

An approach similar to those used in North Carolina and Connecticut can be used for permitting CAFOs within a specific watershed.

4. Coastal Zone Act Reauthorization Amendments of 1990 (CZARA)

In the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA), Congress required States with federally approved coastal zone management programs to develop and implement coastal nonpoint pollution control programs. Thirty-three States and Territories currently have federally-approved Coastal Zone Management programs. Section 6217(g) of CZARA called for EPA, in consultation with other federal agencies, to develop guidance on "management measures" for sources of nonpoint source pollution in coastal waters. In January 1993 EPA issued its *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters*, which addresses five major source categories of nonpoint pollution: urban runoff, agriculture runoff, forestry runoff, marinas and recreational boating, and hydromodification. Within the agriculture runoff nonpoint source category, the EPA guidance specifically included management measures applicable to all new and existing "confined animal facilities." The guidance identifies which facilities constitute large and small confined animal facilities based solely on the number of animals confined. The manner of discharge is not considered. Under the CZARA guidance, a large beef feedlot contains 300 head or more, a small feedlot between 50 and 299 head; a large dairy contains 70 head or more, a small dairy between 20 and 69 head; a large layer or broiler contains 15,000 head or more, a small layer or broiler between 5,000 and 14,999 head; a large turkey facility contains 13,750 head or more, a small turkey facility between 5,000 and 13,749 head; and a large swine facility contains 200 head or more, a small swine facility between 100 and 199 head.

The thresholds in the CZARA guidance for identifying large and small confined animal facilities are lower than those established for defining CAFOs under today's rules. Thus, in coastal States the CZARA management measures potentially apply to a greater number of small facilities than today's CAFO definition. Despite the fact that both the CZARA management measures for confined animal facilities and the NPDES CAFO regulations address similar operations, these programs do not overlap or conflict with each other. CZARA applies to nonpoint source

dischargers. Any CAFO facility, as defined by 40 CFR Part 122, that has an NPDES CAFO permit, is a point source discharger and thus not subject to CZARA. Similarly, if a facility subject to CZARA management measures is later designated a CAFO by an NPDES permitting authority, the facility is no longer subject to CZARA. With respect to AFOs, some of these facilities may be subject to both NPDES and CZARA requirements, if they have both point and nonpoint source discharges. EPA's CZARA guidance provides that new confined animal facilities and existing large confined animal facilities should limit the discharge of facility wastewater and runoff to surface waters by storing such wastewater and runoff during storms up to and including discharge caused by a 25-year, 24-hour storm. Storage structures should have an earthen or plastic lining, be constructed with concrete, or constitute a tank. All existing small facilities should design and implement systems that will collect solids, reduce contaminant concentrations, and reduce runoff to minimize the discharge of contaminants in both wastewater and in runoff caused by storms up to and including a 25-year, 24-hour storm. Existing small facilities should substantially reduce pollutant loadings to ground water. Both large and small facilities should also manage accumulated solids in an appropriate waste utilization system. In addition to the confined animal facility management measures, the CZARA guidance includes a nutrient management measure intended to be applied by States to activities associated with the application of nutrients to agricultural lands (including the application of manure). The goal of this management measure is to minimize edge-of-field delivery of nutrients and minimize the leaching of nutrients from the root zone. The nutrient management measures also provide for the development, implementation, and periodic updating of a nutrient management plan.

5. Clean Water Act Sec. 319 Program

Congress amended the Clean Water Act in 1987 to establish the section 319 Nonpoint Source Management Program because it recognized the need for greater federal leadership to help focus State and local nonpoint source efforts. Under section 319, States, Territories, and Indian Tribes receive grants to implement their approved management programs for controlling non-point source pollution, which may include a wide variety of activities, including technical assistance, financial assistance, education, training,

technology transfer, demonstration projects, and monitoring to assess the success of specific nonpoint source implementation projects. More than 40 percent of section 319 Clean Water Act grants have been used for activities to control and reduce agricultural nonpoint source pollution. Also, several USDA and State-funded programs provide cost-share, technical assistance, and economic incentives to implement NPS pollution management practices.

6. Source Water Protection Program

Although many States, water systems, and localities have established watershed and wellhead protection programs, the 1996 Safe Drinking Water Act Amendments placed a new focus on source water quality. States have been given access to funding and required to develop Source Water Assessment Programs to assess the areas serving as public sources of drinking water in order to identify potential threats and initiate protection efforts.

The Source Water Assessment Programs created by States differ because they are tailored to each State's water resources and drinking water priorities. However, each assessment must include four major elements: delineating (or mapping) the source water assessment area, conducting an inventory of potential sources of contamination in the delineated area, determining the susceptibility of the water supply to those contamination sources, and releasing the results of the determinations to the public.

Although a number of measures are in place to protect and retain the high quality of the Nation's drinking water, drinking water sources are subject to a number of threats, including growing population, chemical use, and animal wastes. Improper disposal of chemicals, animal wastes, pesticides, and human wastes, as well as the persistence of naturally occurring minerals, can contaminate drinking water sources. Like human wastes, animal wastes contain pathogens, such as *E. coli*, that can sicken hundreds of people and kill the very young and old and people with weakened immune systems. These wastes can enter drinking water supplies in runoff from feedlots and pastures.

In addition to these State efforts, EPA is working with a broad spectrum of stakeholders to develop a national strategy to prevent source water contamination. When it is complete, the strategy will reflect what EPA's Water Program can do to further source water contamination prevention nationwide.