

State Policies for Aquiculture Wastes

The following individual summaries of state policies for aquiculture discharges and solid waste were compiled using information from each state's water quality standards and from discussions with regulatory agency staff. Collectively, the summaries provide a general profile of the similarities and differences among state policies and procedures in the northeastern region. All state resource agencies contacted during the development of this publication were asked to review and confirm the accuracy of the information listed prior to publication. Water quality standards and discharge policies are subject to change, however; therefore, the information listed for each state *should not* be used as a definitive guide for determining permit requirements for proposed or existing operations. This can be accomplished only by contacting the responsible state agency directly to discuss the specific aspects of a project.

The summary for each state includes the following information: species and production methods; the agency or divisions responsible for regulating surface water discharges and non-hazardous solid wastes (manure, undigested feed and mortalities); general classification of surface, ground water and solid wastes; sources for copies of state water-quality and solid-waste standards and related information; current state classification of effluents, settleable solids and mortalities from aquiculture facilities; dates that delegated states received individual and general NPDES permit authority from the EPA; state/federal discharge permit program policies and fees; mixing-zone and land-application policies; general aquiculture discharge permit status and other relevant information.

References/Suggested Additional Reading

- Bastian, R. K. 1992. Overview of Federal Regulations Pertaining to Aquiculture Waste Management and Effluents. In *Proceedings of the National Livestock, Poultry and Aquiculture Waste Management Workshop*, July 29-31, 1991, Kansas City, Missouri. J. Blake, J. Donald and W. Magette, editors. American Society of Agricultural Engineers, 2950 Niles Road, St. Joseph, Michigan 49085-9659. ASAE Publication 03-92. p. 220-226.
- Guide to Laws Regulating Coastal Water Pollution. 1993. Marine Law Institute, University of Maine School of Law. Maine Sea Grant Publication number MSG-E-93-9. 16p.

Marine Aquiculture. Opportunities for Growth. 1992. National Academy Press, Washington, D.C. 290p. (ISBN 0-309-04675-0).

Patrick, R., F. Douglass, D. M. Palavage, and P. M. Stewart. 1992. *Surface Water Quality: Have the Laws Been Successful?* Published by Princeton University Press, Princeton, NJ. 198 p.

Piper, R. G., I. B. McElwain, L. E. Orme, J. P. McCraren, L. G. Fowler, and J. R. Leonard. 1989. *Fish Hatchery Management*. Fourth printing. U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 517 p. (ISBN 0-913235-03 -2-04675-0).

Rubino, M. C. and C. A. Wilson. 1993. *Issues in Aquiculture Regulation*. Bluewaters, Inc., 4350 East West Highway, Suite 600, Bethesda, MD 20814, 72p.

Videos

EPA Water Quality Standards. 1991. U.S. Environmental Protection Agency. Six videos on one long play tape. Individual titles: *Introduction to Water Quality Standards; Development of Water Quality Criteria and Its Relationship to Water Quality Standards; Anti-degradation Policy; A Means to Maintain and Protect Existing Uses and Water Quality; Water Quality Standards and 401 Certification; Water Quality -Based Approach to Pollution Control; Enumeration Methods for E. Coli and Enterococci*. Lengths range from 13 minutes to 30 minutes.

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