LAWS AND REGULATIONS FOR SHELLFISH GROWERS IN MARYLAND

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This publication is intended to place the laws and regulations governing shellfish growing in Maryland in an accessible format for individuals wishing to raise oysters and clams. It should be stressed, however, that this is intended only as a guide. Some areas of law have either been left out or covered only briefly since they may refer to special situations or localized areas. In some of these instances we have noted that further information is required.

Two issues should be readily apparent to anyone who becomes involved in shellfish aquaculture. First, the governing laws and regulations have been developed principally to deal with the wild harvest of oysters on public bars. Second, there are numerous inconsistencies in existing laws and regulations.

Introduction

Shellfish aquaculture, like most other businesses, is covered by many state and county rules. The authority for the activity can be divided between *Laws* and *Regulations*.

Laws originate as bills and must be passed by both houses of our elected representatives in the legislature and signed into law by the Governor. Laws, then, must go through the entire legislative process and can only be passed when the Legislature is in session. In Maryland this occurs during a 90 day period from January through April. For this reason, it usually takes longer to change laws than it does to change regulations. Laws also grant state agencies with the authority to carry out certain tasks and to regulate certain industries or functions.

Regulations are administrative rules that are placed in effect by agencies of the state government. These agencies are given the authority to regulate in these areas by the elected officials. Regulations can be changed much more rapidly than laws. An agency acting within its area of authority can change a regulation by publishing its intention and holding hearings. In most cases, these can occur in as little as 90 days with shorter periods if they are acting within emergency provisions.

Locating Laws and Regulations

Laws of the State of Maryland are published in the *Annotated Code of Maryland* or "ACM". Natural Resource Laws covering shellfish aquaculture are in Title 4.

Regulations are published in the *Code of Maryland Regulations* or "COMAR". The authority granted to the Department of Natural Resources to regulate the growing of shellfish is located in Title 08 of COMAR. When the Department intends to change regulations, they will appear in the "Maryland Register", which is published every other week by the Division of State Documents.

The Development of Oyster Aquaculture

Leasing barren bottom for the cultivation of oysters has been a major area of conflict in Maryland for more than a hundred years. Maryland had one of the first oyster cultivation laws in the nation (the "One-Acre Planting Law" of 1820), followed by others in 1865 and 1906, but social and political forces intervened to prevent private oyster production from becoming large or productive.

Many restrictions were imposed upon private growers by public harvesters acting through their local politicians. They were anxious to prevent competition from developing. This led to laws that made it hard, if not impossible, for growers to succeed. They were restricted from having access to natural seed with which to plant their leases until unrealistic public use goals were met. They found it hard to obtain legal redress to affect adequate penalties upon individuals who stole their crop. In short, there are many confusing areas of these laws. Most of them have been developed to try to manage public oyster resources. Growers have found little sense in many of these as they apply to private culture operations.

In Maryland, about 7,000 acres are leased to private individuals while over 290,000 acres are reserved as public oyster areas. Neighboring Virginia has about 100,000 acres leased and Louisiana has about 300,000 acres held by individuals for private oyster production. The oyster industry of the Pacific Northwest states of Oregon and Washington, which are the most modern and progressive oyster growing areas in the United States, consist almost totally of private culture operations, largely supported by hatcheries for their seed.

Over the years, political pressure in the Maryland legislature prevented further leasing in most Eastern Shore counties, although these areas represented some of the most potentially productive grounds in the state. During the early 1970's, the legislature imposed a "moratorium" on further leasing pending a resurvey of the Bay bottom, the first since the period of 1906 to 1912. Although this moratorium was designed to prevent problems with new oyster growers trying to lease productive natural oyster areas, the actual resurvey was given a very low priority for completion for almost a decade. In spite of the massive obstacles to oyster leaseholds, many oyster growers continued to produce over the years.

During the 1980's, the oyster industry in Maryland faced new problems. Declining natural reproduction and massive epizootics of the oyster diseases known popularly as "MSX" and "Dermo" caused the future of the fishery to become doubtful at best. Selected lines of animals that may be resistant to these diseases, as well as the potential for sterile non-native oysters and genetically engineered animals, may offer potential for renewed production. This will only be able to be accomplished through aquaculture. In this case, development of a cadre of private growers who can make decisions based on biological and economic factors, rather than political ones, will need to become the new face of the industry. For this to occur, there will need to be a total renovation of the leasing laws and leasing program of the state, bringing the engines of private entrepreneurship to the expansion of the industry.

Do You Really Need a Lease?

The reason for leasing Bay bottom from the state is to convey property rights on the shellfish that growers place there and to provide legal protection for the shellfish from theft.

You can use or obtain an area for the purpose of storing, bedding, or raising oysters in several ways; some do not require a formal lease agreement. For instance, you may use:

- waters under or adjacent to an owned wharf
- certain waters as a riparian owner
- a temporary bed for ninety (90) days

If you require a lease, you may:

- obtain a new lease in certain areas
- acquire an existing lease by transfer

Each of these options has various points to consider:

Wharf owners have exclusive rights to use the waters under their structures, if the structures have been approved by the US Army Corps of Engineers. Further, in Talbot, Calvert or St. Mary's counties, the wharf owner may grow oysters in trays, baskets, or containers which are attached to the wharf by lines or ropes and that remain within five (5) feet of the wharf. It should be noted that commercial operations, as opposed to those producing oysters for use in restoration projects, must use wharves specifically permitted and approved for that purpose.

Riparian owners have exclusive rights to use the waters of any creek, cove, or inlet that is less than 300 feet in width at the inlet or opening. The rights extend to the middle of the water. These areas are not eligible to be leased by others and often represent an attractive way to raise oysters in counties that are closed to leasing. A grower might work with a riparian owner to utilize these areas for shellfish production. Prudent business practice suggests that such an agreement be placed in writing.

Temporary bedding of oysters may be carried out on areas of barren bottom for a period of up to ninety (90) days. These have to be marked with the name of the person claiming them. This provision was originally intended for use by oystermen so that they could "bank" oysters during periods when the market was poor and sell them when prices got better. It may be possible to use this provision in order to harden and grow out juvenile shellfish, although it has not been done to date. This could be done by a grower who wanted to produce seed oysters though the process known as "remote setting" (see Maryland Sea Grant's publication "Remote Setting Of Oysters").

About Leases

A lease creates a "landlord-tenant relationship" between the State and the individual, as defined by the laws of Maryland. It gives the leaseholder the exclusive ownership to all the shellfish he or she has planted in the leased area, or which already exist in the area.

While the law does not specifically allow leases to be passed by inheritance to heirs or next of kin, some leases have been passed on through several generations of the same family by using the transfer procedures available. It should be noted that those attempting to gain a lease through transfer must provide proof that they are Maryland residents and that the lease does not legally cause them to exceed the acreage limitations imposed by Maryland law.

Terms, Use, Corporations, and Restrictions

Leases are granted for periods of twenty (20) years and are normally renewed as a matter of course if the annual rental fees have been paid regularly. Many of the leases in the state have been in effect for most of this century.

Current laws tend to be somewhat ambiguous about what the leases can be used for. Several sections refer to the fact that they can by used for oysters "and other shellfish" while others state that they may be used "only for the purpose of planting and cultivating oysters". It is agreed that leases can be used to raise any legal native shellfish, as long as they are on the bottom.

The State of Maryland is currently prohibited from leasing bottom either to non-residents or to corporations or joint stock companies. The ban on corporations was originally intended to prevent big business from "owning the Bay." However, it can be argued that such prohibitions have actually harmed the small grower since the act of incorporating may allow benefits such as limiting liability and allowing for capital formation.

In many areas of the state you are prohibited from acquiring a new lease. Currently, in the following counties, no new leases may be granted:

- Charles (except in the Patuxent River)
- Kent
- Queen Anne's
- Talbot
- Dorchester
- Somerset

In other counties, leasing is still open:

- St. Mary's
- Calvert
- Anne Arundel
- Wicomico
- Worcester
- Other non-traditional oyster producing areas such as the Upper Bay counties

Leases that are currently in effect, even in counties that are now closed, may be transferred to new lessees. Application for the transfer must be made to the Department of Natural Resources and costs only five dollars (\$5). Leases may not be transferred to non-residents or corporations. Violation of the leasing laws or regulations will result in the lease being terminated with title to the leased land reverting back to the State of Maryland.

Marking of Leases

The law specifies that the leased bottom shall be as rectangularly shaped "as possible." This allows for easy charting and marking and makes it easier to fit in with other leases in the immediate vicinity. The words "as possible" have often been liberally interpreted, however.

There are minimum and maximum acreage limitations for different areas, as delineated by state law, which are summarized below:

Minimum and maximum acreage allowed by region

Area	Minimum	Maximum
Chesapeake Bay (outside county water)	5 acres	500 acres
Tangier Sound	1 acre	100 acres
all other counties	1 acre	30 acres
Worcester County*	1 acre	50 acres

^{*}special restrictions apply to 2 or more individuals "working in concert"

Consolidating existing leases. A series of leases adjoining each other may be consolidated into single blocks for simplifying record keeping or cutting down on the number of bills issued for lease fees. The pieces must adjoin and cannot be consolidated so that the maximum acreage is exceeded.

Obtaining a Lease

The Maryland Department of Natural Resources (MDNR) has the authority to resurvey and reclassify any of the submerged lands of the state. MDNR maintains a series of charts that detail the Natural Oyster Bars (also called "public") oyster bars and clam bottom together with the leases that currently exist. These are public documents and potential lessees may examine them. They may be a valuable resource for people scouting areas that may be used for shellfish culture. Also, marine patrols of the Maryland Natural Resources Police (NRP) have copies of charts on board their vessels showing these leases and natural areas also. These marine units are located in many ports in the Chesapeake and seaside bays.

Let's assume you have located an area where you wish to grow oysters and have decided that you want to obtain a new lease in a county where it's legal to do so. You have contacted the MDNR and obtained forms for application of a new lease.

Go to the area you want to lease and mark it off with at least one temporary stake or pole with your name on it. This assumes that you have already surveyed the area and determined that it will be suitable for shellfish culture.

Then, complete the application for a new lease and return it to the MDNR, along with the required \$300 fee. On the application you must list:

- your place of residence
- estimated acreage which you want to lease
- a detailed description of the location

The MDNR will determine whether you, and the area that you have applied for, meet the criteria for a legal lease. If so, they will advertise your application for four successive weeks in a newspaper that serves all counties. The ad will describe the area which being applied for together with your name and address.

Within thirty (30) days of the last date of publication any person can protest the application. The general criteria still in use is that if anyone declares, under oath, that they have made a "day's work" from harvesting oysters off the area within "the last five years" then those grounds may not be leased.

In addition, a lease may not be granted if the bottom is currently charted as Natural Oyster Bar (NOB), natural clam bottom, or if it is currently productive and withstands the scrutiny of a survey. In surveying the potential lease, the MDNR uses harvesting rate criteria of:

- 1 bushel of soft-shell clam (Mya) per hour
- 1 ½ bushels of razor clams (*Tagelus*) per hour
- 500 hard clams (*Mercenaria*) per hour

At the request of the applicant, the area may be re-surveyed not more than once a year to ensure that it remains a commercially viable clamming area. Areas that are designated as protected submerged aquatic vegetation, primarily in Worcester County, may also not be leased.

If no one protests the lease, or if a protest claim fails, the MDNR will notify you that it is ready to issue the lease. You must then send MDNR a recording fee of \$5 and a survey fee of \$20. MDNR personnel will conduct an accurate survey, mark out the area, execute a lease agreement, enter it into the "register of titles to oyster lands," and send you the lease. You would then sign the agreement and return it to MDNR within sixty (60) days, along with the first year's rental and any other fees required. If you do not meet the sixty (60) day deadline, the entire procedure is null and void, although MDNR has the discretion to extend the time period for an additional sixty (60) days.

Cost of Leasing

The annual rental for leases is currently \$3.50 per acre. If you fall more than sixty (60) days behind in your annual payments, the state can terminate the lease agreement. At that time the lease will revert back to the State and can be leased to someone else. A special provision in Charles County states that if you do not seed your ground with oysters within three (3) years the lease will terminate. It is not explicit, however, in how many oysters are required to meet the proviso.

Reduction of Fees

Lease fees can be reduced or even abated if an area is affected by adverse factors or diseases that threaten its ability to produce oysters. At the present time, oyster diseases are the primary factor the state considers in doing this. The reduction or abatement is considered on a case by case basis. The major diseases are:

- Dermo (*Perkinsus marinus*)
- MSX (Haplosporidium nelsoni)
- SSO (Haplosporidium costalis)

Pollution Problems

An oyster growing area may be declared polluted by the Maryland Department of the Environment, which closely monitors all shellfish growing waters of the state. This, however, is not considered sufficient reason to reduce or abate lease fees. The MDNR's position has been that pollution does not necessarily affect the ability of the area to produce shellfish, only to market them, and lessees, or growers, can or should have grounds in "approved" waters to which they can relay their product for depuration before they are harvest for market. Also, MDNR will not grant rental abatement or reduction because of accidental spills of hazardous wastes, predators or parasites, or severe storms that may cause freshets or siltation on the grounds.

Preparing Bottom for Planting and Growing

In most cases leases are in muddy bottom areas. These areas usually need to be stabilized or built up with "cultch" which will support planted oysters and keep them from sinking into the bottom and being smothered. Cultch normally used is oyster shell (see the Maryland Sea Grant publication "Stabilizing Oyster Ground"). The State has an interest in ensuring that oyster shell is not wasted and that it is used for the cultivation of new oysters. For that reason it permits shells to be placed back into the Bay on leased ground but requires anyone buying or selling oyster shells to report on how many bushels they have bought or sold.

Note: State regulations require that you obtain a permit from MDNR to import or possess live oysters, seed oysters, oyster shells, live hard clams, live soft shell clams, or clam shells. They will only issue this permit when they are satisfied that these will not be harmful to Maryland shellfish. In addition, oysters planted in designated zones of the Chester, Choptank, Patuxent, Severn, Magothy and Wicomico Rivers must be free of Dermo and MSX diseases. Check state charts for descriptions of the protected areas.

Seed Oysters

The only species of oyster that may be introduced into the waters of the State is the Eastern oyster, *Crassostrea virginica*. Other species are not only illegal for introduction into state waters, but doing so may involve a violation of federal and state law.

It is legal for individuals to catch spat by suspending cultch material in the water column in the form of strings, bags, or trays. These materials may not touch the bottom and they cannot interfere with navigation, which means that they cannot be placed in recognized channels and must be lighted at night or in periods of reduced visibility.

Although MDNR operates many seed oyster areas for the replenishment of the public bars, the agency has only two areas that have been set aside specifically for sale of seed to growers. Unfortunately, both of these are in areas of intense disease infection and have not been utilized by growers because of the certainty of low survival. The price of the seed is usually based on the prevailing price of seed in nearby states, which, in the case of Virginia, has likewise been severely impacted by disease in recent years.

For many years, growers would import seed from Virginia, primarily from the productive seed areas located in the James River. Maryland forbade the import of any oysters or their seed from Virginia waters that were infected with oyster drills, screw borers, or their eggs. MDNR officers must inspect oysters or seed that will be planted in Maryland water between May 1 and September 30 and issue a certificate attesting that the oysters are free of drills or their eggs. If they are infected, they may be seized by the State and destroyed. Potential buyers are advised to know their seller (for further information see Maryland Sea Grant publication "Purchasing Seed Oysters").

Harvesting Your Crop

Harvest time. The simple rule is that you don't make money growing shellfish, you make money selling shellfish, and harvest is when the business should see a profit. Although you have the exclusive right to harvest your oysters at any time throughout the year, there are some rules that you must abide by. You cannot, for example, harvest them on a Sunday and you can only catch them between the official hours of sunrise and sunset.

Minimum size. The law mandates a minimum size three (3) inch oyster, measured from hinge to bill and a one (1) inch hard clam measured as thickness of the animal. These are the only sizes legal for sale and the law applies to those that are privately grown as well as harvested from public reefs. This has been an area of contention among shellfish growers who wish to develop markets for smaller animals. Although it has not yet affected the cultured oyster industry to a great extent, growers of hard clams have suffered in some areas. There is a strong demand for clams smaller than those allowed by law but these fall under the provision of the minimum size laws. Size laws were designed primarily to protect and regulate natural populations so that they grow to reproductive maturity and have the chance to spawn at least once before they are available to harvest. Some have argued that since aquaculturists are spawning their own and not relying on nature for replenishing stocks, there should be no reason for including their activities in the same laws and those covering wild harvests.

Methods. Generally, a grower can harvest oysters by any normal tonging or dredging method. In some areas special permits or licenses are required as well as notification procedures for adjoining leaseholders. For specifics provisions, especially in Wicomico and Somerset counties, consult the Maryland Department of Natural Resources.

Approved Waters. Oysters may not be marketed directly from waters that are listed as "closed" by the Maryland Department of the Environment; some closures are permanent, while others are temporary following heavy rainfalls. The state operates a monitoring program for shellfish sanitation. Waters and shellstock are sampled frequently. Charts of closed areas are maintained by local health departments as well as the Maryland Natural Resources Police. If you are in doubt about harvesting in any area, contact the MDNR, the Department of the Environment, or your local health department.

Containers. Oysters sold in Maryland, including those from leases, must be measured by an approved container. This can be:

- Maryland oyster bushel measure (legal standards require half bushel, bushel, bushel and a half, or three bushel sizes)
- container or bin with dimensions approved in writing by the MDNR (sizes, shapes, and construction methods and materials are included in the regulations in order for approval to be obtained)
- basket with a capacity of 1 U.S. standard bushel, provided that the oysters may not be removed from them during storage or shipment

Note: the Maryland oyster bushel (2800.9 cubic inches) is larger than a U.S. standard bushel (2747.715 cubic inches) but is smaller than a Virginia oyster bushel (3002.1 cubic inches). For further information obtain a copy of the Maryland Sea Grant publication "Purchasing Seed Oysters".

Rights and Limitations as a Grower

Perhaps the most useful right that you have as a leaseholder is that you can harvest your oysters on a year round basis. In the spring and summer, after the public oyster season closes, prices are usually higher than when the public season is open. This, after all, is why people invest in growing shellfish — to make a profit.

Although the problem of theft from oyster and clam grounds has been an issue for a century, recent changes in Maryland law may make the penalties for theft of oysters from private leases stiffer. The law says that no person, other than the leaseholder, can harvest shellfish on any leased bottom. If anyone is caught doing so, the MDNR must request the local State's Attorney to bring criminal action against that person. After conviction, the MDNR can suspend all existing oyster licenses of that person for one year on the first conviction and two years for each conviction thereafter in addition to penalties imposed by the court.

Residents of Maryland are allowed to catch fish and crabs for commercial and recreational purposes on leased oyster grounds. They may not, however, remove or destroy any of markers, buoys, or animals. It is also against the law for anyone other than the leaseholder to remove, destroy, or alter any of market stakes or buoys.

Hydraulic clam dredges are forbidden from working within 150 feet of either a natural oyster bar or any area leased and marked as required. Interestingly, all shellfish harvesters are required to stay 1,000 feet away from occupied duck blinds with decoys set out during the waterfowl season.

Perhaps the most important right is that of the "landlord-tenant relationship" that exists between the State and the leaseholder. It is entirely possible that all of the benefits of the laws pertaining to this relationship have not yet been adequately explored by leaseholders with innovative legal counsel.

Your Responsibilities as a Grower

Once you have your lease, you have the responsibility to maintain markers on all corners. These have traditionally been poles, but they may be buoys, stakes, or other types of monuments. You must have your initials on at least four of them. Even though the law requires that you exercise "reasonable diligence" in making sure that these markers are maintained, the temporary loss or destruction of them does not give anyone the right to come on your grounds and remove or destroy your product. What sounds simple on paper, however, usually translates into trouble when someone pulls your markers and proceeds to help themselves to your oysters.

The law says that no one, not even you as the lessee, has the right to harvest oysters from a lease if the corner markers are missing. The law also says specifically that the Natural Resources Police have a duty to forbid anyone to operate on leased beds until the markers are replaced.

In reality you will find that it is often quite hard to keep shellfish from being stolen. Remember that, while Maryland operates one of the largest marine police forces in the nation, there are still very few of them considering the thousands of miles of shoreline that they must patrol and the various missions they have been given. Also, if you catch someone stealing your shellfish, you should be willing to go to court if officers respond and make an arrest. Failing to follow through with a case wastes the time of law enforcement officers and sends the message that you don't think it's important to protect your product. The best enforcement involves a vigilant leaseholder who is willing to follow all possible avenues — criminal as well as the possibility of civil — in order to protect what is his or hers.

Record keeping

You are required to maintain accurate records concerning:

- placement of cultch material
- production of seed shellfish
- planting of shellfish for final growout
- · harvest from the lease
- sales from the harvested products

These records must be reported to the MDNR on the proper forms. The forms are usually sent to the leaseholder annually so that the information can be added to the Maryland harvest records.

Off-Bottom or Water Column Aquaculture

While raising shellfish on the bottom on leased ground does not require any other permits, raising or storing shellfish in any container in the water column, from the surface to near the bottom, requires additional approval. Three additional approvals must be obtained:

- an aquaculture permit
- · a Tidal Wetlands License
- a lease from the Board of Public Works

These must be acquired before starting the business, and the water quality must be classified by the Maryland Department of the Environment before harvesting can take place.

The MDNR Aquaculture Permit is intended to ensure environmental laws are observed, and will help identify to the applicant any other permits and licenses that will be required, and if the proposed activity meets the general guidelines for aquaculture in Chesapeake Bay and its tributaries. A single permit may include more than one location. Activities may not interfere with ongoing oyster bottom leases at the same location, and aquaculture is not permissible over charted Natural Oyster Bottom or protected State oyster sanctuaries. An aquaculture permit has a five year duration, and is subject to review and renewal for additional five year terms. An annual report is also required.

A completed Tidal Wetlands License is required in navigable waters, and for the alteration of any flood plain, tidal or nontidal wetland in Maryland. This license is normally the next step in receiving approval to conduct aquaculture in State waters. A Joint Federal/State Application, with an approved MDNR Experimental Aquaculture License attached, is submitted to the Maryland Department of the Environment (MDE) Water Management Administration, Regulatory Services Coordination Office. This joint permit application receives a tracking number and is distributed by the Water Management Administration to the appropriate agencies.

The U.S. Army Corps of Engineers (ACE) coordinates efforts with other Federal agencies, such as the Environmental Protection Agency, Fish and Wildlife Service, and National Marine Fisheries Service. The MDE Tidal Wetlands Division coordinates with other State agencies, including the Chesapeake Bay Critical Areas Commission, the MDNR Environmental Review Unit, Natural Resource Police, and the Boating and Hydrographic Operations Unit, the Maryland Historical Trust and the Maryland Department of Health and Mental Hygiene (DHMH). MDE will also contact the local Planning and Zoning offices. Upon receipt of the Tidal Wetlands License application, all agencies involved initiate procedures for issuing any other necessary permits. These permits may include a water use permit, waste water discharge permit and Section 401 Water Quality Certification.

The Tidal Wetlands License application review involves issues of conflicting uses of the waterway, as they relate to activities in navigable waters and land-based operations. Among the many effects of aquaculture that are reviewed for potential conflicts are: established areas of recreational and commercial boating or fishing; water quality impacts; protection of submerged aquatic vegetation; and boating safety issues. These considerations are important due to the understanding that water column aquaculture will affect public rights and traditional uses of the waters, at least to some degree.

A major consideration is that the use of an area for aquaculture does not unreasonably impair navigation. For example, an aquaculture site may not be within a navigable channel marked or maintained by a State, local, or federal agency. It may not unreasonably interfere with the exercise of riparian rights by adjoining riparian landowners, including access to navigation channels from piers or other means of access.

For many projects at and above 500 square feet of surface area used, a lease of State real property is required. A lease is required because the structures would occupy State Tidal wetlands or waterways for commercial benefit. Following the public review and processing of each application, the MDE Water Management Administration makes a recommendation to the Maryland Board of Public Works Wetlands Administration concerning issuance of a Tidal Wetlands License and the granting of a water column aquaculture lease by the Board. Upon approval by the Board, a prescribed one-time license fee is paid to the Board and a rate-per-

acre fee is set. The annual fee is paid through the Department of Natural Resources to the State Treasurer for the term during which the lease is valid.

The Maryland Legislature has approved the experimental issuance of a limited number of permits for off bottom aquaculture. Contact the MDNR if you are interested in pursuing one of these. Currently, permits are handled by the US Army Corps of Engineers (ACE), as the agency responsible for control of navigable waters. A great number of other Federal and state agencies are included in the review process and there may be stipulations placed upon the permittee for such things as water and sediment testing. It should be noted that approval for these special permits has historically taken a long time. For those who wish to conduct their aquaculture activities in the water column, however, it is a necessary procedure.

SUMMARY OF LAWS AND REGULATIONS GOVERNING AQUACULTURE AND LEASING IN THE STATE OF MARYLAND

This is an abridged version of rules and may not include amended laws and regulations. Printed versions of the Code of Maryland Regulations and the Annotated Code are the official and enforceable text. Only official text may be judicially noticed under Courts and Judicial Proceedings, Section 10-203, Annotated Code of Maryland. Shellfish aquaculture is covered by many State rules. This summary covers State and Federal rules. Local county and city laws and ordinances may also apply.

Department of Environment
Annotated Code of Maryland Title 16 and Title 9
Laws Governing Aquaculture in Tidal Wetlands and Water Quality

Wetlands

§§ 16-101 – 16-503 Wetlands and Riparian Rights. Requires that a person wanting to engage in the filling or dredging of tidal wetlands, must first apply to Maryland Department of the Environment for said activity; and then obtain a Tidal Wetlands License from the Maryland Board of Public Works.

Water Quality

§9-313 Provides authority and guidance to the Department for water pollution regulations.

§9-316 Hearing requirement on proposed regulations.

§9-319 Powers and duties of the Department regarding pollution.

§4-1006 (Natural Resource Article) Provides authority for the Department of Environment to close an area to the harvest of oysters and clams due to pollution. Provides for the transplant of oysters deemed polluted under certain circumstances.

Department of Environment Code of Maryland Regulations (COMAR) Governing Aquaculture. Title 26

26.24.02.01 General Requirements for a State Tidal Wetlands License or Private Tidal Wetlands Permit. A person who proposes to construct or reconstruct structures, or to dredge or fill a State or private tidal wetland, must obtain a license from the Board of Public Works or license, general license, general permit, or permit from the Department.

26.24.02.02 Application for Tidal Wetlands License or Permit. Procedures and requirements to apply for a joint federal and State permit for activities in tidal wetlands in Maryland.

26.24.02.03 Criteria for Evaluating Tidal Wetlands License or Permit Applications. Lists criteria to assist in preparing an application and to provide a consistent basis for recommendations and decisions for licenses or permits. The Department shall take into account ecological, economic, developmental, recreational, and aesthetic values of tidal wetlands in order to preserve tidal wetlands and prevent their despoliation and loss.

26.24.02.04 General Tidal Wetlands License. Defines projects are regulated under the General Permit issued to MDE or by the Maryland Board of Public Works.

26.24.02.06 – 26.24.02.08 Conditions, Modifications and Appeals of a License or Permit.

26.08.02.02 Designated Uses of a Water Body

26.08.02.02-1 Support of Estuarine and Marine Aquatic Life and Shellfish Harvesting. Includes the subcategories of designated uses including shellfish harvesting Open water habitats for indigenous populations of fish and shellfish species.

26.08.02.03-3 Water Quality Criteria Specific to Designated Uses. In shellfish harvest waters, there may not be any pathogenic or harmful organisms in sufficient quantities to constitute a public health hazard in the use of waters for shellfish harvesting. Classification of Use II Waters for Harvesting. (Approved, Conditional, Restricted)

Board of Public WorksCode of Maryland Regulations (COMAR) Title 23

23.02.04.01 – 23.02.04.23. This chapter describes the procedures used by the Board of Public Works to serve the rights of riparian landowners and the interests and rights of the general public in State tidal wetlands. The instrument used, a wetlands license, is the authorization issued by the Board of Public Works under Environment Article, Title 16, Annotated Code of Maryland, for the performance of dredging, filling, the construction of structures, or the conduct of certain other activities on land and waters of the State which are tidal wetlands. Defines public interests as the demonstrable environmental, social, and economic benefits which would accrue to the public at large as a result of a proposed action or activity involving State wetlands, and which would exceed all demonstrable environmental, social, and economic costs of the proposed action or activity.

<u>Department of Health and Mental Hygiene</u> <u>Annotated Code of Maryland Title 21</u> <u>Laws Governing Control of Food, Food Processing, and Shellfish</u>

- **§21-211.** Control of food subject to contamination with microorganisms. Authorizes the Secretary by the issuance, denial, or suspension of permits to regulate the distribution of any food in the State that may be contaminated with microorganisms.
- §21-301. **Definitions.** Food establishment definitions.
- **§21-305.** License required; restrictions on licenses; county licenses. Prohibits a person from operating a food establishment without a license issued by the Department.
- **§21-321. Construction, remodeling, or alterations.** Requires plans and specifications of a food establishment and any information needed for proper review of the plans to be submitted to the Department prior to construction, remodeling, or material alteration.
- **§21-346.** Importing shellfish prohibited; exception. Prohibits the importation of shellfish into the State from an uncertified source except for shellstock imported for replanting under the direction of DNR or commercially sterile shellfish.
- **§21-347.** Importing of food containing shellfish. Prohibits the importation of food containing shellfish unless the shellfish contained in the food comes from a certified source. Requires each processor of food containing shellfish to maintain records for proof of source and to provide this proof to the Department upon request.
- **§21-348. Powers of the Department.** Authorizes the Department to take any necessary action against any shipment of shellfish or food containing shellfish if the shellfish involved is from an unknown or uncertified source; this includes condemnation and destruction if the source is uncertified.
- **§21-349.** Shellfish or processed crabs to be maintained at temperatures established by the Department. Authorizes the Department to establish temperatures that a vehicle used to transport, store or sell shellfish for commercial purposes must maintain except for a licensed harvester who delivers the shellfish on the day of harvest. Requires shellfish in such vehicle to be maintained at a temperature established by the Department.

<u>Department of Health and Mental Hygiene</u> <u>Code of Maryland Regulations (COMAR) Governing Shellfish</u>

- **10.15.04 Food and Drink Processing and Transportation.** Establishes the minimum requirements for all food processing plants in the State.
- **10.15.10 Procedures for the Safe Handling and Processing of Seafood.** Incorporates by reference all provisions of 21 CFR 123 and §§ 1240 (r)-(u) and 1240.60 requiring Hazard Analysis Critical Control Point (HACCP) for all seafood processors and specific federal requirements for molluscan shellfish.
- **10.15.07 Shellfish Sanitation.** Incorporates by Reference the National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish, 2003 Revision, Model Ordinance (except for Chapter IV, Chapter VII, and certain sections of Chapter V), and American Public Health Association, "Recommended Procedures for the Examination of Sea Water and Shellfish" 4th Edition, 1970. Also establishes bacteriological standards for shellfish and licensing and certification requirements.

Department of Natural Resources

Annotated Code of Maryland Title 4

Laws Governing Shellfish Leases and Shellfish Lease Production and Aquaculture

- **§4-2A-08. Importation and transport.** Exempts entry into this State or the possession, transportation, exportation, processing, sale, offer for sale, or shipment of fish which are lawfully purchased for, or which are products of, authorized aquaculture operations.
- **§4-512. Fishing near blind during migratory waterfowl season prohibited.** Prohibits fishing within 500 yards of an occupied blind during open season.
- §4- 741. Carrying domestic animals on boats transporting shellfish commercially prohibited. Any boat or vessel catching or transporting commercial shellfish may not carry domestic animals.
- **§4-742. Restrictions on taking shellfish from polluted waters.** Authorizes MDE after appropriate investigation of pollution providing a hazard to public health to restrict the catching or storage of shellfish; methods and requirements of closure and public notice; violations.
- **§4-743. Quarantine of shellfish.** Authority for Department to regulate imports or quarantine areas due to biological threat by shellfish; penalties.
- **§4-711. Regulation of pound or stake nets.** Prohibits setting pound or stake nets on leased ground without permission.
- §4-1001. Definitions. Includes natural oyster bar definitions and harvest gear definitions.
- **§4-1003. Residents may catch oysters or clams.** Limits harvesting by specified gear types to State residents.
- **§4-1005.** Devices for catching oysters and clams; patent tongs; string culture of oysters. Allows catching oyster spat by suspended means.

- **§4-1006. Catching oysters or clams in certain areas prohibited.** Prohibits harvests in areas that are closed, requires DNR marking.
- **§4-1007.** Designation of buying stations for oysters and clams; unlawful sales or purchases; exception; forms. Sales at buying stations only, taxes required and the responsible party.
- **§4-1009. Catching oysters on natural oyster bars.** One month for catching seed oysters for leases, restrictions.
- **§4-1013. Dredging regulations and prohibitions generally.** Dredging on leased ground only with permitted boats, written permission of lessee; permitted dredges, firearms on board.
- **§4-1015. Oyster culling.** Prohibits shipment of oysters below market size from shipment out-of state; allows undersized oysters from private out-of-state sellers to be imported.
- **§4-1017. Oyster license.** Allows possession of oysters in counties with leases at any time, out-of-season.
- **§4-1019.** Report of buyers or sellers of oyster shells required. Requires reporting the purchase or sale of shells to the Department.
- **§4-1019.2 Oyster shell purchase program.** Allows licensed oyster dealers to sell fresh shell to leaseholders prior to the State.
- **§4-1020. Oyster taxes.** Permit and inspection tax on exports; severance tax on catches from public ground.
- **§4-1037.** Areas where catching with gear other than hand tools prohibited. Restricts use of gear other than hand-held tools to catch soft-shell clams within 150 feet of a marked oyster lease.
- **§4-1101. Definitions.** Definitions include county waters; leased oyster bottom; natural clam bar; natural oyster bar.
- §4-1102. Department authorized to survey, classify, and reclassify natural oyster and clam bars. Resurvey and reclassification of bars; effect on leases or leasing.
- **§4-1103. State oyster culture.** State seed areas, sales to the public, limitations; aquaculture seed areas, limits, sales.
- **§4-1118.1 Destroying natural oyster bars.** Prevents destruction or damage of oyster bars that are not leased.
- **§4-11A-01. Definitions.** Definitions include leased oyster bottom, natural clam bar, natural oyster bar, gear.

- **§4-11A-02. Protection of wild stocks of fish.** DNR must ensure against adverse impact to wild stocks; considerations for permitting non-native species; permit required; inspections; exceptions for non-tidal aquaculture.
- §4-11A-04. Department authorized to reserve areas for experimental oyster farming by public high schools. Five barren acres allowed for each tidewater public high school.
- **§4-11A-05.** Leasing submerged land for oyster cultivation-- In general. DNR authority to lease; prohibits joint stock companies or corporations; exceptions for 4-H clubs, specified colleges, nonstock and nonprofit corporations in the Severn; prohibitions in specified county waters; lands not leasable (riparian, natural oyster or clam bar, distances from same); personal leasing limits, areas; issuance or renewals.
- **§4-11A-06. Procedure for obtaining lease; fees; survey.** Application info, fees; advertisement; resource survey, costs; protests; completion.
- **§4-11A-07.** Rent and term of lease; termination. Twenty year term of lease; reduction or abatement of rent for damages by environmental factors; utilization (25 bu. of clams or oysters planted or harvested in a three-year period, or longer if natural conditions, including unavailability of shell or seed prevented utilization), termination due to non-utilization or non-payment of lease fees; invalidation of lease; leases not subject to Title 8 of the Real Property Article.
- **§4-11A-09. Assignment and transfer of leases.** Recording fees of transfer, nonresidents prohibited, also to corporations, joint-stock companies, or leaseholders with maximized acreage allowed.
- **§4-11A-10. Marking of leased land; trespass.** Mark as directed, at least 4 markers with initials of leaseholder; temporary loss shall not permit removal, destruction or disturbance by the unauthorized; unmarked land, duty of NRP to prohibit any person catching oysters until replacement of markers.
- **§4-11A-11.** Rights of lessees of oyster bottoms; exceptions in Wicomico and Somerset counties. Ownership and title to all oysters; bottom land only for oyster cultivation; allowance to fish; may not redeem or purchase leased bottom; may catch oysters at any time, including for seed sale; limits on requiring tonging license to catch in certain counties; season (sunrisesunset of any day except Sunday).
- **§4-11A-12.** Kind of oysters permitted to be planted, cultivated, etc.; importing oyster drills prohibited. Only *C. virginica*; may not import from specified counties between specified dates without a certificate of inspection by Department that they are free of drills or egg cases.
- §4-11A-13. Catching oysters on leased oyster bottoms by lessee. Methods (permitted any allowed by the subtitle); records and reports; special permit for nonresident tongers on Somerset county leases.
- **§4-11A-14.** Power dredging on leased areas in Wicomico County. Power dredging allowed in Wicomico and Nanticoke Rivers; permit, fee for power dredge boat, permission and notice to harvest; no harvests on Sunday; staking prior to harvest; penalty for possession of an unlawful dredge.

- §4-11A-15. Miscellaneous prohibitions on leased oyster bottoms. Catching, destroying, or transferring oysters on lease by non-lessee a criminal action under Article 27, § 342 of the State Penal Code; on conviction, Department may suspend oyster license, terms, hearing; prohibits altering or destroying markers; allows temporary bedding of oysters in areas subject to lease for a period not exceeding three months.
- **§4-11A-16.** Exclusive right of riparian or wharf owners to cultivate shellfish. Definition of riparian ground, allowed use or capture methods; ACE-approved wharf owner rights under dock to grow, around dock in specified counties.
- **§4-11A-17. Experimental propagation activities.** Department establishes 3 areas at 10 acres around Horn Point, Deal Island, Piney Point.
- §4-11A-18. Regulations for taking, possession, transport or sale for purpose of replanting on leased bottoms. Department may adopt regulations allowing undersized oyster harvest to and from leased ground only, for transplanting, not sale to consumers.

MISSING A HEADING?

- **08.02.07.02 Use of Hydraulic Dredges in Worcester County.** Prohibited Areas. No commercial fishery hydraulic dredge or escalator harvester in Worcester County within 150 feet of marked leased oyster ground. Does not prohibit lessee from harvesting lease by any method he deems proper
- **08.02.07.04 Use of Hard-Shell Clam Dredges in Tangier Sound and Pocomoke Sound.** Prohibited Areas. Requires prior written permission of lessee before use on a lease.
- **08.02.08.01 Importation of Shellfish.** Defines shellfish (includes live animals, seed oysters, shells of animals). May not import or possess in-state for planting shellfish from out-of-state. DNR requires satisfactory proof the animals will not be harmful to Maryland shellfish.
- **08.02.08.04** Recording the Catching and Disposal of Oysters. Plantings on Leased Ground, Selling to Unlicensed Buyers. Planting oysters (not seed) on leases from public beds requires Seafood Dockside Vouchers and Oyster Tax Reports.
- **08.02.08.06 Rental Rate for Submerged Lands.** Rate of \$3.50 per acre per year, payable in advance. Reduction or Abatement of Rental Payments. At the discretion of DNR, whole or part of rent may be abated upon confirmation that planted oysters have undergone mortalities caused by pathogenic organisms or infectious diseases. May not reduce or abate for DHMH pollution closures, (b) silting from storms, (c) accidental spills of hazardous wastes, (d) predators and/or parasites.
- 08.02.08.11 Natural Clam Bar Criteria for Use in Leasing Procedures.
 - A. upon application, DNR survey to assess existing or potential harvesting rate for clams
 - B. meeting any of the next criteria, DNR shall deny lease, name area a natural clam bar
 - C. criteria: harvest rate of 500 hard, 0.5 bu. soft-shell, 1.5 bu. razor clams per hour
 - D. applicant can request DNR review of clam harvest rates once per year

- **08.02.08.12 Shellfish Culture of Leased Bottom.** Use of Lease. Definition of active use. By January 15, annual report, copies of receipts of sales or seed purchases is due. No report signifies no activity. Minimum four 8"x12" markers with lessee initials, lease # required; no other signage allowed. Failure to Use. Procedure to terminate an inactive lease.
- **08.02.09.01** Monetary Value of Tidal Water and Non-tidal Water Aquatic Animals. Establishes a monetary value in the event of a man-caused mortality.
- **08.02.14.03 Definitions.** Defines fish, person, aquaculture, species, waters, etc.
- **08.02.14.04** Permit Requirements for Aquacultural Activities. Permit required to own or operate a facility, or propagate; or with finfish in tidal water.
- **08.02.14.05 Types of Permits.** The Department may issue permits to engage in aquacultural activities in certain cases.
- **08.02.14.06 Application Procedures.** Application requirements to engage in aquaculture or aquacultural activities in Maryland.
- **08.02.14.07 Permitted Species**. A list of species or families of fish and aquatic plants for which permits may be issued.
- **08.02.14.08** General Terms and Conditions Applicable to Permits. Conditions of a permit including display and access to inspection.
- **08.02.16.03 Oyster Recovery Areas.** List of tributaries designated as oyster recovery areas for specific management actions.
- **08.02.16.04 Zone Lines.** Geographic areas designate zones within each Oyster Recovery Areas.
- 08.02.16.05 Prohibitions in Zones A and B.
- **08.04.13.02 General Conditions.** May not establish mooring on a private shellfish bed without permission.

Federal Regulation and Rules

- 21 Code of Federal Regulations Part 123, Subpart A. **Definitions and Hazard Analysis Critical Control Point (HACCP) plans.**
- 21 Code of Federal Regulations Part 123, Subpart C. Covers growing waters approved for harvesting of shellfish.
- **21 Code of Federal Regulations Part 1240. Subpart D.** Regarding molluscan shellfish handled, transported, or grown in an area that would likely contribute to the spread of communicable disease from one State or possession to another.

Rivers and Harbors Appropriation Act of 1899 (33 U.S.C. 403; Chapter 425, March 3, 1899; 30 Stat. 1151) Under Section 10 of the Act, the building of any wharfs, piers, jetties, and other structures is prohibited without Congressional approval, and excavation or fill within navigable waters requires the approval of the Chief of Engineers.

National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish, Model Ordinance, 2003 Edition. This document is provide by the Food and Drug Administration and represents the Agency's current thinking on the safe and sanitary control of the growing, processing, and shipping of molluscan shellfish for human consumption. Maryland enforces the Model Ordinance as the requirements which are minimally necessary for the sanitary control of molluscan shellfish.