

ponds, raceways or other similar structures which discharge at least 30 days per year. Facilities which produce less than 9,090 harvest kgs (approximately 20,000 lbs) of aquatic animals per year, or facilities which feed less than 2,272 kgs (approximately 5,000 lbs.) of feed during the calendar month of maximum feeding are not included.

2. Warm water aquatic animals (including but not limited to the Ameiuride, Centrarchidae and Cyprinidae families of fish, e.g., catfish, sunfish and minnows) in ponds, raceways or other similar structures which discharge at least 30 days per year. Closed ponds which discharge only during periods of excess runoff, or facilities which produce less than 45,454 harvest kgs (approximately 100,000 lbs.) of aquatic animals per year are not included.
3. Any such facility which the Director determines is a significant contributor of pollution to waters of the U.S. based on an on-site inspection of the facility.

Guidelines for discharges into “aquaculture projects” are described in Part 122, Subpart B, Section 122.25 and Part 125, Subpart B of Section 40. These guidelines refer to the use of effluents (primarily waste heat, or nutrient-enriched waters) as “source water or influent for production or maintenance of freshwater, estuarine or marine plants and animals.”

These guidelines represent the minimum federal standard available to states to determine if a NPDES permit is required for an aquaculture facility. The regional EPA offices, and all of the delegated states in the northeastern region, refer to the “40 CFR” guidelines, especially Section 122.24 (concentrated aquatic animal production facilities) to determine permit eligibility. Each delegated state, at its discretion, also may choose to add additional or more stringent criteria under its own discharge program.

The U.S. Army Corps of Engineers

Federal regulation of aquaculture discharges also involves the Army Corps of Engineers (ACOE). Section 10 of the Rivers and Harbors Act of 1899 gives the ACOE regulatory authority over structures or facilities over or in navigable waters. Siting and operation of net pens, floats, and other forms of off-bottom shellfish culture are included because they may affect water quality and obstruct navigation. Deployment of net pens or other types of production gear in navigable waters requires a public hearing, a technical review, and a siting permit from the appropriate

regional ACOE office (Table 2). The Corps evaluates the proposed activity to assess its impact on other established uses of the waterway and the local environment.

Under Section 404 of the Clean Water Act, the ACOE shares responsibility with the EPA to restore and maintain the chemical, physical and biological integrity of the nation’s water, including wetlands protection. The Corps authorization to regulate discharge of dredged or fill material into any waters of the United States under Section 404 potentially affects wetlands use and some types of on-bottom shellfish culture.

As with the EPA, ACOE regional offices rely on the cooperation of state resource agencies to review applications and provide certification of water quality and other applicable state regulations.

Future Trends in Federal Regulatory Policy

Current federal policy toward aquaculture surface water discharges remains based on the general guidelines described under the Clean Water Act in 40 CFR, Section 122.24 and the use of best available technology (BAT) and best management practices (BMPs) to reduce or recycle waste products. It is unlikely that pending reauthorization of the Clean Water Act will affect aquaculture appreciably, from the standpoint of more stringent federal technical guidelines or new discharge criteria. Proposed amendments to the CWA, however, do contain provisions for delegated states to charge permit-application and other “user” fees sufficient to cover their costs for administering the NPDES program.

Of all water quality issues confronting the EPA, aquaculture is expected to remain relatively low on its priority list as a point source discharge. The agency is shifting its emphasis, with state participation, to control storm water, agricultural runoff and other types of non-point source discharges. Despite the point source designation under 40 CFR, aquaculture facilities most likely will be included in area-wide, storm-water management plans now being developed by individual states (using federal guidelines) to control introduction of pollutants into receiving waters from non-point sources. Aquaculture also may be included under nutrient management plans that are mandatory in many states for agriculture. These plans are developed individually and depend on the use of recommended BMPs to reduce the non-point source pollution potential of feedlots and crop production.