



PHOTOS: (L) VISIONS OF AMERICA/JOE SOHM, (R) NICOLE BENVENUTO/THE NEW YORK TIMES/REDUX

## Animal Agriculture and the Clean Water Act

The Clean Water Act is the principal law for controlling pollution of rivers, lakes and wetlands in the United States. With its ambitious goal to restore and maintain “the chemical, physical and biological integrity” of the nation’s waterways, the law has a mixed record overall but a poor record when it comes to regulating pollution from animal agriculture, particularly concentrated animal feeding operations (CAFOs).



Clean Water Act permits take two forms: an individual permit or a “general permit” applicable to multiple facilities within a category of pollution sources. Permit obligations are based on the technologies and practices available to the covered category of business and, where necessary, on more stringent water quality considerations.

In areas where waterways remain impaired, additional controls may be needed. For those areas, a scientific analysis determines the Total Maximum Daily Load (TMDL)—the largest amount of specific pollutants that the waterbody can tolerate and still remain healthy. The TMDL or “pollution diet” sets out a plan for all pollution sources to make the necessary pollution reductions.

*Image Credit: Jeff Vanuga, [USDA NCRS](#)*

In 1998, a government assessment of progress under the Clean Water Act noted that an estimated 40% of the nation’s waters were not fishable or swimmable, with agriculture ranking as the top pollution source for impairments to both lakes and rivers.<sup>1</sup> The report called for the Environmental Protection Agency (EPA), the primary federal agency with responsibility for the law, to improve controls on “non-point” or diffuse sources of pollution, including agriculture.

The report and a joint USDA/EPA strategy on CAFOs<sup>2</sup> stressed that voluntary programs had not proven adequate and called on EPA to update regulations for animal feeding operations that predated the dramatic growth of large industrialized animal operations.. EPA estimated that by making the needed changes the number of livestock operations that should be covered by Clean Water permits could rise from around 2,000 to as many as 20,000.<sup>3</sup>

These National Pollutant Discharge Elimination System (NPDES) permits set conditions on the amount and type of pollutants coming from discrete facilities and conveyances known as “point sources.” Under the law, the term “point source” expressly includes CAFOs. The law also specifically excludes “agricultural stormwater” from permit coverage.

NPDES permits, issued by states or the federal EPA and subject to enforcement by regulatory agencies and citizen suits, have been viewed as the centerpiece of the Clean Water Act and an effective way to minimize pollution in our nation’s waterways and ensure the

health of lakes, rivers, and groundwater nationwide. However, industrialized animal agriculture operations have long resisted using permit requirements to address pollution from their operations and instead advocated for voluntary “best management practices.”<sup>4</sup>

### New Rules—Under Challenge

A decade following the release of the 1998 report,<sup>5</sup> EPA issued new rules for CAFOs<sup>5</sup> that, in essence, treat livestock operations as both point sources and non-point sources, with permit obligations for discharges other than stormwater runoff from fields where manure has been properly applied as fertilizer. These rules call for the largest facilities to apply for NPDES permits, as required of any point source, if they plan to discharge or operate in ways that would allow pollutants into waterways. Permits would cover the management of manure, litter, dead animals and other wastes from animal confinement areas, feed storage areas, manure handling facilities, fields receiving manure applications and other pathways for pollutants to reach waterways.

The permit rules also specify that when manure is applied to crop land under the control of the CAFO, operators must follow a Nutrient Management Plan (NMP) to assure that the rates, timing and methods of application protect water quality and constitute legitimate fertilization rather than simple waste disposal. The NMP would be subject to public review and comment and, once approved, specific terms of the plan would become enforceable permit conditions. If a facility operates in compliance with an approved NMP, any runoff that occurs during a heavy storm is treated as “non-point pollution” or “agricultural stormwater” and exempt from permit sanctions.

The 2008 rules have been criticized by environmental groups for failing to identify all existing CAFOs, for covering too few operations and for failing to require tighter controls on the releases of harmful pathogens in CAFO wastes.<sup>6</sup> They have also been criticized by industry, which mounted a legal challenge to the requirement for permits to cover facilities with a “potential to discharge.”<sup>7</sup> The rules remain in effect as of October 2010, and include the following points of contention.

- ❖ An earlier but contested version of the rule<sup>8</sup> required large operators to apply for a permit as a matter of course, but the final rule calls for a case-by-case self-evaluation of a facility’s design, construction and operation to assess the “potential to discharge.”<sup>9</sup> Smaller facilities whose manure management practices threaten water quality are subject to permitting requirements only after inspection reveals a problem. While industry argues that only facilities that actually discharge should be covered by permits, others believe that all CAFOs discharge to some extent and a standard requirement for permitting will provide for needed review of operations before problems arise.



According to the Government Accountability Office, “[n]o federal agency collects accurate and consistent data on the number, size, and location of CAFOs,” and EPA itself does not have a complete record of CAFOs permitted under the Clean Water Act.

*Concentrated Animal Feeding Operations: EPA Needs More Information and a Clearly Defined Strategy to Protect Air and Water Quality from Pollutants of Concern* (Washington, DC: Government Accountability Office, September 2008), <http://www.gao.gov/new.items/d08944.pdf>.

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❖ Major corporations often contract with individual farmers to feed and manage animals owned by the corporation under terms specifying housing, feed and other aspects of livestock management.<sup>10</sup> EPA's initial proposal would have required both entities to sign and be responsible for the permit.<sup>11</sup> The final rule excluded this co-permitting approach, and only the grower is directed to apply for a permit, even though the contract terms may affect the volume and nature of wastes produced.

❖ EPA's CAFO rules address land application of manure but require compliance with an NMP only for land owned by or under the control of the operator. A CAFO operator whose animals produce more than a usable amount of manure may ship the excess manure off site and must document the transfer of that waste. But, once the waste is transferred, its use is no longer regulated under the Clean Water Act and no longer the responsibility of the CAFO operator.

❖ Clean Water Act permit holders with facilities that pipe or channel discharges to waterways are generally required to complete and submit monitoring reports on a frequent basis. That information is readily accessible to the public. For CAFOs, permits generally require annual analysis of manure, litter and other wastewaters as well as soil testing at least once every five years. This information, along with the facility's NMP, is to be kept on-site and available to regulators rather than submitted to regulatory agencies. Public access and review of such data appears to be limited.

U.S. livestock production generates between 500 million and 1 billion tons of manure annually, with a significant part of that waste coming from CAFO operations with minimal treatment requirements. Clear and improved regulations and permit requirements under the Clean Water Act are critical to ensuring that industrialized animal agriculture in the U.S. does not continue to contribute to the pollution of our lakes, rivers and groundwater.



The National Pork Producers Council and others are arguing in court that the Clean Water Act does not authorize EPA to require a permit for a CAFO's land application areas if that operation has a "mere potential to discharge." Even if an operator voluntarily seeks a permit to cover the animal feeding area and manure storage, they argue, the law does not allow EPA to include limits on the timing or rate of manure application to cropland.

*James T. Banks et al., "Brief of Petitioners National Pork Producers Council, American Farm Bureau Federation, United Egg Producers, North Carolina Pork Council, National Milk Producers Federation, Dairy Business Association, Inc., Oklahoma Pork Producers, National Chicken Council, and U.S. Poultry & Egg Association, United States Court of Appeals for the Fifth Circuit, National Pork Producers Council, et al. v. United States Environmental Protection Agency," December 7, 2009, [http://www.fb.org/legal/files/id\\_15/AFBF%20Opening%20Brief%20%2812.07.09%29.pdf](http://www.fb.org/legal/files/id_15/AFBF%20Opening%20Brief%20%2812.07.09%29.pdf).*

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<sup>1</sup> US EPA and USDA, Clean Water Action Plan: Restoring and Protecting America's Waters, February 1998, EPA-840-R-98-001.

<sup>2</sup> USDA and USEPA, "Unified National Strategy for Animal Feeding Operations," March 9, 1999, <http://www.epa.gov/npdes/pubs/finafost.pdf>.

<sup>3</sup> David Stout, "To Save Waterways, E.P.A. Will Tighten Regulation of Big Farms," New York Times, March 5, 1998..

<sup>4</sup> Oliver A. Houck, *The Clean Water Act TMDL Program: Law, Policy and Implementation*, 2<sup>nd</sup> edition, Environmental Law Institute, 2002, Washington, D.C.

<sup>5</sup> US EPA, Revised National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines and Standards for Concentrated Animal Feeding Operations in Response to the Waterkeeper Decision; Final Rule, Federal Register, Vol. 73, No. 225, November 20, 2008.

<sup>6</sup> Claudia Copeland, *Animal Waste and Water Quality: EPA's Response to the Waterkeeper Alliance Court Decision on Regulation of CAFOs* (Washington, DC: Congressional Research Service, June 15, 2010).

<sup>7</sup> "Brief of Petitioners National Pork Producers Council, American Farm Bureau Federation, United Egg Producers, North Carolina Pork Council, National Milk Producers Federation, Dairy Business Association, Inc, Oklahoma Pork Producers, National Chicken Council and U.S. Poultry & Egg Association, National Pork Producers Council, et al. v. United States Environmental Protection Agency," December 7, 2009, [http://www.fb.org/legal/files/id\\_15/AFBF%20Opening%20Brief%20%2812.07.09%29.pdf](http://www.fb.org/legal/files/id_15/AFBF%20Opening%20Brief%20%2812.07.09%29.pdf).

<sup>8</sup> US EPA, National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs); Final Rule, Federal Register, Vol. 68, No. 29, February 12, 2003.

<sup>9</sup> US EPA, Office of Water, Water Permits Division, "Implementation Guidance on CAFO Regulations--CAFOs That Discharge or Are Proposing to Discharge," May 28, 2010, [http://www.epa.gov/npdes/pubs/cafo\\_implementation\\_guidance.pdf](http://www.epa.gov/npdes/pubs/cafo_implementation_guidance.pdf).

<sup>10</sup> James MacDonald et al., *Contracts, Markets, and Prices: Organizing the Production and Use of Agricultural Commodities* (USDA Economic Research Service, n.d.), <http://www.ers.usda.gov/Publications/aer837/>.

<sup>11</sup> US EPA, National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines and Standards for Concentrated Animal Feeding Operations; Proposed Rule, Federal Register, Vol. 66, No. 9, January 12, 2001.