any of the effluent related permits discussed above. It will, however, need an Underground Injection Well permit from the DOH. For purposes of underground injection control (UIC) the State has classified aquifers and underground sources of drinking water as either exempt, i.e., generally not serving as a source of drinking water, or non-exempt, i.e., all other aquifers. On each island, the Department of Health has established a UIC Line. Lands *mauka* of the line are non-exempt. Lands *makai* are exempt. The standards for issuing permits depend upon whether the proposed injection well is into an exempt or non-exempt aquifer.

Aquaculture injection wells may be classified as a subclass B well and permitted *mauka* of the UIC Line if the water in the receiving formation has either: 1) an equal or greater chloride concentration as that of the injected fluid; or 2) a total dissolved solids concentration in excess of five thousand mg/L. §11-23-06, HAR. If this test is not met, the well can only be sited *makai* of the line.

## **4. Human and Animal Health Regulations**

As indicated by the sections above, there are many land use and environmental regulations which may apply to the siting and operation of an aquaculture facility. There are also regulations which control the manner in which an aquaculture facility operates, particularly as it relates to the production of food for human consumption, and the protection of indigenous animals from outside species. A potential farmer must be aware of these restrictions from the early planning stages, as they affect the type of fish and organisms may be raised in Hawaii and the type of pesticides, chemicals, drugs and feed additives that may be used.

Hawaii has strict restrictions on the importation of non-domestic animals and organisms into the State. The Federal government also has strict controls on the importation of certain species. The Hawaii State Department of Agriculture maintains lists of permitted, restricted and prohibited animals and organisms. One should verify with the Plant Quarantine Division that the specie or organism one wishes to raise is permitted in Hawaii.

Both Hawaii and the Federal government have regulations designed to protect humans and animals from unhealthful and injurious food and food products. At the Federal level, the primary regulations are those promulgated under the Federal Food Drug and Cosmetic Act. Generally, the Food and Drug Administration (FDA) regulates the use of food additives while the U.S. EPA

regulations establish levels of tolerances for various chemical pesticides for use on agricultural and food products. In addition, the FDA must approve any animal drugs used directly on animals or as feed additives. An FDA spokesperson at a recent conference, stated that "the FDA will be tightening surveillance of the aquaculture industry...."<sup>4</sup> Again, it is important that the potential farmer ascertain whether the desired method of aquaculture is affected by these regulations.

The State also has regulations which make it unlawful to take, or sell, any aquatic food from any body of water which the DOH finds and declares polluted to the extent that such pollution contaminates the food and renders it unwholesome or injurious to health. §11-29-4(a), HAR. If the DOH finds such polluted conditions at an aquaculture facility, it can shut the facility down.

The State also has specific requirements for handling and processing shellfish and general sanitation requirements for facilities handling or storing food.

## 5. General Business Requirements

Anyone starting an aquaculture operation in Hawaii will be subject to a variety of government taxes, regulations and requirements which apply to all businesses. This section will provide a brief overview of a number of these requirements and the contacts where one may obtain more detailed information.

### Where To Obtain Information

There are several good sources of information and assistance for the small business person in Hawaii. The Department of Business, Economic Development and Tourism (DBED) operates the Business Action Center, specifically to assist small business development in the state. They publish several excellent guides, including "Starting A Business In Hawaii" and "Hawaii's Business Regulations: A Summary." These publications can be obtained from the Center at the address and phone number listed below. Each State department administering the various taxes and requirements also provides specific information regarding compliance. Finally, there are several useful private publications available at local bookstores.

### State Requirements

**State Income Tax** Employers are required to collect and withhold State income tax from employees. Information and forms for this purpose can be obtained from the Department of Taxation.

**General Excise Tax** Virtually anyone doing business in Hawaii must obtain a General Excise Tax License from the Department of Taxation. The one-time fee is \$20.00.

Most businesses must pay a General Excise Tax of four percent (4%) of gross revenue. For certain wholesale transactions the rate is only one-half percent (1/2%). The tax is on the business, not on the consumer, and must be paid monthly, quarterly, or semi-annually, depending upon the level of the gross revenues. A use tax may also apply on imported tangible personal property upon which the General Excise Tax is not paid. Both taxes are deductible from one's State income tax liability. Information and report forms can be obtained from the Department of Taxation.

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<sup>4</sup> Guy Jensen, Ph.D, Director of FDA Center for Veterinary Medicine speaking at the National Convention of Catfish Farmers of America, February 1992, reported in "Regional Notes, Center for Tropical and SubTropical Aquaculture," June, 1992.

- Business Registration** Businesses other than sole proprietorships must register with the State Department of Commerce and Consumer Affairs. The fees range from \$3.00 for a general partnership to \$50.00 minimum for corporations.
- Unemployment Insurance** Hawaii imposes an unemployment tax on any employer with one or more employees. The tax rates vary from year to year, and for ongoing business rates also vary according to the claims experience of the employer. Information on current rates and other requirements can be obtained from the State Department of Labor and Industrial Relations, Unemployment Insurance Division.
- Workers' Compensation Insurance** Employers are required to carry Workers' Compensation Insurance. This coverage must provide medical benefits and certain scheduled wage replacement benefits for work-related injury or illness. The cost of the insurance must be born entirely by the employer and cannot be passed on to the employee. Failure to provide the required insurance can result in a penalty of not less than \$250, or \$10 for each worker for every day during which the failure continues, whichever sum is greater. Information on benefits and other requirements can be obtained from the State Department of Labor and Industrial Relations, Disability Compensation Division.
- Temporary Disability Insurance** Employers must provide Temporary Disability Insurance (TDI) or sick leave benefits to eligible workers who are unable to work due to a nonwork related disability or injury. Generally, workers are not eligible unless they have been working at least 20 hours per week for at least 14 weeks and earning at least \$400 during the four most recent calendar quarters. Generally, the TDI provides 55% of the worker's average weekly wage for up to 26 weeks. An employer can meet the requirements by purchasing the insurance from an approved carrier or providing an approved sick leave policy. The employer may collect part of the cost of providing the TDI from covered employees. The employee share can be deducted from the employees wages but only up to one-half of one percent of the employees weekly wages, up to a maximum set by the Department of Labor and Industrial Relations each year. Failure to provide the required coverage can result in a penalty of not less than \$25, or \$1 for each worker for every day during which the failure continues, whichever sum is greater. Information on benefits and other requirements can be obtained from the State Department of Labor and Industrial Relations, Disability Compensation Division.
- Prepaid Health Care Insurance** Employers must provide covered workers with medical and hospital care for nonwork-related illness or injury by purchasing an approved health care plan such as Kaiser or HMO, by adopting an approved self-insured health care plan, or negotiating a collective bargaining agreement which provides benefits at least equivalent to the required benefits. The employer may collect part of the cost of providing the coverage from covered employees. The requirements do not apply to workers employed for less than 20 hours per week. The requirements also do not apply to seasonal agricultural workers and certain other types of workers. The employee share can be deducted from the employee's wages up to one half of the premium cost at a rate of no more than one and one-half percent (1.5%) of the worker's monthly wages. Failure to provide the required coverage can result in a penalty of not less than \$25, or \$1 for each worker for every day during

which the failure continues, whichever sum is greater. Information on benefits and other requirements can be obtained from the State Department of Labor and Industrial Relations, Disability Compensation Division.

### County Requirements

- Business License** In certain circumstances, a business license from the County may be required. One should contact the Department of Finance in the respective counties for further information on their requirements.
- Property Tax** Real property, land and improvements are subject to property tax. No property tax is assessed on business inventory or other personal property. Assessments are at 100% of "fair market value." Various rates apply for land and improvements and classes of property. According to the DBED handbook, fiscal 1992 commercial rates per \$1,000 net assessed value are: Oahu \$8.51; Hawaii \$8.50 (building), \$10.00 (land); Kauai \$7.59 (building), \$7.99 (land); and Maui \$6.50.

### Federal Requirements

In addition to the various State requirements, any business operation faces a number of Federal requirements. Again, a prospective aquaculturist should consult the various information sources listed above and the Federal government agencies for detailed information. This section lists only some of the more significant requirements.

- Social Security and Income Tax** Employers are required to collect and withhold federal Social Security and income taxes. In addition to withholding Social Security taxes, an employer must also pay Social Security on the employees wages. One should consult the Internal Revenue Service for detailed reporting information and forms.
- Federal Unemployment Tax** In addition to the State unemployment tax, an employer must pay Federal unemployment tax if the employer pays an employee more than \$1,500 in a calendar year. At certain levels of tax liability, the payments must be made with a tax deposit coupon at an authorized bank.
- Other Requirements** An employer must also comply with employee health and safety regulations, wage-hour and child labor laws, if certain fringe benefits are provided, with ERISA. The newly enacted Americans with Disabilities Act also effects hiring practices and physical access requirements for businesses. More specific information regarding these programs and requirements is available from the federal government.
- Federal Income Tax** Federal Income tax requirements and considerations that may apply to aquaculture are well beyond the scope of this work. However, in many instances under the Federal tax laws, aquaculture is considered to be a type of farming or agriculture and may be given to special tax treatment. Therefore, anyone with an aquaculture operation should consult with an accountant or tax attorney for more specific advise and information.

General Business Requirements Contacts

State Department of Business Economic  
Development & Tourism  
Business Action Center  
1130 North Nimitz Highway, Suite A-254  
Honolulu, Hawaii 96817  
(808) 586-2545

Small Business Information Service  
Grosvenor Center, Mauka Tower  
737 Bishop Street, Suite 1900  
Honolulu, Hawaii 96813  
(808) 586-2600

Internal Revenue Service  
Prince Kuhio Federal Building  
Room 1002  
300 Ala Moana Blvd  
Honolulu, Hawaii 96813  
(808) 541-1040

State Department of Taxation  
Taxpayers Services Branch  
830 Punchbowl Street  
Honolulu, Hawaii 96813  
(808) 548-4242

State Department of Commerce  
and Consumer Affairs  
Business Registration Division  
1010 Richards Street  
Honolulu, Hawaii 96813  
(808) 586-2727

State Department of Labor and  
Industrial Relations  
830 Punchbowl Street  
Honolulu, Hawaii 96813  
Workers' Compensation  
(808) 548-4180  
Temporary Disability Insurance  
(808) 548-7821  
Pre-Paid Health Care  
(808) 548-4046  
Labor law information  
(808) 548-6594  
Disability Compensation Division  
(808) 548-7821  
Unemployment Insurance Division  
(808) 548-3024

## D. TRADITIONAL HAWAIIAN FISHPONDS

One aspect of aquaculture that is unique to Hawaii is its ancient Hawaiian fishponds. The early Hawaiian people used a system of natural and man made enclosures to raise, trap and harvest fish and other aquatic organisms. Although some of the fishponds have been destroyed by development or natural forces, many exist today.

There is currently growing interest in revitalizing the fishponds and placing them back into production, on both subsistence and commercial bases. Anyone interested in operating a Hawaiian fishpond for aquaculture purposes faces all of the same concerns that would be faced by any other similarly sited aquaculture operation. In addition, because of their unique historic, cultural, and social significance, revitalization, development and operation of fishponds raises its own set of issues and concerns.

Hawaiian fishponds have been the subject of extensive study, concerning their archeological and cultural significance, the economics of revitalization and operation, permitting problems and the like.<sup>5</sup>

The State of Hawaii in conjunction with the community has also taken several recent initiatives to promote the revitalization of fishponds. In September 1991, the Governor convened the Molokai Fishpond Restoration Workshop to examine issues and questions regarding fishpond revitalization. During 1992, the Governor's Task Force on Molokai Fishpond Restoration met periodically to continue the exploration of fishpond related issues and set in motion the process for revitalizing and operating two fishponds on the island of Molokai. The Task Force has done considerable work in identifying and exploring community, regulatory, archeological and other concerns relating to fishpond development. In the context of the revitalization of the two ponds, the Task Force and the Aquaculture Development Program in the Department of Land and Natural Resources are taking innovative approaches to the applicable land use and environmental permitting. This work may significantly change and simplify the permitting for revitalization and operation of fishponds in a traditional manner. Anyone interested in fishpond development should inquire specifically with the Aquaculture Development Program concerning these efforts and the unique nature of fishpond revitalization.

The following are some of the concerns which are of heightened significance for fishpond revitalization and operation. This list is intended to be illustrative, not exhaustive of all concerns.

- *Historic and archaeological significance.* Any activity involving fishponds will require appropriate historic and archeological review.
- *Cultural issues.* Fishponds have cultural significance to the Hawaiian community and issues concerning appropriateness of restoration techniques, subsistence versus commercial use etc., may arise.
- *Navigational servitude issues.* Where fishpond walls have broken down and the fishponds have been used for boating and recreation, issues concerning U.S. Army Corp permitting and the navigational servitude may arise.
- *Submerged lands issues.* Many fishponds encompass public submerged lands, raising leasing, resource allocation and other issues. Some fishponds likewise encompass ceded lands raising issues concerning the entitlements of native Hawaiians.
- *Konohiki fishing rights.* Hawaii state law preserves the essence of certain fishing and

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<sup>5</sup> A good bibliography regarding fishponds can be found in DHM Planners, Inc. and Public Archaeology Section, Applied Research Group-Bishop Museum, 1989. *Hawaiian Fishpond Study: Islands of O'ahu, Moloka'i, and Hawai'i*. Report prepared for the Hawaii Coastal Zone Management Program, Office of State Planning, Honolulu.

fisheries management rights vested under the 1839 Law of Kamehameha III. §187A-23 HRS. Exercise of these rights may conflict with submerged land leasing and the operation of certain fishponds. For a good discussion of Konohiki fishing rights see Native Hawaiian Rights Handbook, M. MacKenzie, 1991, and Ocean Leasing for Hawaii, Aquaculture Development Program, 1981.

## **E. PERMIT SEQUENCING**

Despite the fact that aquaculture development is supported by the State of Hawaii, the sheer number of agencies and permits involved can give the impression of creating enormous roadblocks. However, with careful planning and preparation, the process of obtaining permits and certifications from various government agencies, while complex, can proceed more or less concurrently through several agencies at once, and the data requirements of most agencies can be satisfied by a single Environmental Assessment document.

Planning, preparation and an understanding of which permits will be required are essential to efficiently obtaining permits for an aquaculture facility. The first step for a potential farmer should be to determine in which land use and coastal management areas the project site is located, and to identify any sensitive resources, such as wetlands, shorelines or waterways, which may be affected. Based on the location and the potentially affected resources, one should determine which regulations and permit requirements might apply and consult with the appropriate agencies as to whether they will assert jurisdiction, their concerns, and information requirements. It is also a good idea at the outset to consult with the Aquaculture Development Program, DLNR, for its help in planning the most efficient course of action.

In planning a course of action, one should be aware of two different considerations. First, there are certain legal requirements as to which permits must be obtained and which approvals must be granted before others. Second, one must consider the types of information needed for each permit or approval and coordinate the collection and presentation of the information. In other words, if water quality information is required for a DA permit, a CDUA, and an NPDES permit, determine the data needed for all of the applications and consider developing it all at one time, regardless of the order the applications are made. This will mitigate costs and save repetition and time.

The environmental review process is a good way to minimize repetition of effort and documentation. Frequently, a well prepared comprehensive environmental review document can provide the basic project information required by all the various permitting agencies in one coordinated document. The one document can be the foundation for each application. This can save time and money. For these reasons and because the environmental review process must be completed prior to any final agency action on any permit, the environmental review process is always a good place to begin the permit approval process.

Under Hawaii law, the decision-making authority concerning the environmental review documents is granted to the first agency receiving an application for project approval (the "lead agency"). In practice, it is often preferable to have this authority reside with the agency having jurisdiction over the resource subject to the greatest impacts from the proposed project. Thus, based on the location, affected resources, and agency concerns, one should determine the expected level of environmental review, i.e., an Environmental Assessment (EA), or a full blown Environmental Impact Statement (EIS), the agency with the most critical concerns, and decide, if there is a choice, which agency to approach first.

If this "lead" agency reviews the environmental assessment and grants a "negative declaration," no further environmental review should be required by other agencies. However, if the lead agency determines that an EIS will be required, an EIS must then be prepared, reviewed, may be subject to

a public hearing, and finally accepted by the lead agency prior to final action on any permit by any agency. Thus, it is critical to begin the environmental review process at the earliest feasible time.

The order of obtaining certain permits is provided by law. If an SMA permit is required, it must be obtained prior to any other permit decision. Grading and Building permits, on the other hand cannot be issued until all other permits have been obtained. Other permits also have sequencing requirements. *Within the legal sequencing parameters, the actual order of applying for and obtaining permits will depend on the location, scope and nature of a particular project, and is ultimately up to the applicant.* The following illustrates some of the considerations in permit sequencing which might apply to aquaculture projects.

#### Permit Sequencing Approach:

Step One. Determine your land use district and other location attributes: Are you in a Conservation District? A Special Management Area? On the Shoreline? In a Ground Water Management Area? Will you affect waters of Hawaii or the United States?

Step Two. Determine what significant resources you will affect: Are there Historic Properties? Wetlands? Ocean, stream or lake waters?

Step Three. Determine which permits you will be required to obtain. See Table 1 for an quick overview of some permit requirements.

Step Four. Determine the lead agency and begin preparation of environmental review documentation.

Step Five. If historic properties are involved, you should begin working with the State Historic Preservation Division immediately. The Historic Preservation office must be given an opportunity to review the project prior to final action by any other agency.

Step Six. If you are in a Special Management Area (SMA), you must obtain your SMA permit before you can obtain any other permit. You may process a Shoreline Setback Variance in conjunction with the SMA permit. You must complete the environmental review process before an SMA permit can be granted. The historic review process must also be completed prior to approval, if historic properties are involved.

Step Seven. If you need an Department of Army (DA) permit you should begin the application and review process early. All other permits, except a building permit and grading and grubbing permit must be obtained before the DA permit can be granted. However, the DA permit must be reviewed by other Federal agencies, and the applicant must obtain a Water Quality Certification and a Coastal Zone Consistency Determination from the State prior to DA permit approval. These reviews, and particularly the Water Quality Certification, can take considerable time and require the collection and development of considerable data by the applicant and the agencies. Environmental review must also be completed prior to approval.

Step Eight. If you are in the Conservation District, you will need to submit a Conservation District Use Application (CDUA). Prior to approval of the CDUA, you will need to obtain a Sanitation permit, if applicable, and a Water Use permit if you are in a Ground Water Management Area. Environmental review must also be completed prior to approval.

Step Nine If you need an NPDES permit, you should begin discussions with DOH at an early time. Although there are no other permits or requirements, other than environmental review, which must precede an NPDES permit, the collection of water quality data and the agency consideration can take a considerable amount of time. If the process is not started early, it could delay the ultimate granting of a DA permit, if needed, or a Building or Grading permit.

Step Ten. If a DA permit is required, have all other permits, except the Building Permit and Grading permit been granted?

Step Eleven. Obtain a Building permit and a Grading permit, if all other required permits and approvals have been granted.

# SIGNIFICANT REGULATORY AREAS FOR AQUACULTURE ACTIVITIES

SEAWARD OF SHORELINE	SHORELINE AREA	INLAND
<p><b>LIKELY REQUIREMENTS:</b></p> <p>EIS                      DA Permit                      Conservation District Use Application                      Ocean Waters Permit                      CZM Consistency(Federal permits)                      Clean Water Cert.(Federal permits)                      NPDES/ZOM                      Building Permit</p> <p><b>POSSIBLE REQUIREMENTS:</b></p> <p>Historic Review(Fishponds)</p>	<p><b>LIKELY REQUIREMENTS:</b></p> <p>EIS                      Special Management Area Permit                      Shoreline Setback Variance                      NPDES/ZOM/UIC                      Grading, Grubbing Permit                      Building Permit</p> <p><b>POSSIBLE REQUIREMENTS:</b></p> <p>DA Permit                      CZM Consistency(Federal Permits)                      Clean Water Cert.(Federal Permits)                      Historic Review                      CDUA                      Water Use(Water Management Area)</p>	<p><b>LIKELY REQUIREMENTS:</b></p> <p>EA                      NPDES/ZOM/UIC                      Grading, Grubbing Permit                      Building Permit</p> <p><b>POSSIBLE REQUIREMENTS:</b></p> <p>EIS                      Historic Review                      CDUA                      CZM Consistency(Federal permits)                      DA Permit(Wetlands)                      Water Use(Water Management Area)</p>
<p><b>SPECIAL MANAGEMENT AREA</b>                      MINIMUM 100 YARDS                      FROM SHORELINE</p>		
<p><b>SHORELINE SETBACK</b>                      20-40                      FEET</p>		

Table One  
 Adapted from Permits and Environmental Requirements for Aquaculture in Hawaii,  
 Revised January 1980, Aquaculture Development Program, Dept. of Planning and Economic Development,  
 State of Hawaii

TABLE 1

## F. LAND USE AND ENVIRONMENTAL REGULATIONS AND PERMITS<sup>6</sup>

This section provides synopses of over twenty Federal, State, and County permits and regulations which may apply to aquaculture operations. For each permit or regulation, the legal authority, purpose, applicability to aquaculture, administering agency, application information requirements, public participation, sequencing requirements, and where applicable the fees or costs, are provided. No synopsis can substitute for reading the statutes and regulations themselves, and for contacting the agencies directly to discuss their requirements as applied to any specific project. Furthermore, laws, regulations and interpretations change constantly. One must therefore, always check on the currency of any particular law or regulation. The permits and requirements are organized by whether they are administered by the Federal, State or County governments.

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<sup>6</sup> Preparation of this section greatly assisted by the work of William W. L. Yuen, Esq. and Cynthia D. Charlton, Esq. found in DHM, Inc., Hawaii Fishpond Study, Coastal Zone Management Program and the Historic Preservation Division, Department of Land and Natural Resources, September, 1990; and of William A. Brewer, Permits and Environmental Requirements for Aquaculture in Hawaii, published by Department of Planning and Economic Development, 1980.

# 1. FEDERAL REGULATIONS AND PERMITS

## FEDERAL ENVIRONMENTAL IMPACT STATEMENT

### Authority

- National Environmental Policy Act of 1969, Public Law 91-190, 42 U.S.C. 4321 et seq.
- Title 40 Code of Federal Regulations, Parts 1500-1508, Council on Environmental Quality Guidelines

### Purpose

The National Environmental Policy Act of 1969 (NEPA), establishes a process for review of the environmental impacts of actions taken by the Federal government. This review is intended to ensure that environmental concerns are examined and alternatives considered prior to making the final decision on a project or action. This is accomplished by the preparation of either an Environmental Assessment (EA) or an Environmental Impact Statement (EIS), which reviews the environmental impacts of a project and discusses alternatives and mitigation measures.

### Applicability to Aquaculture

Environmental review is required for any project involving Federal funding, issuance of a Federal permit, or undertaken by the Federal government, which activity has the potential to significantly affect the human environment. Federal agencies may allow categorical exemptions for activities which do not individually or cumulatively have a significant effect of the human environment. 40 CFR 1507.3. If a project is not categorically exempt, an EA must be prepared which briefly provides sufficient evidence and analysis for determining whether the project will have a significant effect and require an EIS or whether the agency can make a Finding Of No Significant Impact (FONSI).

If the reviewing agency concludes the project will have a significant effect, an EIS must be prepared. An EIS is a full and fair discussion of the significant environmental impacts and should inform the public and the decision makers as to reasonable alternatives which would minimize adverse impacts or enhance the quality of the environment.

Aquaculture related activities which could require a Federal environmental review include: projects involving sites listed or eligible for listing in the National Register of Historic Places; dredging and filling of wetlands and other waters; activities in navigable waters; and activities affecting endangered species.

### Administering Agency

The Federal agency which funds, permits, or undertakes the proposed activity is responsible for determining the need for an EIS and coordinating its preparation and review. If more than one agency is involved, then the agency with the most significant involvement or concerns will usually be designated the "lead" agency. Federal agencies must, to the fullest extent possible, cooperate with state and local agencies to reduce the duplication between Federal, state and local environmental review requirements. 40 CFR 1506.2. Such cooperation includes: 1) joint planning processes; 2) joint environmental research; 3) joint hearings; and 4) joint environmental

assessments or environmental impact statements. Generally, a single environmental review document will suffice for Federal, state and local compliance.

### **Information Requirements**

Format and informational requirements are detailed in 40 CFR 1502. These requirements are similar to those for environmental reviews at the state level, which are detailed in the State EIS section below. Each Federal agency typically has its own specific regulations concerning the preparation of EAs and EISs. Basically, an EIS must describe the full scope of the activity and consider direct and indirect environmental impacts of the activity over time. Such impacts include changes in land use patterns, energy supply and demand, floodplain development, air and water quality, noise levels, water resource use, wetlands, coastal zone and fish and wildlife habitat.

### **Public Participation**

When an EIS is required, the agency must solicit public comment on the draft EIS. A public hearing will be held when required by the agency's enabling statutes or regulations or when the agency deems it appropriate considering the degree of environmental controversy or public interest. 40 CFR 1506.6. An agency must respond to written comments and comments received at public hearings as part of a final EIS. 40 CFR 1503.2.

### **Processing Time**

The time requirement to complete the environmental review will vary on the scope of the proposed project, the magnitude of the impacts, and the number of Federal, state and local permits required. Periods of three to four months for a minor non-controversial project and a year or more for major actions with significant impacts would not be unusual.

### **Sequence of Filing**

The environmental review process must be completed prior to a final decision on the proposed project by the Federal agency(s) involved. The environmental review process should be commenced early in the planning process to assist with project design and to ensure the timely processing of required permits.

### **Cost**

The cost of preparing the environmental review documents is highly variable, depending on the scope of the project, its impacts, the number of permits involved and the amount of controversy surrounding the project.

# U.S. DEPARTMENT OF THE ARMY PERMIT

## Authority

- Section 10 of the Rivers and Harbor Act of 1899, 33 U.S.C. 403
- Section 404 of the Clean Water Act, as amended, 33 U.S.C. 1344
- Section 103 of the Marine Protection, Research and Sanctuaries Act, 33 U.S.C. 1413
- Title 33 Code of Federal Regulations, Parts 320-330, Regulatory Programs of the Corps of Engineers

## Purpose

The Department of the Army (DA) Permit program was originally established to ensure that the navigational characteristics of coastal waters of the United States were not impaired by development. The jurisdiction of the permit program under the Army Corp of Engineers (ACOE) originally extended only to those waters of the United States which were considered navigable. Activities which could interfere with navigation required a permit under the Rivers and Harbors Act. However, with passage of the Clean Water Act, the authority of the ACOE was extended to include issuance of permits for discharge of dredge or fill material into "waters of the United States" which includes, wetlands, ponds, and any waters the degradation of which could affect commerce.

## Applicability to Aquaculture

Under Section 10 of the Rivers and Harbors Act, a DA permit is required for structures or work in navigable waters of the U.S. Structures and work include piers, pilings, boat docks, breakwaters, revetment, riprap, permanent moorings, power transmission lines, or any other obstacles or obstructions, and any dredging or disposal of dredged material or other modification of a navigable water. 40 CFR 322.2(b) and (c). For Section 10, navigable waters are those waters that are subject to the ebb and flow of the tides and/or are presently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce.

Under Section 404 of the Clean Water Act a DA permit is required for the discharge of dredged or fill materials into waters of the United States. Waters of the United States includes all navigable waters, plus, all other waters such as lakes, rivers, streams, mud flats, sand flats, wetlands, wet meadows, natural ponds, the use, degradation or destruction of which could affect commerce. The regulatory definition specifically includes any body of water from which fish or shellfish are or could be taken and sold. 33 CFR 328.3(3)(ii).<sup>7</sup>

Maintenance and repair of existing structures is for the most part exempt from the DA Permit requirements.

Issuance of a DA Permit is based on a "public interest review" which evaluates the probable impacts of a project, including its cumulative impacts, and its intended use. This decision process

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<sup>7</sup> The reconstruction of an existing fishpond wall would in most cases not trigger the full requirements of the DA Permit process, providing the wall is to be reconstructed in the same location and is similar in size to the original fishpond wall, and providing that the pond is not being used for navigation. A certain amount of discretion is provided the ACOE in interpreting the DA Permit requirements so that certain actions which are generally permitted can be processed administratively. An applicant should consult the ACOE regarding their specific wall reconstruction proposal.

requires a balancing of the reasonable benefits which can be expected to accrue from an activity against its reasonably foreseeable detriments. All factors which may be relevant to a proposed activity are required to be considered including, conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply, water quality, energy needs, safety, property ownership and in general the needs and welfare of the people. 33 CFR 302.4(a). The decision whether to authorize a project, and if so the under what conditions, will be determined by the outcome of this "general balancing process."

### **Administering Agency**

The U.S. Army Corps of Engineers is responsible for administering and granting DA Permits.

Operations Branch  
U.S. Army Engineer District, Honolulu  
Building 230  
Fort Shafter, Hawaii, 96858-5440  
(808) 438-1500

### **Information Requirements**

The ACOE basically requires that the proposed work be physically described in sufficient detail so that its potential impact on the affected environment can be fully evaluated. The ACOE's evaluation extends considerably beyond the potential impact of the project on navigation and includes consideration of: conservation, economics, historic values, water quality, aesthetics, coastal zone management, recreation, water supply, general environmental concerns, and use, energy needs, safety, food production, flood damage prevention, fish and wildlife values, and, in general, the needs and welfare of the people.

Both narrative description and detailed plans and drawings are required. In the case of actions with significant potential environmental effects, an EIS is required.

### **Public Participation**

A public notice soliciting comments on the permit application is issued within 15 days after the receipt of a complete application. 33 CFR 325(2)(d)(1). The comment period on the application is 15 days to 30 days from the date the public notice is issued, which period can be extended an additional 30 days. Depending on the complexity of the proposal, a public hearing may be required.

### **Processing Time**

The DA Permit process varies with the scale and complexity of the proposed action. If all information requirements have been met and there are no substantive comments to the proposed action, a DA Permit can be issued 60 days after the receipt of a complete application. If an action provokes controversy and/or additional information is required (e.g., preparation of an EIS) issuance of a DA Permit can take one year or more.

### **Sequence of Filing**

A DA permit will not be issued until all related permits, certifications, and authorizations required by the Federal, state and county governments have been obtained. At the discretion of the ACOE, however, the DA permit can be processed and issued concurrently with other permits. Prior to issuing a DA permit, the ACOE must consult with other affected Federal agencies: U.S. Fish and

Wildlife and National Marine Fisheries Service, if endangered species critical habitat is involved; Advisory Council on Historic Preservation if a site listed or eligible for listing on the National Register of Historic Properties is involved. If the project is located within the State's coastal zone (see section on coastal zone management) the ACOE must obtain a determination that the project will be consistent with the coastal zone management program. If discharges of effluent into waters of the State are involved the ACOE must obtain a certification from the State that the project is consistent its with water quality standards.

### **Cost**

The cost of preparing the application, project plans, an EA and if required an EIS, can be substantial depending on the size of the property, the complexity of the proposed action and surrounding environmental conditions.

A permit filing fee of \$100.00 is charged for commercial or industrial uses and a \$10.00 filing fee is charged for non-commercial use. Payment of the fee will be required prior to issuance of the DA Permit.

## SECTION 106 REVIEW

### NATIONAL HISTORIC PRESERVATION ACT

#### Authority

- National Historic Preservation Act of 1966, as amended, Public Law 89-665; 16 U.S.C. 470 et seq.
- Title 36 Code of Federal Regulations, Part 800, Protection of Historic Properties, Regulations of the Advisory Council on Historic Preservation

#### Purpose

The purpose of Section 106 of the National Historic Preservation Act (NHPA) is to avoid unnecessary harm to historic properties from Federal actions. Section 106 of the NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties, and to afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings.

#### Applicability to Aquaculture

A Section 106 review is required whenever properties listed on the National Register of Historic Properties, properties formally determined to be eligible for listing, and properties not formally determined eligible but which meet the National Register eligibility criteria, may be affected by a Federal action. This broad applicability means that properties which have not yet been listed and even those not yet discovered can be subject to the Section 106 requirements. Federal actions are actions undertaken directly by Federal agencies, activities receiving direct or indirect Federal financial assistance, or activities requiring permits or other approvals from Federal agencies.

The review process involves five basic steps:

- 1) identifying and evaluating historic properties;
- 2) assessing effects of the project;
- 3) consultation between the agency and the State Historic Preservation Officer (SHPO) regarding the manner in which to proceed;
- 4) ACHP review and comment; and
- 5) implementation and action by the agency.

The intent of the process is for the agency, SHPO and ACHP to reach agreement on the manner in which to proceed in light of potential effects on the historic property.

If it is determined that there will be an adverse effect and agreement is reached as to what steps the agency will take to mitigate the adverse effects, a Memorandum of Agreement (MOA) will be signed and the agency will act accordingly. If no agreement is reached, the ACHP makes its comments and the entire package is forwarded to the applying agency for consideration prior to proceeding with the proposed activity. It is up to the agency to determine the course of action to take in light of the historic preservation considerations.

## **Administering Agency**

The Advisory Council on Historic Preservation in consultation with the SHPO is responsible for administering the Section 106 review and providing comments.

Advisory Council On Historic Preservation  
1100 Pennsylvania Avenue, N.W.  
Suite 809  
Washington, D.C. 20004

State Historic Preservation Division  
Department of Land and Natural Resources  
State of Hawaii  
33 South King Street, 6th Floor  
Honolulu, Hawaii 96813  
(808) 584-0045

## **Information Requirements**

The information required depends on the course of the review and the result of the initial evaluation of the property. If the process is fully executed the information will include at least the following:

- a description of the undertaking, including photographs, maps and drawings, as necessary;
- a description of the efforts used to identify historic properties;
- a description of the affected historic properties, with information on the significant characteristics of each property;
- a description of the effects of the undertaking on historic properties and the basis for the determinations;
- a description and evaluation of any alternatives or mitigation measures that the agency proposes for dealing with the undertaking's effects;
- a description and evaluation of any alternatives or mitigation measures that were considered but not chosen and the reason for their rejection;
- documentation of the consultation with the SHPO;
- a description of the agency's efforts to obtain and consider the views of affected local governments and other interested persons;
- the planning and approval schedule for the undertaking;
- copies or summaries of any written views submitted to the agency concerning the effects;
- any additional information needed to understand the undertaking; and
- a summary of the views of the SHPO and any interested parties.

## **Public Participation**

The agency is required to provide adequate opportunity for the public to receive information and express their views. 36 CFR 800.5(e).

## **Processing Time**

The time required to complete Steps 1 through 3 of the review process are dependent on the agency. If the agency submits a signed MOA with the required documentation for review by the Advisory Council, review can take up to 30 days. If there is no MOA the agency can request issuance of the Advisory Council's comments within 60 days after all of the required documentation is submitted. 36 CFR 800.6.

### **Sequence of Filing**

It is important that consideration of historic properties occur in the early stages of project planning to ensure that preservation concerns receive thorough consideration as the project is planned. Early review also permits modifications to a project while they are relatively easy to accomplish and reduces the potential for conflict and delay.

### **Cost**

The cost to the agency of preparing the required documentation varies with the size of the property and the complexity of the proposed undertaking.

## 2. STATE REGULATIONS AND PERMITS

### ENVIRONMENTAL IMPACT STATEMENT - STATE

#### Authority

- Chapter 343, Hawaii Revised Statutes, as amended, Environmental Impact Statements
- Title 11, Chapter 200, Hawaii Administrative Rules, Environmental Impact Statement Administrative Rules

#### Purpose

Chapter 343, HRS, establishes a system of environmental review at the State and County levels which is intended to ensure that environmental concerns are given appropriate consideration in decision making along with economic and technical considerations. §11-200-1, HAR. This is accomplished first by the preparation of an Environmental Assessment (EA) to determine whether an action may have a significant environmental effect. If it is determined to have such an effect the an Environmental Impact Statement (EIS) must be prepared. An EIS is an informational document, which describes the proposed action and which discloses the environmental effects of a proposed action, the effects of a proposed action on the economic and social welfare of the community and State, the effects of the economic activities arising out of the proposed action, measures proposed to minimize adverse effects, and alternatives to the action and their environmental effects.

The State environmental review process is modelled on the Federal National Environmental Policy Act of 1969. If both Federal and State agencies are involved with the proposed project the environmental review must be coordinated.

#### Applicability to Aquaculture

Except for unusually small aquaculture projects or projects entailing administratively determined "insignificant" environmental impacts, an EA is required for actions which are proposed by State and County agencies, as well as actions proposed by the private sector which require prior approval from an agency, and which fall within any of the following categories:<sup>8</sup>

- 1) propose the use of State or County lands or funds, other than funds to be used for feasibility or planning studies for possible future programs or projects which an agency has not approved;
- 2) propose any use on land within the Conservation District, as classified under Chapter 205, HRS;

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<sup>8</sup> Section 183-44, HRS, provides that "repairs, strengthening, reinforcement, and maintenance and emergency repair of fishponds shall not be construed as actions 'proposing any use' within the context of §343-5, HRS." Emergency repair is defined by §183-44 b(1), HRS, as "that work necessary to repair damages to fishponds arising from natural forces or events of human creation not due to the willful neglect of the owner, of such a character that the efficiency, esthetic character or health of the fishpond, neighboring activities of persons, or existing flora and fauna will be endangered in the absence of correction of existing conditions by repair, strengthening, reinforcement, or maintenance." Section 183-44b(2), HRS, defines repairs and maintenance of fishponds as "any work performed relative to the walls, floor, or other traditional natural feature of the fishpond and its appurtenances, the purposes of which are to maintain the fishpond in its natural state and safeguard it from damage from environmental forces."

- 3) propose any reclassification of land within the Conservation District, as classified under Chapter 205, HRS;
- 4) propose any use within the shoreline area as defined in §205A-41, HRS (see Shoreline Setback Variance);
- 5) propose any use within any historic site as designated in National Register of Historic Properties or Hawaii Register of Historic Places as provided for in the National Historic Preservation Act of 1966, 16 U.S.C. 470, as amended, or Chapter 6E, HRS; or
- 6) propose any amendment to existing County general plans where such amendment would result in a designation other than agriculture, conservation or preservation.

If a proposed action is not exempt (see below) an EA must be prepared. If the administering agency determines, after reviewing the EA, that the proposed action will not have a significant impact on the environment a "negative declaration" will be issued stating that preparation of an EIS will not be required. If an agency anticipates that a "negative declaration" will be issued, a draft EA must be made available for public review for at least 30 days and in the final EA the agency must respond in writing to comments received. §343-3(b), HRS.

If, for actions covered by the categories described above, the responsible agency determines that the proposed action may have a significant impact on the environment an EIS is required. Actions which may affect State-designated endangered species or the habitat of endangered species are likely to require an EIS.

Section 11-200-8, HAR, provides a list of "classes of action" which are exempt from the preparation of an EA because they are judged to not have a significant impact on the environment. However, if the cumulative impact of actions are significant where the action is normally insignificant, the exemptions listed below are inapplicable.

- 1) operations, repairs or maintenance of existing structures, facilities, equipment, or topographical features, involving negligible or no expansion or change of use beyond that previously existing;
- 2) replacement or reconstruction of existing structures and facilities where the new structure will be located generally on the same site and will have substantially the same purpose, capacity, density, height, and dimensions as the structure replaced;
- 3) construction and location of single, new, small facilities or structures and the alteration and modification of same and installation of new, small, equipment and facilities and the alteration and modification of same including but not limited to:
  - (A) single family residences not in conjunction with the building of two or more such units;
  - (B) multi-unit structures designed for not more than four dwelling units if not in conjunction with the building of two or more such structures;
  - (C) stores, offices and restaurants designed for total occupant load of twenty persons or less, if not in conjunction with the building of two or more such structures; and
  - (D) water, sewage, electrical, gas, telephone, and other essential public utility services extensions to serve such structures or facilities; and accessory or appurtenant structures including garages, carports, patios, swimming pools, and fences;
- 4) minor alterations in the conditions of land, water, or vegetation;
- 5) basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource;
- 6) construction or placement of minor structures accessory to existing facilities;
- 7) interior alterations involving things such as partitions, plumbing, and electrical conveyances;
- 8) demolition of structures, except those structures located on any historic site as designated in the National Register of Historic Properties or Hawaii Register of Historic Places; and

- 9) zoning variances except: use, density, height, parking requirements and shoreline setback variances.

### **Administering Agency**

For State environmental review purposes, actions are divided into two groups, Applicant Actions and Agency Actions.

**Applicant Actions** -- The State or County agency to whom the applicant first applies for any permit connected with an action that falls under any of the categories requiring an EA, is responsible for determining the need for an EIS. The agency is also responsible for acceptance of the final EIS.

**Agency Actions** -- Government initiated actions (e.g., those projects involving the use of State or County lands or funds) are assessed by the agency proposing the project to determine the need for an EIS. The Governor or the respective County Mayor is responsible for the acceptance of the final EIS for Agency Actions.

The Office of Environmental Quality Control (OEQC) is responsible for handling the processing of the EIS for both Agency and Applicant Actions.

Office of Environmental Quality Control  
Central Pacific Plaza  
220 S. King Street  
Fourth Floor  
Honolulu, Hawaii 96813  
(808) 586-4185

### **Information Requirements**

Title 11, Chapter 200, HAR, outlines the information requirements for an EA and a final EIS. Both the EA and EIS must address each of the required information areas in sufficient detail to allow decision makers to fully anticipate the environmental consequences of a proposed action.

An Environmental Assessment must contain the following information:

- 1) identification of the applicant or proposing agency;
- 2) identification of the approving agency, if applicable;
- 3) identification of agencies consulted in making the assessment;
- 4) a general description of the action's technical, economic, social, and environmental characteristics;
- 5) a summary description of the affected environment, including suitable and adequate location and site maps;
- 6) identification and summary of major impacts and alternatives considered, if any;
- 7) proposed mitigation measures, if any;
- 8) a determination of the need for an EIS;
- 9) findings and reasons supporting determination; and
- 10) agencies to be consulted in the preparation of the EIS, if applicable.

A final Environmental Impact Statement, at a minimum, must contain the following information:

- 1) a summary sheet which concisely discusses the following:
  - brief description of the action;
  - significant beneficial and adverse impacts;

- proposed mitigation measures;
  - alternatives considered;
  - unresolved issues; and
  - compatibility with land use plans and policies, and listing of permits or approvals;
- 2) a table of contents;
  - 3) a statement of purpose and need for action;
  - 4) a project description;
  - 5) a description of any known alternatives for the action;
  - 6) a description of the environmental setting, including a description of the environment in the vicinity of the action, as it exists before commencement of the action, from both a local and regional perspective;
  - 7) a statement of the relationship of the proposed action to land use plans, policies, and controls for the affected area;
  - 8) a statement of the probable impact of the proposed action on the environment, which shall include consideration of all phases of the action and consideration of all consequences on the environment; direct and indirect effects shall be included;
  - 9) a discussion of the relationship between local short term uses of the human environment and the maintenance and enhancement of long-term productivity;
  - 10) a discussion addressing all irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented;
  - 11) a discussion of all probable adverse environmental effects which cannot be avoided;
  - 12) a discussion of mitigation measures proposed to minimize impact;
  - 13) a summary of unresolved issues and either a discussion of how such issues will be resolved prior to commencement of the action, or what overriding reasons there are for proceeding without resolving the problems;
  - 14) a list identifying all governmental agencies, other organizations and private individuals consulted in preparing the statement;
  - 15) reproductions of all substantive comments and responses made during the consultation process;
  - 16) comments and recommendations received on the draft EIS;
  - 17) a list of all persons, organizations and agencies commenting on the draft EIS;
  - 18) responses of the applicant to significant environmental points raised during the review process.

### **Public Participation**

If a negative declaration is anticipated the agency must make a "draft EA" available for public comment for 30 days. If after reviewing an EA, an agency makes a determination that preparation of an EIS is required, a notice is published in the OEQC Bulletin advising the public of the EIS preparation. The Environmental Impact Statement Preparation Notice--prepared by the agency requiring the EIS--summarizes the proposed action and lists the reasons supporting the determination. The Notice includes the name and address of a person who may be contacted for further information about the proposed action.

Following the publication of the Notice, the public has 30 days in which to request to be a consulted party during the EIS's preparation. After a draft EIS has been prepared and submitted for review, the public has an additional 45 days during which to comment in writing. The applicant must respond in writing to any public comments. Both the comments and the applicant's response must be included in the final EIS submitted to the administering department.

For Applicant Actions, a determination as to the acceptability of a final EIS must be made within 30 days of filing the final EIS with the administering department and the OEQC. The 30-day period may be extended at the request of the applicant for a period not to exceed 15 days. There is no maximum period for determining the acceptability of Agency Actions. No public hearing is

required under Chapter 343 HRS, but one or more public hearings are not unusual in the project review and permitting process.

Acceptance of an EA or EIS does not mean that a project is approved, it is merely a condition which must precede a request for permit approval.

### **State-Federal EIS Coordination**

Section 343-5(f), HRS, requires that whenever an action is subject to both Federal and State environmental review, the OEQC and State agencies shall cooperate with Federal agencies to the fullest extent possible to reduce duplication between Federal and State requirements. Such cooperation, to the fullest extent possible, is required to include the preparation of joint environmental impact statements with concurrent public review and processing at both levels of government. Where Federal law has environmental impact statement requirements in addition to, but not in conflict with Chapter 343, the OEQC and agencies are required to cooperate in fulfilling these requirements so that one document complies with all applicable laws.

### **Processing Time**

The time requirement to complete the environmental review will vary on the scope of the proposed project, the magnitude of the impacts, and the number of Federal, state and local permits required. Periods of three to four months for a minor non-controversial project and a year or more for major actions with significant impacts would not be unusual.

### **Sequence of Filing**

An EA, and if required an EIS, should be prepared very early on in the planning process to evaluate the significance of a proposed action and insure the timely processing of all required permits.

### **Cost**

There is no specific filing or processing fee associated with the environmental review process. However, the preparation of the environmental review documents can be very expensive depending upon the scope, and complexity of the proposed project and the environmental sensitivity of the surrounding environs.

# CONSERVATION DISTRICT USE APPLICATION

## Authority

- Chapter 205, Hawaii Revised Statutes, as amended, Land Use Commission
- Chapter 183, Hawaii Revised Statutes, as amended, Forest Reservations, Water Development, Zoning
- Title 13, Chapter 2, Administrative Rules of the Department of Land and Natural Resources Providing for Land Use within the Conservation District

## Purpose

The Land Use Commission (LUC) is charged with classifying all lands in the State as either Urban, Rural, Agricultural or Conservation. Conservation districts include areas necessary for protecting watershed and water sources; preserving scenic and historic areas; providing park lands, wilderness and beach reserves; conserving endemic plants, fish and wildlife, including those which are threatened or endangered; preventing floods and soil erosion; forestry; open space areas whose existing openness, natural condition, or present state of use, if retained, would enhance the present or potential value of abutting or surrounding communities, or would maintain or enhance the conservation of natural or scenic resources; areas of value for recreational purposes; other related activities; and other permitted uses not detrimental to a multiple use conservation concept. §205-2(e), HRS. The Board of Land and Natural Resources (BLNR) in the State Department of Land and Natural Resources (DLNR) regulates activity within the Conservation District through the requirement that a Conservation District Use Application (CDUA) be submitted and approved prior to any use of land in the Conservation District. §183-41, HRS.

## Applicability to Aquaculture

Anyone proposing to make any use of lands within the Conservation District is required to submit a CDUA for approval prior to undertaking the proposed use. The Conservation District encompasses large areas of mountain and shoreline lands, along with areas necessary for protecting watersheds and water sources. Also included is most of the State's submerged offshore land and outlying small islands. Most of the State's historic fishponds are in the Conservation District.<sup>9</sup>

Pursuant to Title 13, Chapter 2, HAR, land within the Conservation District is classified into one of four use subzones:

- 1) Protective (P): The objective of this subzone is to protect valuable resources in such designated areas as restricted watersheds, marine, plant and wildlife sanctuaries, and significant historic, archaeological, geological, and volcanological features and sites and other designated unique areas. §13-2-11, HAR.
- 2) Limited (L): The objective of this subzone is to limit uses where natural conditions suggest constraints on human activities (e.g., land susceptible to flooding, erosion, tsunami, volcanic activity or landslides). §13-2-12, HAR.
- 3) Resource (R): The objective of this subzone is to develop areas to ensure sustained use of natural resources, (e.g., future parkland, lands for growing and harvesting of timber, outdoor recreation, and shoreline and ocean waters). §13-2-13, HAR.

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<sup>9</sup> Section 183-44, HRS, provides that certain repair, strengthening, reinforcement, and maintenance activities may occur on fishponds in the Conservation District without the issuance of a CDUA, subject to the BLNR's approval.

- 4) General (G): The objective of this subzone is to designate open space where specific conservation uses may not be defined, but where urban use would be premature. §13-2-14, HAR.

Permitted uses within the Conservation District subzones are cumulative. All uses permitted in the Protective subzone are also permitted in Limited subzone. All uses in the Limited subzone are also permitted in the Resource subzone. All uses in the Resource subzone are permitted in the General subzone. The specific uses permitted in each subzone are listed below. Aquaculture is a permitted use in the Resource and General subzones. The restoration or operation of significant historic and archaeological sites listed on the National Register of Historic Properties or State Register of Historic Places is a permitted use in all of the subzones.

The following land uses are permitted in the Protective (P) subzone:

- 1) research, recreational, and educational uses which require no physical facilities;
- 2) establishment and operation of marine, plant, and wildlife, sanctuaries and refuges, wilderness and scenic areas, including habitat improvements;
- 3) restoration or operation of significant historic and archaeological sites listed on the National or State Register;
- 4) maintenance and protection of desired vegetation, including the removal of dead, deteriorated and noxious plants;
- 5) programs for the control of animal, plant, and marine populations, including fishing and hunting;
- 6) monitoring, observing, and measuring natural resources;
- 7) occasional use; and
- 8) government use where public benefit outweighs any impact on the conservation district.

The following land uses are permitted in the Limited (L) subzone:

- 1) all uses permitted in the Protective subzone;
- 2) emergency warning systems or emergency telephone systems;
- 3) flood, erosion, or siltation control projects; and
- 4) growing or harvesting of forest products.

The following land uses are permitted in the Resource (R) subzone:

- 1) all uses permitted in the Protective and Limited subzones;
- 2) aquaculture;
- 3) artificial reefs; and
- 4) commercial fishing operations.

The following land uses are permitted in the General (G) subzone:

- 1) all permitted uses in the Protective, Resource, and Limited subzones; and
- 2) development of water collection, pumping, storage, control and transmission.

The BLNR uses the following guidelines in considering CDUAs:

- all applications shall be reviewed in such a manner that the objectives of the subzone are given primary consideration;
- all applications shall be reviewed so that any physical hazard identified shall be alleviated when required by the BLNR;

- all applications for subdivision shall address their relationship with the County general plan; and
- all applications shall meet the purpose and intent of the Conservation District. §13-2-21, HAR.

### **Administering Department**

The Conservation District Use Application is administered by the Department of Land and Natural Resources, Office of Conservation and Environmental Affairs. The Board of Land and Natural Resources has the sole responsibility for approving a CDUA and attaching restrictive conditions, if any.

Office of Conservation and Environmental Affairs  
 Department of Land and Natural Resources  
 State of Hawaii  
 1151 Punchbowl Street  
 Honolulu, Hawaii 96813  
 (808) 587-0388

### **Information Requirements**

An application form is available from DLNR. The application must contain:

- an Environmental Assessment or; if required, an Environmental Impact Statement (If an adequate EA and/or EIS has already been prepared for the proposed project in conjunction with some other permit requirement, preparation of a new document will not be required);
- a description of the location and boundaries of the area to be utilized;
- a description of the parcel's characteristics including existing use, structures, utilities, access, vegetation, and topography, including ocean depths and shoreline features;
- a description of any existing covenants, easements, and restrictions for the parcel;
- a survey of any historic site which may be affected by the proposed use, including a plan for protection, salvage or restoration;
- a statement of the reasons for selecting the proposed location;
- a description of the activities to be conducted, including a specification as to whether the activities are commercial or noncommercial, a timetable for construction, deployment and operation of the facilities, and planned levels of use;
- preliminary plans of the proposed development (where applicable these should include site and elevation plans, floor plans, grading and drainage plans and landscaping plans); and
- for use of marine waters a statement on the extent to which the proposed activity will impact the use of marine waters for navigation, fishing and public recreation and a description of any enclosures, fences, stakes, buoys or structures proposed to mark the desired area.

### **Public Participation**

A public hearing is required for:

- all applications which propose to use conservation land for commercial use;
- boundary amendments or amendments to permitted uses within a subzone; and
- conditional uses within the Protective (P) subzone, except, where a public hearing has already been held for the project in conjunction with any federal, state or county permit requirement. §13-2-23, HAR.

## **Processing Time**

The processing time for a CDUA is 180 days from the date the application is officially received.<sup>10</sup> The application is considered during regularly scheduled meetings of the BLNR. If the BLNR fails to act within 180 days after the receipt of an application, the applicant may automatically put his/her land to the proposed use, subject to the conditions outlined in §13- 2-21, HAR. If the application involves an EIS or a contested case hearing, the 180-day period may be extended for an additional 90 days at the request of the applicant, or, subject to approval by the BLNR, for a longer period. §183-41(a), HRS.

## **Sequence of Filing**

The BLNR will not act on an application until the environmental review process has been completed, and if applicable, a Special Management Area Permit, Shoreline Setback Variance, Department of Health approval of sanitation facilities, and water supply permits or approvals have been obtained. If a Permit for Work in Ocean Waters is required, the two applications will be combined under most circumstances. (See, Permit for Work in Ocean Waters section.)

## **Cost**

A filing fee of \$50.00 is required for each Conservation District Use Application filed. An additional fee of \$50.00 is required for each application requiring a public hearing. The cost of assembling the information required to supplement the application can be substantial depending on the size of the property, the complexity of the proposed development and surrounding environmental conditions.

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<sup>10</sup> If the application is for State lands under the control of DLNR, the processing time starts when it signs the application as the land owner. If the activity is on private land, the time frame starts when the application is submitted to DLNR.

# PERMIT FOR WORK IN OCEAN WATERS

## Authority

- Chapter 200, Hawaii Revised Statutes, Ocean Recreation and Coastal Areas
- Title 19, Chapter 42 Section 161, Hawaii Administrative Rules, Department of Land and Natural Resources

## Purpose

To protect navigation and shoreline processes by regulating development activities and the construction or placement of any structure or material within the shores, shore waters, navigable streams and harbors of the State.

## Applicability To Aquaculture

Anyone desiring to perform any dredging, filling or erecting of any construction within the ocean waters or navigable streams of the State, is required to obtain a Permit for Work in Ocean Waters of the State (sometimes referred to as a Permit for Work in Shorewaters of the State) from the DLNR. §200-4(a)(6), §200-6(a), HRS; §19-42-161, HAR. In locations where a Conservation District Use Application is required, as well as the Permit for Work in Ocean Waters, a single permit system is employed. An applicant files the CDUA and the two processes are coordinated.

## Administering Agency

Effective July 1, 1992, the responsibility for these and other functions relating to ocean waters, recreational boating and ocean recreation, were transferred from Department of Transportation to DLNR pursuant to Chapter 200, HRS. The jurisdiction of DLNR under Chapter 200 is to all ocean waters (waters seaward of the upper reaches of the wash of the waves, within the jurisdiction of the state) and navigable streams, except for commercial harbors, which remain under the jurisdiction of the Department of Transportation.

Ocean Recreation Division  
Department of Land and Natural Resources  
79 S. Nimitz Highway  
Honolulu, Hawaii 96813  
(808) 587-1966

## Information Requirements

An applicant for a Permit for Work in Ocean Water of the State is required to submit the following information:

- 1) a tax map which identifies the property the applicant proposes to develop;
- 2) a plot plan of the property drawn to scale with all proposed structures accurately depicted;
- 3) if the parcel abuts the shoreline, a certified shoreline survey is required which shows the actual field location of the shoreline in relation to the position of the proposed facilities;
- 4) elevations and soundings;
- 5) a written description of the proposed project and a statement of objectives;
- 6) a statement of the project's valuation and construction schedule; and
- 7) an Environmental Assessment, and if necessary, an Environmental Impact Statement. (See State Environmental Impact Statement section for environmental review requirements.)

## **PUBLIC PARTICIPATION**

There is no requirement for public hearing or notice. If the permit is being processed in conjunction with a CDUA, the hearing and notice requirements of the CDUA regulations will apply. (See CDUA section.)

## **PROCESSING TIME**

There is no specified time limit for review and action on the permit application. The processing time will depend on the scope and complexity of the project and whether an EIS is required. The application must be reviewed by the Department of Health for compliance with state water quality standards. When the application is combined with a CDUA the processing will be done in conjunction with the CDUA. (See CDUA section for processing time.)

## **SEQUENCE OF FILING**

If the project also requires issuance of a Special Management Area Permit or a Shoreline Setback Variance, these approvals must precede approval of the Permit for Work in Ocean Waters of the State.

## **COST**

The filing fee for the permit is \$50.00.

# HISTORIC SITE REVIEW

## Authority

- Chapter 6E, Hawaii Revised Statutes, Historic Preservation
- National Historic Preservation Act of 1966, as amended, Public Law 89-665; 16 U.S.C., 470 et seq.
- Presidential Executive Order 11593

## Purpose

To protect buildings, structures, objects, districts, areas, and sites, including underwater sites, significant to the history, architecture, archaeology, or culture of the State, its communities or the nation. The review procedure is designed to provide the State adequate advance notice prior to any construction, alteration or improvement of any nature being undertaken on a historic property.

## Applicability to Aquaculture

Before any agency or officer of the State, or Counties, approves any project involving a permit, license, certificate, land use change, subdivision or other entitlement for use, which may affect a historic property, or burial site, the agency shall advise the Historic Preservation Division (HPD) within the Department of Land and Natural Resources and allow the HPD an opportunity to review the effect of the proposed project on historic properties or burial sites. §6E-8, §6E-42, HRS.

Before any construction alteration, disposition or improvement on private land which will affect a historic property on the Hawaiian Register of Historic Places, the landowner shall notify the HPD and allow an opportunity for HPD to review the effect of the activity. The activity cannot commence until the HPD has concurred or 90 days has passed. Within 90 days the HPD shall concur or begin condemnation proceedings, or undertake to record, preserve and salvage any historical information deemed necessary to preserve Hawaiian history. §6E-10, HRS.

Projects by state agencies shall not commence until the HPD concurs. If the HPD does not concur within 90 days, the agency may apply to the Governor, for a decision overruling or sustaining the HPD.

Although the respective State, and Federal historic preservation laws and regulations do not necessarily prohibit alteration or destruction of designated historic places, every effort is usually made by the historic preservation program officials to preserve and protect such resources to the extent permissible by law. Projects affecting historic properties, but judged to be in the best interests of the public, or projects which produce adverse effects to landowners or other affected parties, may be allowed to proceed (following review), provided the State has the opportunity to record, retrieve, or salvage historical data, information, or artifacts which would be otherwise lost.

It is unlawful to take, destroy or alter any historic property located upon lands owned or controlled by the State, or to take injure, destroy or alter any burial site or the contents thereof on any lands, except as permitted by DLNR. §6E-11, HRS.

## Administering Agency

The Historic Site Review requirement is administered by the Historic Preservation Division of the Department of Land and Natural Resources.

State Historic Preservation Division  
Department of Land and Natural Resources  
State of Hawaii  
33 South King Street, 6th Floor  
Honolulu, Hawaii 96813  
(808) 587-0047

### **Information Requirements**

An applicant or agency must file a notice of their intention to perform any action which may impact an historic site 90 days prior to the proposed start date. The applicant must make clear the nature of the proposed action and the precise location of such activities with respect to any historic site. A site plan and scale drawings showing the proposed action are generally required. An archaeological reconnaissance survey may also be required.

Actions affecting historic sites on the National Register or Hawaii Register will also require the preparation of an Environmental Assessment and if determined to be necessary an Environmental Impact Statement. (See State EIS section.)

### **Public Participation**

There is no requirement for a public hearing in connection with a Historic Site Review. Projects affecting a designated historic property will frequently require an EIS and may entail a public hearing on the EIS.

### **Processing Time**

The processing time for a Historic Site Review is 90 days from the date the Historic Preservation Division is officially notified.

### **Sequence of Filing**

By law a permit, license, certificate, land use change, subdivision or other entitlement for use, which may affect a historic property may not be approved without allowing the Historic Preservation Division the opportunity to comment. §6E-42, HRS. It is therefore advisable that the Historic Preservation Division be consulted early on in the planning process to insure the prompt processing of applicable permits.

### **Cost**

There is no fee required for the Historic Site Review. The cost associated with the obtaining the necessary information will vary depending upon the scope and nature of the historic sites affected. An archeological reconnaissance survey, if required, can be costly.

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

## Authorities

- Clean Water Act, as amended, 33 U.S.C. 134)
- Chapter 342D, Part III, Hawaii Revised Statutes, Water Pollution Control
- Title 11, Chapter 54, Hawaii Administrative Rules, Department Of Health, Water Quality Standards
- Title 11, Chapter 55, Hawaii Administrative Rules, Department Of Health, Water Pollution Control

## Purpose

To protect water quality by regulating the discharge of wastewater from fixed point sources into surface waters including wetlands and coastal waters. Fixed point sources include pipes, ditches, channel, tunnels, wells, etc. from which pollutants may be discharged. Ponds, tanks or other aquaculture activities are generally considered fixed point sources.

## Applicability to Aquaculture

A National Pollutant Discharge Elimination System (NPDES) permit is required before any effluent discharge can be made from fixed point sources into surface waters. Most aquaculture operations (unless underground injection wells are used) will result in discharges into surface waters from channels, ditches or other fixed point sources. Warm water facilities producing less than 100,000 pounds of animals per year and facilities discharging during fewer than 30 days per year, may be exempt from the NPDES permit requirement. 40 CFR 122.24(c). The NPDES permit sets specific limits on discharge volume and effluent concentration. It is issued for a set time period of no more than five years. Once granted, monitoring of effluent volume and concentration is usually required. Title 11, Chapters 54 and 55 of the DOH Administrative Rules should be reviewed for specific requirements.

## Administering Agency

The Department of Health, Clean Water Branch is responsible for administering the NPDES permit requirements.

Clean Water Branch  
Environmental Management Division  
Department of Health  
State of Hawaii  
Five Waterfront Plaza  
500 Ala Moana Blvd., Suite 250  
Honolulu, Hawaii 96813  
(808) 586-4200

## Information Requirements

- 1) scaled plans and a description of the proposed activity; and
- 2) a physical-chemical characterization of the proposed effluent, including pH, temperature, dissolved oxygen, nitrogen, phosphorus, chlorine and other information as determined by DOH.

Tests on the existing quality of the receiving water, a survey of the receiving water's ecosystem and an analysis of the prevailing water currents may also be required.

Although an preparation of environmental review documents is not specifically required by the State, if the discharge of effluent or the placement of outfall structures fall under the permit authority of a Federal agency and the project involves the potential for a significant effect on the environment, an Environmental Assessment and possibly an Environmental Impact Statement will be required.

### **Public Participation**

There is no required public hearing. The Department of Health must notify the public of their intent to issue a permit and a hearing may be required if requested by a member of the public.

### **Processing Time**

The processing time for a NPDES permit varies with the complexity of the project. For minor project proposals, processing of the NPDES permit can be expected to take from three to four months. Projects requiring an Environmental Impact Statement may take considerably longer. NPDES permits are issued for a limited period of time, general five years. All NPDES permit applications must be reviewed by the U.S. Environmental Protection Agency.

### **Sequence of Filing**

There is no specific sequencing requirement for NPDES permits.

### **Costs**

A filing fee of \$100 must be paid with the NPDES permit application. The cost of preparing the permit application and required information varies with the scope and complexity of the project and the nature of the surrounding environment. NPDES permits are generally conditioned upon the applicant conducting periodic monitoring tests during the life of the permit to ensure compliance. The costs of conducting such monitoring, including equipment and laboratory analysis, can be considerable.

### **Other Contacts**

U.S. Environmental Protection Agency  
Water Management Division  
215 Fremont Street  
San Francisco, California 94105

## **ZONE OF MIXING APPROVAL**

### **Authority**

- Clean Water Act, as amended, 33 U.S.C. 1344
- Chapter 342D, Part III, Hawaii Revised Statutes, Water Pollution Control
- Title 11, Chapter 54, Hawaii Administrative Rules, Department of Health, Water Quality Standards

### **Purpose**

A zone of mixing is a limited area around the outfall of a fixed point source that provides for the initial dilution of waste discharges upon entry into the receiving waters. Zones of mixing are recognized as being necessary for the assimilation of certain discharges which have received the best degree of treatment or control. It is the objective of these limited zones to provide for a current realistic means of control over the placement and manner of discharges or emissions so as to achieve the highest attainable level of water quality or otherwise to achieve the minimum environmental impact considering initial dilution, dispersion, and reactions from substances which may be considered to be pollutants. §11-54-09(b), HAR.

### **Applicability to Aquaculture**

A Zone of Mixing approval is required for any activity that discharges effluent into a location where water quality standards for that area would be violated by the effluent without further dilution. Specific water quality standards for the State and the classification of receiving waters are found in Title 11, Chapter 54 of the Department of Health Administrative Rules. In general terms, zones of mixing are not allowed for discharges into pristine or protected waters. (Class 1 Inland Waters, Class AA Marine Waters, and Class 1 Marine Bottom Ecosystems. The classifications are found in §11-54-2, through §11-54-7, HAR. Zones of mixing may be allowed for discharges into other waters consistent with the standards and requirements set forth in the administrative rules. A Zone of Mixing approval is normally processed in conjunction with an NPDES permit.

Approval of a Zone of Mixing can only be made if:

- 1) the operation which is making the discharge is in the public interest;
- 2) the discharge does not substantially endanger human health or safety;
- 3) compliance with the existing water quality standards from which a zone of mixing is sought would produce a hardship without greater benefits to the public;
- 4) the basic standards of all waters are not violated; and
- 5) the discharge has/will receive the best degree of treatment or control. §11-54-09(5), HAR.

Every zone of mixing approved and established must be monitored on an ongoing basis by the applicant. §11-54-09(6), HAR.

### **Administering Agency**

The Department of Health, Clean Water Branch is responsible for administering the Zone of Mixing approval. The Department may establish approve the establishment of a zone of mixing after review and concurrence by the U.S. Environmental Protection Agency. §11 HAR 54-09(9).

Clean Water Branch  
Department of Health  
State of Hawaii  
Five Waterfront Plaza  
500 Ala Moana Blvd., Suite 250  
Honolulu, Hawaii i 96813  
(808) 586-4200

Environmental Protection Agency  
Water Management Division  
215 Fremont Street  
San Francisco, California 94105

### **Information Requirements**

The application for a Zone of Mixing approval must be made on the DOH form and concurrent with any application for a NPDES permit. Information required to accompany an application for a Zone of Mixing approval generally includes:

- a complete and detailed description of the present conditions of the receiving waters;
- an explanation of how the proposal will violate the established water quality standards; and
- Additional information as required by the DOH. §11-54-09(c)(1), HAR.

### **Public Participation**

A public hearing is required prior to approval of a Zone of Mixing. If an NPDES permit is being considered in conjunction with a Zone of Mixing, the public notification and comment process established for the NPDES permit can be substituted for the hearing requirement. §11-54-09(c)(4), HAR.

### **Processing Time**

The processing time for a Zone of Mixing approval varies with the complexity of the project. For minor project proposals, processing can be expected to take from three to four months. A Zoning of Mixing approval is issued for a limited period of time (generally five years) and is tied to the approval period for a NPDES permit.

### **Sequence of Filing**

An applicant should consult with the Department of Health early in the planning process to consider applicable water quality standards and effluent disposal alternatives to determine approval requirements and design alternatives.

### **Cost**

The cost of preparing the application and the necessary supplemental information varies with the scope of the project. When established, Zones of Mixing are generally conditioned upon the applicant conducting certain monitoring tests to ensure compliance. The equipment and laboratory cost needed to conduct such monitoring can be expensive.

# WATER QUALITY CERTIFICATION

## Authority

- Clean Water Act, as amended, 33 U.S.C. 1251, et seq.
- Chapter 342D, Hawaii Revised Statutes, Water Pollution
- Title 11, Chapter 54, Hawaii Administrative Rules, Department of Health, Water Quality Standards

## Purpose

To certify that any action involving a Federal license or permit does not or will not violate applicable State Water Quality Standards.

## Applicability to Aquaculture

A water quality certification is required by section 401 of the Clean Water Act, 33 U.S.C. 1251 et seq., of any applicant for a federal license or permit to conduct any activity, including, but not limited to, the construction or operation of facilities which may result in any discharge into navigable waters of the United States. §11-54-09.1, HAR. The Director, DOH, will issue the certification if there is reasonable assurance that applicable water quality standards will not be violated and the best practicable methods of control will be applied to a discharge. §11-54-09.1.01(b), HAR.

## Administering Agency

The Department of Health, Clean Water Branch is responsible for administering the Water Quality Certification, which is issued by the Director.

Clean Water Branch  
Department of Health  
State of Hawaii  
Five Waterfront Plaza  
500 Ala Moana Blvd., Suite 250  
Honolulu, Hawaii 96813  
(808) 586-4200

## Information Requirements

The applicant must submit a complete description of the discharge involved, which shall include:

- a description of the facility or activity, the discharge from construction and operation, the characteristics of the discharge and the location of its entry into state waters;
- a description of equipment and facilities to control discharges;
- a description of the methods and means of monitoring, if applicable; and
- any additional information requested. §11-54-09.1.02, HAR.

## Public Participation

The Director may provide public notice and an opportunity for public comment or hearing, upon request or at the Director's own determination.

### **Processing Time**

The Director is required to act on a request for certification within one year. §11-54-09.1.02(7), HAR. If the Director fails or refuses to act on a request for certification within a reasonable period of time (which shall not exceed one year) after receipt of a complete application, then the certification requirements shall be waived with respect to federal applications. §11-54-09.1.04, HAR.

### **Sequence of Filing**

Water Quality Certification is required prior to the issuance of subject Federal approvals or permits. Therefore, an applicant should apply for the certification at the earliest feasible time and in conjunction with the Federal application.

### **Cost**

A private applicant must pay a filing fee of \$100. In addition, the applicant must pay the costs of publication related to public notification and public hearings.

# **FEDERAL CONSISTENCY REVIEW**

## **COASTAL ZONE MANAGEMENT PROGRAM**

### **Authority**

- Coastal Zone Management Act of 1972, as amended, Public Law 92-5 83, 16 U.S.C. 1451 et seq.
- Chapter 205A, Part I, Hawaii Revised Statutes, Hawaii Coastal Zone Management Act
- Title 15 Code of Federal Regulations, Part 930, Federal Consistency with Approved Coastal Zone Management Programs

### **Purpose**

The Hawaii Coastal Zone Management Act provides a broad set of goals, objectives and policies, consistent with the Federal Coastal Zone Management Act, dealing with protection, management, development, restoration and enhancement of coastal zone recreational, historic, scenic, open space, economic and ecosystem resources. In Hawaii the regulation of activities within the coastal zone is separated into three areas:

- 1) Federal Consistency Review, administered by the Coastal Zone Management Program within the Office of State Planning (OSP);
- 2) Special Management Area Permits; and
- 3) Shoreline Setback Variances, both administered by the counties.

Federal law requires that Federal agencies conduct their planning, management, development and regulatory activities in a manner consistent with the State Coastal Zone Management Program (CZMP). Pursuant to Federal regulation, the state may review all Federal activities within the coastal zone for consistency with the CZMP. If the State determines the Federal activity is not consistent with its CZMP, the Federal activity cannot go forward unless the U.S. Secretary of Commerce overrides the determination. 15 CFR Part 930 et seq.

### **Applicability to Aquaculture**

The Coastal Zone Management Area (Coastal Zone) is defined as all marine waters extending from the upper reaches of the wash of the waves on the shore seaward to the limit of the State's police power and management authority, including the United States's territorial sea and all land areas excluding those lands designated as state forest reserves. §205A-1, HRS. Activities within the Coastal Zone which are Federally funded, require a Federal permit or license, or are conducted by the Federal government and directly impact the Coastal Zone, are subject to review for consistency with the State's CZMP. The review process generally involves:

- 1) a determination by the proponent and applicable Federal agency as to whether the activity is consistent with the CZMP;
- 2) submission of the determination and related information to the OSP for review; and
- 3) OSP's concurrence with or objection to the determination.

## **Administering Agency**

The Office of State Planning, Coastal Zone Management Program is responsible for administering Hawaii's CZMP and conducting Federal Consistency Reviews.

Coastal Zone Management Program  
Office Of State Planning  
P.O. Box 3540  
Honolulu, Hawaii 96811-3540  
(808) 587-2879

## **Information Requirements**

Detailed instructions for preparing the consistency assessment are found in "Hawaii Coastal Zone Management Program Federal Consistency Procedures Guide", available from OSP. In conjunction with the appropriate forms, the applicant must prepare an assessment of the proposed activity's consistency with the CZMP which discusses the proposed activity's effects on the Coastal Zone in terms of how they it furthers or conflicts with the CZMP's objectives and policies; information regarding the status of any State and local environmental permits or reviews associated with the activity; and any supplemental information such as environmental review documents, plans and drawings.

## **Public Participation**

Public notice of a consistency review is required and is generally provided in a Federal agency public notice. Responses are usually requested within 14-30 days of the notice. The OSP weighs all written public comments pertaining to the CZMP policies in its review. Public hearings on the proposed activity, if any, conducted by the Federal agency are also a source of public input in the consistency review process.

## **Processing Time**

The processing time for a consistency review varies with the scope and complexity of the project and the number of permits involved. After receipt of the necessary information, OSP conducts a preliminary review and may request additional information. Next, input from agencies and the public will be requested. When the review is completed, a determination will be made. If OSP determines that the proposed activity is not consistent with the CZMP it will recommend alternative measures that would be more consistent with the CZMP objectives.

## **Sequence of Filing**

The proposed Federal funding, permit or activity cannot go forward until the consistency determination is obtained. Therefore, the review process should be initiated early in the planning and permitting process.

## **Cost**

There is no fee associated with the consistency review. The cost of preparing the necessary information will depend on the scope and complexity of the proposed activity. Generally, most of the necessary information will have been prepared in conjunction with other applicable permits.

# UNDERGROUND INJECTION CONTROL

## Authority

- Federal Safe Drinking Water Act, Pub. Law 93-523, U.S.C. 300f et seq.
- 40 Code of Federal Regulations Part 144
- Chapter 340E, Hawaii Revised Statutes, Safe Drinking Water
- Title 11, Chapter 23 Hawaii Administrative Rules, Underground Injection Control

## Purpose

The purpose of the Underground Injection Control (UIC) program is to protect the quality of the State's underground sources of drinking water from pollution by subsurface disposal of fluids. The program seeks to control the location, construction and operation of injection wells so that injected fluids do not migrate and pollute the underground drinking water sources. §11-23-01, HAR.

## Applicability to Aquaculture

In certain instances aquaculture operations find it advantageous to discharge wastewater into underground injection wells rather than into surface waters. No injection well can be constructed and operated in the State without obtaining a permit from the Department of Health (DOH). For purposes of UIC the State has classified aquifers and underground sources of drinking water as either exempt, i.e., generally not serving as a source of drinking water, or non-exempt, i.e., all other aquifers. On each island, the DOH has established a UIC Line. Lands *mauka* of the line are non-exempt. Lands *makai* are exempt. The standards for issuing permits depend upon whether the proposed injection well is into an exempt or non-exempt aquifer.

In certain circumstances, injection wells from aquaculture may be classified as a subclass B wells permitted *mauka* of the UIC line if the water in the receiving formation has either: 1) an equal or greater chloride concentration as that of the injected fluid; or 2) a total dissolved solids concentration in excess of five thousand mg/L. §11-23-06, HAR. If this test is not met the well can only be sited *makai* of the line.<sup>11</sup>

All new wells must be sited more than one-quarter mile from any part of a drinking water source. Subclass B wells sited *mauka* of the UIC line must in addition submit data concerning the water quality of the aquifer at the location. All wells must be constructed consistent with good engineering practices as recommended by the Honolulu Board of Water Supply's "Water System Standards", dated March 1977. §11-23-09, HAR. All wells must be operated in such a manner as to not cause violations of any DOH rules and regulations. §11-23-11, HAR.

A permit will be issued, for up to five years, for an injection wells into exempted aquifers if the well will not endanger the quality of underground drinking water sources; if it is designed and constructed to operate without causing a violation of applicable rules and laws; and if it is designed and built in compliance with the standards set forth in the rules. For wells injecting into a non-exempt aquifer, the issuance must also be based on an evaluation of the contamination potential of the local water by the injection fluids and the water development potential of the aquifer for public and private consumption. §11-23-16, HAR.

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<sup>11</sup> This assumes that the well is not otherwise prohibited because the disposed fluid is not allowed to be injected under §11-23-06, HAR.

## **Administering Agency**

Wastewater Branch  
Department of Health  
State of Hawaii  
Five Waterfront Plaza  
500 Ala Moana Blvd., Suite 250C  
Honolulu, Hawaii 96813  
(808) 586-4294

## **Information Requirements**

An application must be submitted on the DOH's application form and must include the following data, as well as other items set forth in the regulations:

- (2) facility location;
- (3) tax map key number and map;
- (4) USGS topographic map showing proposed well and all other wells within one quarter mile;
- (9) nature and source of injected fluid;
- (10) proposed design capacity and operating volume;
- (12) elevation section for proposed well;
- (13) description of injection system...and system blueprints;
- (14) details of proposed injection testing;
- (15) for injection wells sited mauka of the uic line, water quality data;
- (17) well log maintained by a geologist;
- (19) complete results of injection testing; and
- (21) nature and source of formation water.

Numbers refer to item numbers in §11-23-13(a), HAR. Items 16-22 are required upon completion of the injection well.

## **Public Participation**

Public notice of applications for injection wells into an underground source of drinking water must be circulated, with a 30 day period provided for public comment. §11-23-14, HAR. If a public hearing is requested by the applicant or an interested party, DOH shall hold a public hearing if the Director determines that there is significant public interest. §11-23-15, HAR.

## **Processing Time**

The rules do not set forth a specific time frame for permit issuance. However, because of the public notice requirement, the minimum time is thirty days.

## **Sequence of Filing**

Upon completion of the application with all required data, the DOH may approve the start of construction. However, approval of the start of construction does not guarantee approval to operate.

## **Cost**

The filing fee for a permit application is \$100. In addition, the applicant must pay all fees assessed for publishing the public notice and for the notice of the public hearing, if required.

# WELL CONSTRUCTION AND PUMP INSTALLATION PERMITS

## Authority

- Chapter 174C, Hawaii Revised Statutes, State Water Code
- Title 13, Subtitle 7, Chapter 168, Hawaii Administrative Rules, Water Use, Wells, and Stream Diversion Works

## Purpose

The purpose of the Well Construction and Pump Installation Permit is to regulate the use and withdrawal of water to assure the maximum and beneficial use of the ground and surface waters of the State. §13-168-1, HAR.

## Applicability to Aquaculture

No well can be constructed, altered or repaired and no pump or pumping equipment can be installed without the issuance of a Well Construction or Pump Installation Permit, respectively. The requirement to obtain a permit extends to all areas of the State including a designated Water Management Area (See also Water Use Permit section). §13-168-12, HAR. All well and pump installations must be operated so as to ensure the prevention of waste and the prevention of contamination of ground water aquifers. All wells must be constructed to meet at least the minimum standards specified in §13-168-13, HAR, which include the standards in Volume I, Part III, section 5, of the publication entitled Water System Standards, State of Hawaii, 1985, adopted by the counties and in the American Water Works Association Standards (ANSI/AWWA E101-77). §13-168-14, HAR.

## Administering Agency

The Commission on Water Resource Management is responsible for administering and granting the Well Construction and Pump Installation Permits.

Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  
1151 Punchbowl Street  
Honolulu, Hawaii 96813  
(808) 587-0265

## Information Requirements

In addition to a completed application form the following information will be required:

- 1) the purpose of the well or pump installation;
- 2) proposed withdrawal and use of water;
- 3) water use permit information if applicable (see Water Use Permit);
- 4) type, size and expected capacity of the well or pump; and
- 5) any additional information the commission needs to clearly understand the proposal.

A pumping test will also be required for new wells or wells that have not had a previous pumping test. §13-168-12(b), HAR.

Within 30 days after the completion of the well or pump installation a Well Completion Report

must be filed. The report is usually prepared by the well driller or pump installation contractor and is submitted on behalf of the applicant. The content of the Completion Report is specified in §13-168-13, HAR.

### **Public Participation**

No public hearing is required in conjunction with the issuance of a Well Construction or Pump Installation Permit.

### **Processing Time**

By rule, the Commission is required to act on an acceptably completed application within ninety days of the receipt of the application. The Commission will issue a permit only if the proposal complies with all applicable laws, rules and review standards. Before approval, the application will be forwarded to the DOH for their review concerning among other things the appropriateness of the well location. §13-168-12, HAR.

### **Sequence of Filing**

In cases where a Water Use Permit is required, the Commission will not issue a Well Construction or Pump Installation Permit until formal approval of a Water Use Permit has been received. An applicant is therefore advised to consult the Commission on Water Resource Management to sequence the submittal of the applicable permit applications.

### **Cost**

A filing fee of \$25 is required with each permit application. The cost of preparing the application and the necessary supplemental information varies with the scope of the project.

# WATER USE PERMIT

## Authority

- Chapter 174C, Hawaii Revised Statutes, State Water Code
- Title 13, Subtitle 7, Chapter 171, Hawaii Administrative Rules, Designation and Regulation of Water Management Areas

## Purpose

The purpose of the Water Use Permit requirement is to establish administrative control over the withdrawal and diversion of ground and surface water in designated Water Management Areas. Water Management Areas are hydrologic areas where water resources are being threatened by existing or proposed withdrawals or diversions of water, water quality problems, or serious disputes, which have been so designated by the Commission on Water Resource Management (the "Commission"). §13-171-11, HAR.

## Applicability to Aquaculture

A Water Use Permit is only required in geographic areas which have been designated by the Commission, pursuant to §174C-41, HRS, as Water Management Areas. The Commission has designated four Ground Water Management Areas on Oahu: Honolulu, Pearl Harbor, Wailua, and Windward Oahu, and the entire island of Molokai.

In those areas designated as Water Management Areas, no withdrawal, diversion, impoundment or consumptive use of water may occur without the issuance of a Water Use Permit. Domestic consumption of water by individual users and catchment systems are exempt from this requirement. §13-171-11(a), HAR.

To obtain a Water Use Permit an applicant must establish that the proposed use of water:

- 1) can be accommodated with the available water source;
- 2) is a reasonable and beneficial use as defined in §13-172-2, HAR;
- 3) will not interfere with any existing legal use of water;
- 4) is consistent with the public interest;
- 5) is consistent with State and County general plans and land use designations; and
- 6) is consistent with County land use plans and policies. §13-171-13, HAR.

## Administering Agency

The Commission on Water Resource Management is responsible for administering and granting the Water Use Permit.

Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  
1151 Punchbowl Street  
Honolulu, Hawaii 96813  
(808) 587-0265

## **Information Requirements**

In addition to a completed application form the following information will be required:

- 1) source of the water supply;
- 2) the quantity and quality of water requested;
- 3) the use of water and any limitations thereon;
- 4) the location of the use of water;
- 5) the location of the well or point of diversion; and
- 6) any other relevant information necessary to adequately understand the proposal.

It is also advisable that an applicant submit a written document with their application that specifically addresses the issues required by §13-171-13, HAR listed in the Applicability to Aquaculture section above.

## **Public Participation**

Upon receipt of the application, notice is published and a copy of the notice is transmitted to the mayor, and the water board of the affected county and any person requesting formal notice. Written objections to the proposal must be submitted within 10 working days of the last public notice. The Commission may then request additional information from the applicant or objectors. A public hearing may also be scheduled at the discretion of the Commission.

## **Processing Time**

By rule the Commission is required to approve or disapprove an acceptably completed application within 90 days of the receipt of the of the application which does not require a public hearing or within 180 days for applications which require a hearing.

## **Sequence of Filing**

An application for a Water Use Permit should be submitted early in the project development process to secure an allocation of the necessary water for the project. A Water Use Permit is also required prior to obtaining a Well Construction permit an a Designated Water Management Area or a CDUA approval for Conservation District lands in a designated Water Management Area.

## **Cost**

A filing fee of \$25 is required to accompany each permit application. The cost of preparing the application and the necessary supplemental information varies with the scope of the project and proposed water use.

### **3. COUNTY REGULATIONS AND PERMITS**

#### **ENVIRONMENTAL IMPACT STATEMENT - COUNTY**

##### **Authority**

- Chapter 343, Hawaii Revised Statutes, as amended, Environmental Impact Statements
- Chapter 205A, Hawaii Revised Statutes, as amended, Coastal Zone Management
- Title 11, Chapter 200, Hawaii Administrative Rules, Environmental Impact Statement Administrative Rules
- Charter of the County of Kauai, City and County of Honolulu, County of Maui, and County of Hawaii
- County Ordinances of the County of Kauai, City and County of Honolulu, County of Maui, and County of Hawaii

##### **Purpose**

*The requirements of Chapter 343, HRS, apply to County agencies and actions in the same manner as to State agencies and actions. For convenient reference the purpose of the environmental review process is reiterated here. For a more detailed discussion please refer to the State EIS section.*

Chapter 343, HRS, establishes a system of environmental review at the State and County levels which is intended to ensure that environmental concerns are given appropriate consideration in decision making along with economic and technical considerations. §11-200-1, HAR. This is accomplished first by the preparation of an Environmental Assessment (EA) to determine whether an action may have a significant environmental effect. If it is determined to have such an effect the an Environmental Impact Statement (EIS) must be prepared. An EIS is an informational document, describes the proposed action and which discloses the environmental effects of a proposed action, effects on the economic and social welfare of the community and State, effects of the economic activities arising out of the proposed action, measures proposed to minimize adverse effects, and alternatives to the action and their environmental effects of the alternatives.

The State environmental review process is modelled on the Federal National Environmental Policy Act of 1969. By both State and Federal regulation, if both Federal and State/County agencies are involved with the proposed project the environmental review must be coordinated.

##### **Applicability to Aquaculture**

The following actions will require environmental review:

- 1) proposed use of County lands or funds, other than funds to be used for feasibility or planning studies for possible future programs or projects which an agency has not approved;
- 2) proposed development on land within the County designated Special Management Area (see Special Management Area Use Permit section);
- 3) proposed use within the shoreline area as defined in §205A-41, HRS (see Shoreline Setback Variance section);
- 4) proposed use within any historic site as designated in the National Register of Historic Properties or the Hawaii Register of Historic Places as provided for in the National Historic Preservation Act of 1966, 16 USC 470, as amended, or Chapter 6E, HRS; or

- 5) proposed amendment to existing County general plans where such amendment would result in a designation other than agriculture, conservation or preservation.

See State EIS section for exempt classes of activities.

### **Administering Agency**

Actions triggering environmental review at the County level are divided into two groups, Applicant Actions and Agency Actions.

Applicant Actions -- The County agency to which the applicant first applies for any permit connected with any non-exempt activity, is responsible for determining the need for an EA and an EIS and is responsible for acceptance of the final environmental review document.

Agency Actions -- For government initiated actions the department proposing the project is responsible for determining the need for an EA and an EIS. The Mayor of the County is responsible for the acceptance of the final environmental review document before agency actions.

For both agency and applicant actions, the processing of the EIS is coordinated between the County department and the Office of Environmental Quality Control (OEQC).

### **Information Requirements**

See generally State EIS section.

### **Public Participation**

See generally State EIS section.

### **Processing Time**

See generally State EIS section.

### **Sequence of Filing**

An EA, and if required an EIS, should be prepared very early on in the planning process to evaluate the significance of a proposed action and insure the timely processing of all required permits.

### **Cost**

There is no filing fee associated with the preparation and processing of the environmental review documents. The cost will depend upon the scope and complexity of the proposed activity and the nature of the affected environment.

# SPECIAL MANAGEMENT AREA USE PERMIT

## COASTAL ZONE MANAGEMENT PROGRAM

### Authority

- Chapter 205A, Part II, Hawaii Revised Statutes, as amended, Special Management Areas
- Special Management Area Rules and Regulations of the County of Kauai, City and County of Honolulu, County of Maui and County of Hawaii.

### Purpose

As part of the State's Coastal Zone Management Program, Hawaii's four counties are required to designate Special Management Area (SMA) boundaries and through the establishment of a permitting process provide special controls on development within this area. This process is intended to avoid the permanent loss of valuable resources and the foreclosure of management options, and to ensure adequate access, by dedication or other means, to public owned or used beaches, recreation areas, and natural reserves. §205A-21, HRS.

The SMA ranges inland from the "shoreline"<sup>12</sup> for a considerable distance (100 yards or greater) and is required to include only shoreline or coastal water related land (Att. Gen. Op. 75-18). The exact boundaries of the SMA are designated on maps which are on file with the administering department of the respective county.

### Applicability to Aquaculture<sup>13</sup>

No development may proceed in the SMA unless an applicant obtains a Special Management Area Use Permit (SMAP) from the granting authority of the respective county. §205A-28, HRS. Section 205A-2, HRS, defines "development" broadly to include:

- the placement or erection of any solid material or any gaseous waste, liquid, solid, or thermal waste;
- grading, removing, dredging, mining, or extraction of any materials;
- change in density or intensity of the use of land, including the division or subdivision of land;
- change in the intensity of use of water, ecology related thereto, or of access thereto; and
- construction, reconstruction, demolition, or alteration of any size of any structure.

There are, however, a number of exemptions that may cover or partially cover aspects of aquaculture development. These include:

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<sup>12</sup> Shoreline is defined as "the upper reaches of the wash of the waves, other than storm and seismic waves, at high tide during the season of the year in which the highest wash of the waves occurs, usually evidenced by the edges of vegetation growth or the upper limit of debris left by the wash of the waves." §205A-1, HRS.

<sup>13</sup> The 1989 Legislature amended Chapter 205A, HRS, Part II. The requirements described in this section are based on the amendments. The counties are at various stages of revising their existing rules and regulations for Special Management Areas to reflect these amendments. At their discretion, the counties may adopt more stringent requirements than those specified. Therefore, an applicant should review the regulations specific to the county in which they apply.

- construction of a single-family residence that is not part of a larger development;
- routine maintenance dredging of existing streams, channels and drainage ways; and
- the use of land for the purpose of cultivating, planting, growing, and harvesting of plants, crops, trees, and other agricultural, horticultural, or forestry products or animal husbandry, or aquaculture or mariculture of plants or animals, or other agricultural purposes subject to review.

§205A-22, HRS, as amended, specifically exempts aquaculture and mariculture from the definition of development, as do the SMA regulations of the County's. However, the exemption is qualified in the regulations, such that if the activity is or may become part of a larger project, the cumulative impact of which may have a significant environmental or ecological effect on the SMA the activity will be defined as "development". Construction of facilities which are ancillary to the aquaculture operation, such as storage facilities, maintenance buildings, research offices, and restaurants may also not be considered exempt. It is, therefore, advisable to check with the County administering agency to determine the practical scope and effect of the exemption on any particular project.

The SMA guidelines in the respective County regulations provide that a SMAP will only be granted if the applicant demonstrates that:

- 1) that development will not have any substantial adverse environmental or ecological effect, except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health, safety, or compelling public interests;
- 2) that the development is consistent with the objectives, policies and special management area guidelines contained in Chapter 205A, HRS, as amended; and
- 3) that the development is consistent with the general plan, development plans, zoning and other applicable ordinances of the respective county.

### Administering Agency

The SMAP is administered by the respective County planning department.

Planning Department  
County of Kauai  
4280 Rice Street  
Lihue, Kauai, Hawaii 96766  
(808) 245-3919

Department of Land Utilization  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813  
(808) 523-4432

Planning Department  
County of Maui  
200 South High Street  
Wailuku, Maui, Hawaii 96793  
(808) 243-7735

Planning Department  
County of Hawaii  
25 Aupuni Street  
Hilo, Hawaii 96720  
(808) 961-8288

The granting authority for the SMAP, depends upon the size and scope of the project. Proposed projects which are less than \$125,000 in value and do not have the potential to cause any substantial adverse environmental or ecological effect can be handled through a SMA Minor Permit which can be issued administratively by the department. For projects which exceed \$125,000 in value or which may have a substantial adverse environmental or ecological impact, the County Planning Commission (on Oahu the City Council) has the authority to grant the SMAP.

## Information Requirements

Along with a completed application form, the applicant will be required to submit the following information:

- 1) a tax map which identifies the property the applicant proposes to develop;
- 2) a plot plan of the property drawn to scale with all proposed structures accurately depicted;
- 3) if the parcel abuts the shoreline, a certified shoreline survey is required which shows the actual field location of the shoreline in relation to the position of the proposed facilities (to be valid the survey must be prepared by a Registered Land Surveyor and confirmed by the Chairman of the Board of Land and Natural Resources);
- 4) a written description of the proposed project and a statement of objectives;
- 5) a statement of the project's valuation as estimated by an architect, engineer, or contractor licensed by the Department of [Regulatory Agencies];
- 6) an Environmental Assessment (EA) and if determined by the administering department that it is necessary an Environmental Impact Statement (EIS) (See State/County EIS section); and
- 7) any additional information as required by the administering department.

## Public Participation

A public hearing is conducted in conjunction with the all SMAP applications. If a Shoreline Setback Variance is also required in connection with the development proposal, a joint public hearing will be held.

## Processing Time

The processing time for a Special Management Area Minor Permit (i.e., a project which is not in excess of \$125,000 and will not have significant environmental impact) ranges from 21 days in the County of Hawaii to 30 days for the other three counties.

The processing time for a Special Management Area Use Permit varies considerably between counties. From the date the completed application is accepted by the administering department, the full processing time for the application is 120 days in the City and County of Honolulu and the County of Hawaii; 120 days in the County of Kauai with the Planning Commission's discretion to extend; and 165 days in the County of Maui.

A number of formal sequencing steps are involved with the processing of a SMAP application. Although the steps are similar between counties, specific time periods for each step vary. An applicant contemplating a development activity in the SMA should consult with the administering department of the respective county as early as possible in the planning process to assess the required processing steps and identify information requirements.

## Sequence of Filing

Issuance of a SMAP is required by statute to precede any other permit approval. If a Shoreline Setback Variance is required in conjunction with a SMAP they will be processed concurrently.

## Cost

The filing fee for a SMAP is (\$200) in the City and County of Honolulu<sup>14</sup> and County of Hawaii, and (\$150) in the County of Kauai and County of Maui.

The cost of preparing a Certified Shoreline Survey, project plans, project valuation, an EA, and if required an EIS, can be substantial depending on the size of the property, the complexity of the proposed development and surrounding environmental conditions. An applicant should consult with a planning firm to estimate the costs specific to their project.

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<sup>14</sup> For all projects other than agriculture, aquaculture, and outdoor recreation, the filing fee for a SMAP in the City and County of Honolulu increases by \$100 per acre up to a maximum of \$2,000.

## **SHORELINE SETBACK VARIANCE (OR SHORELINE AREA VARIANCE) COASTAL ZONE MANAGEMENT PROGRAM**

### **Authority**

- Chapter 205A, Hawaii Revised Statutes, Part III, as amended, Shoreline Setbacks
- Shoreline Setback Rules and Regulations of the County of Kauai, City and County of Honolulu, County of Maui, and County of Hawaii.

### **Purpose**

The purpose of the shoreline setback law is to regulate uses and activities within the shoreline area to preserve and protect the natural shore and open space and to protect against encroachment of structures which may disturb the natural processes of the shoreline and cause erosion of the shoreline. The shoreline setback law establishes a permitting system where, all non-exempt structures must obtain a Shoreline Setback Variance (termed Shoreline Area Variance in Maui County), and meet certain guidelines and criteria.

### **Applicability to Aquaculture<sup>15</sup>**

Anyone proposing to construct a structure<sup>16</sup> in the shoreline area or otherwise physically alter the shoreline area is required to obtain a Shoreline Setback Variance (or Shoreline Area Variance), unless otherwise exempted. The "shoreline area" includes, at least, all of the land area between the shoreline and the shoreline setback line (not less than 20 feet and not more than 40 feet inland). It may include the area between mean sea level and the shoreline (§205A-41, HRS)<sup>17</sup> and be set back at distances greater than 40 feet (§205A-45, HRS, as amended) by county ordinance. In their recently amended rules relating to the shoreline area, Maui County extended shoreline setbacks to a distance of 150 feet in some areas.<sup>18</sup>

The law prohibits most activities involving the mining or taking of sand, dead coral or coral rubble,

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<sup>15</sup> The 1989 Legislature amended Chapter 205A, HRS, Part III. Currently the City and County of Honolulu, and the Counties of Hawaii and Kauai are in the process of revising their existing rules and regulations for shoreline setbacks to reflect these amendments. The County of Maui recently completed their revisions. The requirements described in this section are based on the Legislature's amendments which the counties can be expected to adopt, or in the case of Maui, have adopted. At their discretion, the counties may adopt more stringent requirements than those specified. Because of this, an applicant should review the regulations specific to the county in which they apply.

<sup>16</sup> As defined "structure" includes, but is not limited to, any portion of any building, pavement, road, pipe, flume, utility line, fence, groin, wall, or revetment. §205A-41, HRS.

<sup>17</sup> In the revision of their Rules of the Planning Commission Relating to the Shoreline Area, Maui County choose not to extend their jurisdiction to include the area from the shoreline to the mean sea level.

<sup>18</sup> Section 12-4-6b(3) of Maui County's Rules of the Planning Commission Relating to the Shoreline Area, provides that "a lot with an average lot depth of one hundred sixty feet or more shall have a shoreline setback line either at one hundred fifty feet from the shoreline or at a distance from the shoreline calculated by multiplying the average lot depth of the lot by 0.25 whichever is the least distance from the shoreline."

rocks, soil or other beach or marine deposits from the shoreline area. No variance will be granted unless the following conditions are imposed as appropriate:

- 1) maintain safe lateral access along the shoreline or adequately compensate for its loss;
- 2) minimize the risk of adverse impacts on beach processes;
- 3) minimize the risk of structures failing and becoming loose rocks or rubble on public property; and
- 4) minimize adverse impacts on public views to, from and along the shoreline. §205A-46(c), HRS.

No variance is required, however for structures if they are necessary for or ancillary to continuation of existing agriculture or aquaculture in the shoreline area on June 16, 1989. §205A-44(b)(4), HRS. A Shoreline Setback Variance (or Shoreline Area Variance) may also be granted for a structure or activity otherwise prohibited if the granting authority finds in writing that, based on the record presented, the proposed activity is necessary for or ancillary to, among other things, Aquaculture, or Drainage. §205A-46, HRS, as amended.

### **Administering Department**

The Shoreline Setback Variance (or Shoreline Area Variance) is administered by the respective County planning department.

Planning Department  
County of Kauai  
4230 Rice Street  
Lihue, Kauai, Hawaii 96766

Department of Land Utilization  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Planning Department  
County of Maui  
200 South High Street  
Wailuku, Maui, Hawaii 96793

Planning Department  
County of Hawaii  
25 Aupuni Street  
Hilo, Hawaii 96720

If the Shoreline Setback Variance (or Shoreline Area Variance) is processed alone or in conjunction with a Special Management Area Minor Permit the granting authority is the director of the administering department. If a Special Management Area Use Permit is required in conjunction with the Shoreline Setback Variance (or Shoreline Area Variance), both permit requests are forwarded to the County Planning Commission of the respective county for approval (on Oahu the City Council is the granting authority).

### **Information Requirements**

An applicant for a Shoreline Setback Variance (or Shoreline Area Variance) is required to submit with the completed application form a Certified Shoreline survey showing the actual field location of the shoreline in relation to the position of the proposed facilities. To be valid the survey must be prepared by a Registered Land Surveyor and confirmed by the Chairman of the Board of Land and Natural Resources. Detailed construction plans showing the design of the proposed structure and its relationship to property boundaries and existing topography in and adjacent to the subject property are also required.

An Environmental Assessment (EA) which evaluates the potential impact of a proposed project will be required. If on the basis of the EA's findings it is determined that a significant impact may result from a proposed project, preparation of an Environmental Impact Statement (EIS) will also be required. If an adequate EA and/or EIS has already been prepared for a proposed project in conjunction with some other permit requirement, preparation of a new document will not be

required. (See State EIS and County EIS sections.)

A written statement describing how a proposed project is necessary for, or ancillary to, aquaculture is also required. This statement should specifically address the relationship between aquaculture and each feature of the development proposal.

### **Public Participation**

A public hearing is conducted in conjunction with the request for a Shoreline Setback Variance (or Shoreline Area Variance). If a Special Management Area Use Permit is also required in connection with the development proposal, a joint public hearing will be held.

### **Processing Time**

The processing time for a Shoreline Setback Variance (or Shoreline Area Variance) varies with scale of the project proposal and the need for additional permits (e.g., an SMAP). Within 30 days of the official receipt of a complete application, the Director of the administering department assesses the impact of the project and determines the need for the preparation of an EIS. Within 45 days of the completion of the environmental requirement (i.e., an accepted EIS or if an EIS is not required a Negative Declaration) the administering department will hold a public hearing on the application. Within 45 days after the public hearing is held, the Director will make a written decision and forward it to the applicant. In cases where the variance application is being processed with an application for a Special Management Area Use Permit, the recommendation will be forwarded to the County Planning Commission (City Council on Oahu) for final decision.

### **Sequence of Filing**

If a Special Management Area Use Permit is required in conjunction with the development proposal, the request for a Shoreline Setback Variance (or Shoreline Area Variance) should be filed at the same time so that the applications can be processed concurrently.

### **Cost**

The filing fee for a Shoreline Setback Variance (or Shoreline Area Variance) is (\$100) in the County of Kauai, County of Hawaii, and City and County of Honolulu and (\$150) in the County of Maui. The cost of preparing a Certified Shoreline Survey, construction plans, an EA, and if required an EIS, can be substantial depending on the size of the property, the complexity of the proposed development and surrounding environmental conditions.

# FLOOD PLAIN MANAGEMENT

## Authority

- National Flood Insurance Act of 1968, 42 U.S.C. 4001 et seq.
- Flood Disaster Protection Act of 1973,
- Chapter 179, Hawaii Revised Statutes, Flood Control and Flood Water Conservation
- Chapter 46, Section 11, Hawaii Revised Statutes
- County Ordinances

## Purpose

To protect life and property and reduce public costs for flood control, rescue and relief efforts, Flood Hazard Districts have been established in which various flood proofing measures may be required in accordance with the National Flood Insurance Program.

## Applicability to Aquaculture

Structures located in a Flood Hazard District may be required to be constructed with flood proofing features designed to eliminate or reduce the potential for flood damage. Some examples of flood proofing include the placement of walls or levees around buildings; elevation of buildings; watertight closures; and location of electrical equipment and circuits above expected flood levels. For specific requirements, contact the planning and/or building department in the appropriate county.

## Administering Agency

County planning agencies.

# GRADING, GRUBBING AND STOCKPILING PERMIT

## Authority

- Chapter 180C, Hawaii Revised Statutes, Soil Erosion and Sediment Control
- County Ordinances of the County of Kauai, City and County of Honolulu, County of Maui, and County of Hawaii

## Purpose

To control activities which alter land forms and which have the potential to change drainage patterns, destroy vegetation, cause erosion and produce unsafe or unsightly disfigurement of the landscape.

## Applicability to Aquaculture

Anyone desiring to perform any grading, grubbing, stockpiling, or clearing activities is required to obtain a permit from their respective County Department of Public Works.

## Administering Department

The Grading, Grubbing and Stockpiling Permit is administered by the Department of Public Works of the respective county in which the project is located.

Department of Public Works  
County of Kauai  
3021 Umi Street  
Lihue, Kauai, Hawaii 96766  
(808) 245-3318

Division of Engineering  
Department of Public Works  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813  
(808) 527-5056

Department of Public Works  
County of Maui  
200 South High Street  
Wailuku, Maui, Hawaii 96793  
(808) 243-7845

Department of Public Works  
County of Hawaii  
25 Aupuni Street  
Hilo, Hawaii 96720  
(808) 961-8321

## Information Requirements

The information required for a Grading, Grubbing and Stockpiling Permit is normally presented in the form of a scale drawing, with explanatory and/or supplementary data annotated. An applicant is required to submit the following information:

- 1) all pertinent terrain features;
- 2) a layout and arrangement of the proposed works on a plan view;
- 3) representations to scale of typical cross-sections of cut and fill areas;
- 4) details of topography both before and after work (i.e., existing and proposed elevations);
- 5) identification of erosion control measures;
- 6) estimates in cubic yards of the amount of excavation and embankment and the area in square feet of the land to be graded;
- 7) if material is to be imported or exported from the site, an indication of where the material will come from or where it will be deposited. A grading permit is also required for any such off-site locations as well; and

8) a soils report may also be required in some cases.

Where a graded area is 15,000 square feet or more, the plan should be prepared by a civil engineer licensed in the State of Hawaii. If the project involves more than one acre of land, the applicant must also submit a temporary erosion control plan<sup>19</sup> for review and approval by the administering department.

A performance bond, in an amount equal to the cost of all work and services required to complete the project, is required for all projects involving the movement of more than 500 cubic yards of earth or for excavations and fills of over 15 feet in vertical height.

### **Public Participation**

There is no mandatory requirement for a public hearing in connection with a Grading, Grubbing and Stockpiling Permit.

### **Processing Time**

The processing of the permit application varies with the size of the project proposal. Providing the application contains all the required information, the processing time generally ranges from two to three weeks.

### **Sequence of Filing**

The Grading, Grubbing and Stockpiling Permit will not be granted until an applicant complies with all other environmental and regulatory requirements.

### **Cost**

The filing fee for a Grading, Grubbing and Stockpiling Permit is based on the volume of earth moved or square feet of area denuded. The cost of preparing the required information to accompany the application can be substantial depending on the size of the property and the extent of proposed earth moving activities. An applicant should consult with a civil engineering firm to estimate the costs specific to their project.

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<sup>19</sup> Assistance in preparing an erosion control plan can be obtained free of charge from the U.S. Soil Conservation Service.

# BUILDING PERMIT

## Authority

- Hawaii Revised Statutes
- Charters of the County of Kauai, City and County of Honolulu, County of Maui and County of Hawaii
- County Ordinances of the County of Kauai, City and County of Honolulu, County of Maui and County of Hawaii

## Purpose

To protect the health, safety and welfare of the public through the enforcement of various codes as provided by law including, zoning, building, housing, electrical, and plumbing codes.

## Applicability to Aquaculture

Anyone desiring to erect, construct, enlarge, repair, move, improve, convert, alter, remove, or demolish any building or structure (including most fences and retaining walls) is required to obtain a Building Permit prior to undertaking the activity.

Actions related to the various fishpond types which could potentially require a Building Permit include: construction or reconstruction of walls and fences; and the development of any accessory buildings, roadways or structures.

## Administering Department

The Building Permit is administered by the Department of Public Works in the County of Kauai, Maui and Hawaii and the Building Department in the City and County of Honolulu.

Building Division  
Department of Public Works  
County of Kauai  
3021 Umi Street  
Lihue, Kauai, Hawaii 96766  
(808) 245-3318

Building Department  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813  
(808) 523-4564

Land Use and Codes Administration  
Department of Public Works  
County of Maui  
200 South High Street  
Wailuku, Maui, Hawaii 96793  
(808) 243-7845

Building Division  
Department of Public Works  
County of Hawaii  
25 Aupuni Street  
Hilo, Hawaii 96720  
(808) 961-8331

## Information Requirements

The information required for a Building Permit is presented in the form of detailed scale drawings, with explanatory information annotated. An applicant is required to submit the following information, as pertinent to their project proposal:

- 1) a plot plan showing the location of the proposed action in relation to property lines, other buildings or structures, roadways and easements and any other pertinent information;
- 2) a floor plan which indicates the dimension and use of the rooms;

- 3) a framing plan or typical section view showing ceiling heights and the size and spacing of beams, floor joists, studs, siding, foundation, rafters, etc.;
- 4) exterior elevation views showing the height of the building or structure;
- 5) location of property and owner's address;
- 6) name and address of person preparing the plans (if other than the property owner);
- 7) a contractor's statement as required by Chapter 444, HRS; and
- 8) any additional information as deemed necessary by the administering department.

As required by Chapter 464, HRS, plans and specifications submitted in conjunction with the request for a Building Permit, shall bear the seal and signature of an architect or structural engineer licensed in Hawaii.

### **Public Participation**

There is no requirement for a public hearing in connection with a Building Permit.

### **Processing Time**

The processing of the permit application varies with the size and complexity of the project proposal. The administering department reviews the application and plans for compliance with the respective county zoning ordinance, building, housing, electrical and plumbing codes. The application is routed through a number of County and State agencies with jurisdiction over specific aspects of the proposed work. Each of these agencies is required to sign the application form to indicate the applicant's compliance with applicable laws. If an applicant has not met all of the agency requirements the application will not be signed and the Building Permit will be denied.

### **Sequence of Filing**

A Building Permit will not be granted until an applicant complies with all other environmental and regulatory requirements.

### **Cost**

The filing fee for a Building Permit is calculated on the value of the proposed project. An applicant should consult the administering department of their respective county for specific fee schedules.

## **G. REGULATION OF AQUACULTURE OPERATIONS**

### **1. FEDERAL REGULATIONS AND PERMITS**

#### **U.S. FOOD DRUG AND COSMETIC ACT**

##### **Authority**

- Federal Food Drug and Cosmetic Act, 21 U.S.C. 301 et seq.
- Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C 136 et seq.
- Title 21 Code of Federal Regulations Parts 500 - 589, Animal Drugs, Feeds and Related Products
- Title 40 Code of Federal Regulations Part 180, Tolerances and Exemptions from Tolerances from Pesticide Chemicals in or on Raw Agricultural Commodities

##### **Purpose**

The purpose of the Federal Food Drug and Cosmetic Act (FDCA) is to protect the public from misbranded or adulterated food, drugs, and cosmetics.

##### **Applicability to Aquaculture**

The FDCA prohibits the addition of any poisonous or deleterious substance to food products in interstate commerce, unless permitted by the Food and Drug Administration (FDA). The jurisdiction of the FDA covers virtually all commercial aquaculture production. The regulatory scheme has three areas applicable to aquaculture, food additives, pesticide use on raw agricultural commodities, and animal drugs used directly or in animal feed. For otherwise prohibited food additives which are required for food production or cannot be avoided, the FDA under 21 USC 346 has established regulations as to the quantity and circumstances under which the substance can be used. Pesticides applied to raw agricultural products are regulated pursuant to 21 USC 346 and 346a and the Federal Insecticide, Fungicide, and Rodenticide Act. The standards concerning allowable quantities of regulated pesticides are found at 40 CFR Part 180. Drugs for use on animals used for food and used in animal feed must be approved by the FDA. The regulations concerning the approval and regulation of animal and feed are found at 21 CFR Parts 500 to 589.

##### **Administering Agency**

U.S. Food and Drug Administration  
5600 Fishers Lane  
Rockville, MD 20857  
(301) 443-3783

##### **Information Requirements**

Permits and approvals required for sale of food additives, pesticides and animal drugs and feed would generally apply only to manufacturers. Specific standards, permits and approvals which may apply to the use of food additives, pesticides and animal drugs and feed are beyond the scope of this summary.

## Sequencing

The FDA regulations only apply if and when regulated substances are used by an operator. It is important, however, that the operator be aware of possible restrictions and regulations before engaging in production.

## **2. STATE REGULATIONS AND PERMITS**

### **IMPORTATION OF NON-DOMESTIC ANIMALS**

#### **Authority**

- Chapter 150A, Hawaii Revised Statutes, Hawaii Plant Quarantine Law
- Lacey Act, 18 U.S.C. 42
- Title 4 Subtitle 6, Hawaii Administrative Rules, Department of Agriculture, Division of Plant Industry
- 50 Code of Federal Regulations 16 et seq.

#### **Purpose**

The purpose of the Permit to Import Restricted Commodities Into Hawaii is to restrict or prohibit the importation of specific non-domestic animals or microorganisms that are detrimental to the agricultural and aquacultural industries, natural resources and environment of Hawaii. §4-71-1, HAR.

#### **Applicability to Aquaculture**

Anyone desiring to import animals and microorganism cultures into Hawaii must obtain a Permit to Import Restricted Commodities. The Division maintains three lists: 1) Conditionally Approved Animals; 2) Restricted Animals; and 3) Prohibited Animals. An aquaculture business may obtain a permit to import animals on the Conditionally Approved list and for animals on Part B of the Restricted list. A permittee desiring to import animals on the Restricted list must obtain prior site approval. A bond may be required for certain animals on the restricted list. §4-71-6.5, HAR. The lists should be obtained and the Branch consulted when considering the importation of any species of aquatic animal.

#### **Administering Agency**

The permit is administered by the Plant Quarantine Branch. Permit decisions on animals for which a permit application has been previously made and the Board of Agriculture has ruled, can be made by the Branch Chief. Decisions on new animals or organisms are made by the Board. §4-71-13, HAR.

Department of Agriculture  
Plant Quarantine Branch  
701 Ilalo Street  
Honolulu, Hawaii 96813-5524  
(808) 586-0844

## **Information Requirements**

For animals the entry of which has been previously permitted, an applicant shall submit:

- name and address of the shipper and importer;
- approximate number and kind (scientific name) of animal;
- sex if determinable;
- object of importation;
- mode of transportation; and
- approximate date of arrival.

For new animals or organisms, the following additional information is required:

- a statement of reasons for importation;
- the person responsible for the animal or microorganism;
- a description of safeguarded facilities;
- the method of disposition;
- an abstract of the animal or microorganism; and
- any other pertinent documented information that supports and justifies the proposed introduction. §4-71-4, HAR.

## **Public Participation**

There is no requirement for a public hearing.

## **Processing Time**

The regulations do not provide specific time frames for decision on the permit application.

## **Sequence of Filing**

The permit must be obtained prior to importation of the animals.

## **COST**

None.

# STATE FOOD, DRUG, AND COSMETIC ACT AQUATIC FOOD SALE REGULATIONS

## Authority

- Chapter 328, Hawaii Revised Statutes, Food, Drug, and Cosmetics
- Chapter 321-11, Hawaii Revised Statutes, Department of Health
- Title 11, Chapter 29 Hawaii Administrative Rules, Department of Health, Food and Food Products

## Purpose

The purpose of the regulations is to establish standards of identity, quality and labeling for foods, and to regulate the sale of aquatic foods in the interest of consumer protection and the public welfare. §11-29-1, HAR.

## Applicability to Aquaculture

It is unlawful to take, sell, deliver for sale, hold for sale, or offer for sale, any aquatic food from any body of fresh, brackish, or salt water which the State Department of Health (DOH) may find and declare to be polluted to the extent that such pollution constitutes a condition whereby the aquatic food found therein may have become contaminated with filth, or rendered diseased, unwholesome or injurious to health. §11-29-4(a), HAR. It is also unlawful to offer for sale any fish which have been bruised, torn, or otherwise rendered liable to spoilage. §11-29-4(d), HAR.

Bait fish must be stored separately and away from food fish and labeled clearly. §11-29-4(c), HAR.

The DOH has a separate set of rules and regulations which apply to shellfish, oysters, clams, and mussels. (See Shellfish Regulations section).

The DOH regulations also incorporate by reference various Federal regulations promulgated under the U.S. Food, Drug and Cosmetic Act. The applicable sections are listed in the DOH regulations and are generally found in Title 21 of the Code of Federal Regulations.

## Administering Agency

The regulations are administered by the Department of Health, Food and Drug Branch.

Food and Drug Branch  
Department of Health  
591 Ala Moana Boulevard  
Honolulu, Hawaii 96813  
(808) 586-4725

## Information Requirements

There is no permit or permit application required by these regulations.

# SHELLFISH SANITATION

## Authority

- Chapter 328, Hawaii Revised Statutes, Food Drugs and Cosmetics
- Title 11, Chapter 35, Hawaii Administrative Rules, Department of Health, Shellfish Sanitation
- U.S. Food, Drug and Cosmetic Act, 21 U.S.C. 301 et seq.
- National Shellfish Sanitation Program Manual of Operations, Public Health Service Publication Number 33, U.S. Department of Health and Human Services

## Purpose

The purpose of these regulations is to establish sanitary controls for the shellfish industry. §11-35-1, HAR.

## Applicability to Aquaculture

No person in the State of Hawaii shall operate a plant or business engaged in growing, harvesting, shucking, packing, repacking, or reshipping fresh or fresh-frozen shellfish for sale to the public for human consumption without a valid permit issued by the department. §11-35-3(a), HAR. Shellfish include all edible species of oysters, clams, and mussels of the molluscan class Pelecypoda, unless in their final packaging they have been heat-sterilized and packaged in hermetically sealed containers.

Shellfish growing areas (offshore ocean, coastal, estuarine or fresh water area suitable for natural shellfish growth or artificial shellfish propagation) will be surveyed and classified by the department. Areas not surveyed are automatically classed as prohibited areas. Shellfish from approved areas may be harvested for direct marketing. No person shall sell, transport, receive or take any shellfish not declared to be approved or otherwise fit for direct marketing. §11-35-6, HAR.

Artificial growing systems for shellfish must meet the performance criteria for natural growing systems. The operator of an artificial growing system shall be issued a shellstock shipper's certificate. §11-35-7, HAR.

Harvesting, processing, packing, storing and shucking operations must meet the standards set forth in the regulations.

Permits issued are valid for up to one year, with an automatic expiration date of June 30 of each year. §11-35-3(d), HAR.

## Administering Agency

Food and Drug Branch  
Department of Health  
591 Ala Moana Boulevard  
Honolulu, Hawaii 96813  
(808) 586-4725

## Information Requirements

Permit applications shall be accompanied with sufficient written data, drawings and descriptions for the department to evaluate the operation relative to the regulations. §11-35-3(b), HAR.

**Public Participation**

There is no requirement for public notice or participation.

**Processing Time**

The regulations do not set forth any specific time frames for action on permit applications.

**Sequence of Filing**

The permit must be obtained prior to conducting shellfish operations.

**Cost**

There is no filing fee associated with the permit application.

# SANITATION PERMIT

## Authority

- Chapter 321-11, Hawaii Revised Statutes, Department of Health
- Hawaii Public Health Regulations, Chapter 1-A, Food Service and Food Establishment Sanitation Code

## Purpose

The purpose of the regulations is to provide minimum requirements for the handling, processing and service of foods to protect the public health, safety and welfare. Chapter 1-A, Art. 1 Section 1, Public Health Regulations(PHR).

## Applicability to Aquaculture

The need for a sanitation permit will depend on the nature of the aquaculture operation. Any person operating a food establishment must obtain a permit. Art. 1, Sec. 5, PHR. Food establishments include: fish markets, fish-processing plants, or facilities for the production, preparation for sale, packing, storage, sale or distribution of any food. Art II, Definitions, PHR. According to the department, if one is only harvesting and wholesaling to a processor or other permitted facility, a sanitation permit may not be required. It is advisable to check with the department directly regarding the applicability of the requirements to any specific operation. Article VI of the regulations details the various applicable requirements.

## Administering Agency

The Sanitation Permit is administered by the Department of Health, Sanitation Branch.

Sanitation Branch  
Department of Health  
591 Ala Moana Boulevard  
Honolulu, Hawaii 96813  
(808) 586-8000

## Information Requirements

Permit applications can be obtained from the Sanitation Branch.

## Sequence of Filing

An applicant must apply for a permit prior to beginning construction, extensive remodelling or conversion work. Operation can begin pending a permit decision so long as the application has been made to the department. Art. I, Sec. 4, Item 2, HAR.

## Cost

There is no permit fee for a Sanitation Permit.

## REFERENCES

Brewer, William A.  
Permits and Environmental Requirements for Aquaculture in Hawaii  
State Department of Planning and Economic Development  
Honolulu, Hawaii, 1980.

DHM Planners, Inc.  
Hawaiian Fishpond Study  
Coastal Zone Management Program, Office of State Planning  
State Historic Preservation Division  
Department of Land and Natural Resources  
Honolulu, Hawaii, 1990.

Dr. David Ziemann, et al.  
Aquaculture Effluent Discharge Program: Year 1 Final Report  
The Center for Tropical and Subtropical Aquaculture  
Honolulu, Hawaii, 1990.

Melody Kapilialoha MacKenzie, Editor  
Native Hawaiian Rights Handbook  
Native Hawaiian Legal Corporation  
Office of Hawaiian Affairs  
Honolulu, Hawaii, 1991.

Gerald S. Clay, Esq., Principle Author  
Ocean Leasing for Hawaii  
Aquaculture Development Program  
Department of Planning and Economic Development  
Honolulu, Hawaii, 1981.

P. Achitoff, N. Conroy, L. Munger, S. Nagata  
Key Issues In Wetlands Regulation In Hawaii  
National Business Institute, Inc.  
1992.

Michael D. Jenkins  
Starting and Operating a Business in Hawaii  
Oasis Press  
Grants Pass, Oregon, 1991.

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