

Ohio Department of Health
Guide for the Evaluation of Bathing Areas

Bathing Places 1970 (reprinted 05-20-05)

Bathing Places include:

Quarries, Ponds, Gravel Pits, Small Lakes, Damned Streams, and Other Similar Bodies of Water, Man-made or Natural. (*Approved swimming pools excluded*).

Standards for Acceptability

I. Satisfactory Sanitary Survey

(see Appendix I for outline)

II. With diluting water

A. A minimum of 500 gallons per bather per day must be provided during the swimming season.

III. With little or no diluting water

A. Minimum total area of not less than three (3) acres (130,680 square feet).

B. A limited bather load of 50 persons per acre (875 square feet per bather) must be maintained.

IV. Visibly marked bathing area shall provide a minimum of 40 square feet per bather.

V. That part of the bathing areas, which is 5 foot or less in depth, must have a bottom of sand, gravel, stone, or other acceptable material to eliminate an unusual turbid (muddy) condition of the bathing water under normal use conditions.

VI. Safety Precautions

A. Bathing and diving areas

Clearly mark limits with conspicuous buoys or poles spaced not over 100 feet apart.

Bathing in waters of extreme depth should not be allowed.

Bottoms shall be free from holes, steep slopes, and sharp objects.

Water depth in diving area shall be not less than 8 feet.

Bathing shall not be permitted during time of undue high turbidity caused by natural occurrences.

All equipment and appurtenances shall be maintained in good repair at all times.

B. Bathing regulations

Establish rules for safety of bathers.

Post regulations conspicuously along bathing area shoreline.

C. Night bathing

Provide adequate illumination of bathing and diving areas.

D. Life guards

Provide one or more qualified lifeguards for each 300 lineal feet of bathing area shoreline.

Provide elevated lifeguard stations.

E. Life rings

Provide one or more life rings for each 300 lineal feet of bathing area shoreline.

Life rings shall be 15 inches in diameter with 75 feet of rope stored on suitable racks.

Rings shall be of an approved design and construction.

F. Boat

Provide one square-sterner boat equipped with oars and life ring.

G. First aid equipment

Provide first aid kit, blankets, and stretcher.

Telephone shall be available within reasonable distance.

VII. Sanitary Appurtenances

A. Bath houses

Clearly marked dressing rooms for each sex shall be provided.

Showers for each sex are recommended.

B. Toilet and hand washing facilities (Chapter 1238 OBC)

Toilet facilities for each sex must be provided (water flush toilets are recommended where possible).

Hand washing facilities shall be provided and located adjacent to the toilet facilities.

C. Water supply

A safe and approved water supply must be provided.

Drinking fountains shall be provided (Chapter 1238 OBC).

VII. Sanitary Appurtenances –cont.

D. Miscellaneous

Soap and toilet tissue must be available at all times.

Conveniently located rubbish containers must be provided.

Where night bathing is permitted, adequate lighting must be provided for the bath house and bathing area.

VIII. Bacteriological Standards

A. Interpretation of bacteriological results

No ideal test to determine water quality exists at the present time. All tools presently available are compromises. The objective and responsibility of public health personnel is to prevent transmission of communicable disease. Sanitary surveys, bacteriological analyses, and observed experience in instances of disease are tools to be used for the guidance of judgment and evaluation of the suitability of a bathing place. If unusual unanticipated results are obtained by analysis, an effort should be made to determine the reason.

B. Sampling procedure

Bacteriological examination of representative samples from the swimming area may be used to supplement information obtained in the sanitary survey.

To be truly representative, a series of tests should represent sampling for at least ten days and not be unduly weighted by an excessive number of test "foul weather " days when water quality is generally at its poorest.

Collect sample within 1 foot of surface in water having a depth range of 3 to 6 feet. Sample may be collected from a boat or by wading. Use a sweeping motion downward and upward holding the open bottle in a manner to prevent hand contamination.

Motion of collection should be against any current that may exist at that time.

Sample may be collected among bathers as long as care is taken not to directly contaminate the bottle by a bather.

Care should be taken to avoid stagnant water.

C. Evaluation methods

The following criterion is for evaluation of conditions at any point in Waters designated to be used for recreational purposes, including such water-contact activities as swimming and water skiing:

BACTERIA: The fecal coliform (either MPN or MF count) not to exceed 200 per 100 ML as a monthly geometric mean based on not less than five samples per month; nor exceed 400 Per 100 ML in more than ten percent of all samples taken during a month.

A test for fecal streptococci may be used to supplement the coliform test or to provide additional information.

Personnel of the Ohio Department of Health are available for consultation and under certain circumstances may assist with field work involved in bathing place problems.

REFERENCES

1. APHA Recommended Practice for Design, Equipment, and Operation of Swimming Pools and Other Bathing Places -10th edition; Pages 44 to 56.
2. Sanitarians Handbook by Ben Freedman, Peerless Publishing Company, 1957; pages 284 to 314.
3. Environmental Sanitation by Joseph A. Salvato, Jr., John Wiley & Sons, Inc., 1958; Pages 312 to 347.
4. Municipal and Rural Sanitation by Ehlers and Steel -5 the edition, 1958; McGraw Hill Book Company, Inc., parts of Chapter 7, page 152.
5. Resolution of Ohio Water Pollution Control Board regarding Criteria of Stream-Water Quality for Various Uses; April 14, 1970.

Appendix I
Outline for Sanitary Survey

NOTE -The information to be detailed herein is considered to be supplementary to that contained in the "Permanent Record for Bathing Places ". Some of the data recorded on that sheet (for example, data regarding sewage disposal at the bathing area and material in bottom of bathing area) may be considered to be part of, or have some bearing on the sanitary survey. (See Appendix II and III)

Suggested items (or section headings) for consideration in the report are detailed below. Other items may be added at the discretion of the individual. Keep in mind that beneficial influences (for example, a nearby unpolluted stream) should be enumerated as well as those which may be adverse.

The extent of the area to be covered by the survey should be determined by knowledge of the area and as the need requires. No set distances can be determined for all situations.

1. Personnel of survey team.
2. Date.
3. Persons contacted during survey.
4. Location of nearby streams, storm drains, sanitary sewers, etc.
5. Nature of potential sources of pollution, existing or proposed (if any), and influence of streams, sewers, local sewage disposal, etc.
6. Influence of wind, currents, etc.
7. Other items of interest in evaluation.
8. Summary of tests for water quality.
9. Notable deficiencies.
10. Summary –acceptability
11. Signature of person preparing report.

Appendix II
Permanent Record for Bathing Places

Name				Date
Area Sanitary Survey				
Surface drainage				
Surface drainage				
Surface drainage				
Surface drainage				
Type of Bathing Place			Location	
Total Area			Allowable Bather Load	
Average Depth			Amount of Diluting Water	
Is Disinfectant Used?			Chemical Used	
How Applied				
Size of Visibly Marked Bathing Area				
Material in Bottom of Bathing Area				
Size of Beach area				
Bathhouse Facilities				
Total Number of Fixtures				
Men				
Women				
Total Number of Fixtures		Urinals	Lavatories	Showers
Men				
Women				
Drinking Water				
Source			Location	
Development				
Number of Bacterial Samples	Safe		Unsafe	
Drinking Facilities				
Sewage Disposal				
Type				
Properly located, developed and maintained				
Safety				
Number of Lifeguards			Number of Stations	
Number of Boats			Number of Life Rings or Poles	
Is area lighted for night swimming				
First Aid Equipment available				

Bathing Area Operation Report

Health District _____

Name of Area		Week beginning									
Location											
Day	Total # of Bather	Disinfectant residuals					Water			Temp ° F	
		Time	Time	Time	Time	Time	Clarity	Surface Cond.	Weather Cond.	Air	Water
		Total	Total	Total	Total	Total					
Sun											
Mon											
Tues											
Wed											
Thur											
Fri											
Sat											

Bacteriological Tests

Date Collected	Fecal Coliform (MPN or MF)	Number Samples	Remarks

Operator _____