

CHAPTER 41

Bathing Beaches

BOARD OF HEALTH ROLE AT A GLANCE

- Know the requirements for bathing beach water testing stated in M.G.L. ch.111 s. 5S and enumerated in 105 CMR 445.000
- Determine when the waters at bathing beaches within the BOH jurisdiction are unsafe based on bacteriological test results or physical quality review, and post beaches accordingly.
- Reopen beaches posted by BOH when water sample testing or physical quality indicates that the water meets the standards.

OVERVIEW

In August, 2000 legislation was signed into law regarding testing, posting and risk communication for all public and semi-public bathing beaches in Massachusetts. This required the amendment to 105 CMR 445.000; Minimum Standards for Bathing Beaches, State Sanitary Code, Chapter VII. Subsequent changes to regulations were made in 2009 and 2014.

The regulation of bathing beaches is not new to the Commonwealth, however. Over the past forty years, bathing beaches in the Commonwealth of Massachusetts have been regulated through the State Sanitary Code. Since the early 1960s responsibility for bathing water quality has shifted from the Massachusetts Department of Public Health (DPH), to the agency now known as the Department of Environmental Protection (DEP) and back to DPH.

Under the new law, local Boards remain responsible for monitoring the safety of the water at all public and semi public bathing beaches in their communities. What is new for Boards, is an increase in the frequency of testing, the type of testing that must be conducted and the need to conduct risk communication.

The new law is two-part: it revised and clarified existing regulatory requirements to better promote public health and safety at beaches in the Commonwealth and it mandated DPH to amend the existing regulations. These tasks was completed. The amended regulations were published in April, 2001 and can be found in the Code of Massachusetts Regulations (CMR) at 105 CMR 445.00.

Most of the amendments to 105 CMR 445.000 mirror MGL ch. 111 s. 5S. The following portions of the regulation are most significant:

- Bacteriological quality and physical quality standards for bathing waters. 105 CMR 445.030
- Indicator organisms and standards. 105 CMR 445.031
- Weekly testing of public and semi-public beaches. 105 CMR 445.032(C)
- Sample collection procedures and frequency of testing. 105 CMR 445.032
- Signs to be posted when bathing waters test to unsafe levels. 105 CMR 445.040
- Variance procedures. 105 CMR 445.100
- Reporting procedures 105 CMR 445.033(B)
- Permitting 105 CMR 445.300
- Required Permanent Signage at Beaches 105 CMR 445.020(A)

BOARD OF HEALTH RESPONSIBILITIES

- Test the waters of public bathing beaches within five days prior to beach opening and on a weekly basis throughout the bathing season.
- Ensure that the owners/operators of semi-public beaches conduct the required water quality tests. The required testing may be conducted by the Board, but the costs are borne by the owner.

The definition of bathing beaches found in 105 CMR 445.010 identifies two categories of beaches that are impacted by the regulations. Public beaches, which are any beach open to the general public, whether or not a fee is charged; and semi-public beaches which include neighborhood or residential associations, beach associations, country clubs, hotels, motels, campground, camps, condominiums and other beaches where admission for the use of the beach is included in the fee consideration paid or given for the primary use of the premises. Public and semi-public beaches must now be tested under the same regimen.

Beaches operated by the state will be overseen by DPH.

Operators of semi-public beaches will be responsible for paying for the testing of those beaches.

- Ensure testing is performed at the appropriate time and at the appropriate location(s) for each beach.

The regulation requires that testing be performed at times that the results will provide a meaningful reading of the safety of the water when bathers would be swimming. The BOH shall approve the sampling location(s) at each beach in its jurisdiction. The sampling location must be an area of greatest bather load. DPH suggests that the samples be obtained at a time of greatest bather load and that the samples be taken from the same location each week. Additional

samples must also be taken at any critical location subject to contamination such as a place where pipes drain in to the bathing waters. 105 CMR 445.032(A).

How to collect bathing water samples is described in 105 CMR 445.032(B)(C)(D) and (E). DPH has created a “Beach Sampling – Field Data Form” for sample collection

If there are contiguous beaches that require sampling, and a sample from one area would satisfy the requirements of the regulation, one location for sampling may be chosen. The BOH shall determine a representative sampling site for such beaches. This decision should be based on geography and previous testing records.

- Know what organisms are being measured and the levels that are not safe.

The tests to be performed will determine the presence and density of enterococci in marine waters and enterococci or E.coli in bathing beach waters. Previously “total coliforms” were used as indicator organisms for determining bacterial quality of beach water, but it has been determined that such a count did not accurately portray the safety of a beach. The levels of bacteria determined to be unsafe are described in 105 CMR 445.030 and 105 CMR 445.031.

- Determine when the waters at bathing beaches within the BOH jurisdiction are unsafe due to an elevation of the indicator organism, the presence of floatables or hazardous chemicals.

When the results of the water sampling reveal a bacteriological count that exceeds the levels mandated in 105 CMR 443.031 and meets the criteria in 105 CMR 445.030 (B)(3), or when epidemiological evidence shows the presence of an infectious disease or other hazardous health condition considered related to bathing water in the water, the BOH shall determine the waters to be unsafe.

The requirements of the regulations also serve to protect bathers from sludge deposits, solid refuse; floating solid, grease or scum wastes; oil, hazardous material and heavy metals; unsafe physical elements of a beach (such as fast currents or sharp drop-offs) and the bacteria listed above. 105 CMR 445.030(A)

- Immediately post signs warning the swimmers when bathing water is determined to be unsafe.

The regulation requires that once an unsafe level of organism is recorded, or the physical quality of the bathing beach water does not satisfy the BOH, the BOH must post, or cause to be posted, as soon as possible (but in no event longer than twenty-four hours), a sign warning bathers of the dangers of swimming in those bathing waters. The sign must state:

**WARNING! NO SWIMMING
SWIMMING MAY CAUSE ILLNESS**

The signs must also display “a graphic description of a swimmer in a red circle with a diagonal hatch mark. The sign must also detail the reason for the warning, the date of the posting and the name and telephone number of the Board of Health. The BOH must post the signs at the parking lot and at each entrance to the beach. 105 CMR 445.040

The regulations also require that the BOH, its agent or authorized person must notify DPH immediately when the analysis of bathing water is found to exceed the acceptable limits for the focus bacteria and the beach is closed. 105 CMR 445.033(B)(2) DPH must be notified when the beach is reopened, as well. DPH may be notified by telephone at (617) 624-5757 or by fax at (617) 624-5183.

- Review request from general public for additional beach water sampling.

Any person may request that the BOH conduct water testing, monitoring and analysis when there is a reasonable basis to believe that an alleged violation of the bathing beach regulation has occurred. The BOH shall promptly review such requests and determine whether additional testing need be done to assure the safety of the water for swimmers. 105 CMR 445.036 If the beach is operated by the Commonwealth and thus monitored by DPH, the BOH should inform the person making the request that the Commonwealth should be notified and that the Commonwealth will make the determination for additional testing.

- Receive results of tests from beach operators.

Any operator or authorized agent of a public or semi-public beach (except those overseen by DPH) shall report the certified results of all testing to the BOH within five days of the receipt of the results from the laboratory.

If an analysis indicates the existence of bacteria that exceeds the levels described in the regulation, the operator or authorized agent of a public or semi-public beach must immediately report these results to the BOH.

- Report routine data collected from water testing to DPH.

All test results for bathing waters must be reported to DPH by October 31 of each year. 105 CMR 445.033(B)(3)

- Establish variance scheme as outlined in regulation.

The BOH may grant a variance for testing for any public or semi-public beach under its jurisdiction if certain conditions are met. The operator of the beach must supply the BOH with the complete water quality analysis data for the

two prior bathing beach seasons and a written sanitary survey of the bathing beach. The specific requirements for the survey are listed in 105 CMR 445.100 (A). In granting a variance, the BOH must be satisfied that the usual enforcement of 105 CMR 445.000 would not serve a significant public health purpose and that granting a variance will not conflict with the intent or spirit of the standards outlined in the regulation. 105 CMR 445.100(E) It is recommended that the BOH provide notice of the pending grant of a variance to the citizens of its community.

The BOH must submit to DPH a notice of intent to grant a variance. Along with this notice the BOH must submit all the information (records and data) upon which it is basing its decision to grant a variance. If DPH fails to comment after 45 days, approval is presumed. 105 CMR 445.101(B)

When a variance is granted, the BOH must specify the bacteriological testing schedule that will be required in place of the standard regulatory scheme. This schedule must require at a minimum water testing once prior to the bathing season and testing at least once every thirty days during the bathing season. 105 CMR 445.100(B)

The length of the variance will be determined by the BOH but may not exceed four years. The BOH shall immediately revoke a variance if at any time the analysis of the bathing beach water does not meet the standards required by the regulation. 105 CMR 445.100(C)

A copy of the variance must be posted in a conspicuous place at the BOH for thirty days. After the thirty days the variance must be available for inspection by the public at the town clerk's office throughout the duration of the variance.

STATE RESPONSIBILITIES

DPH oversees beaches operated by the Commonwealth.

DPH will be available to receive information about high bacteriological readings and beach closings by telephone at (617) 983-6762 or by fax at (617) 983-6770.

DPH should receive the results of all routine sampling from all the BOHs by October 31 of each year. DPH will provide each BOH with the required reporting format.

When a BOH approves a variance, the variance must be submitted with all the documents needed for the variance for review by DPH. DPH then has 45 days to make a determination whether to approve or deny the BOH findings. If DPH fails to comment after 45 days, its approval is presumed.

If DPH grants a variance for a beach that it oversees, the variance must be available for view by the public at DPH.