

Understand New CAFO Regulations

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New regulations have been released, but not all farms qualify as a Concentrated Animal Feeding Operation (CAFO).

However, some farms in Pennsylvania will now need to verify whether or not they fall under the CAFO designation, because a CAFO is now defined by herd size rather than animal units per acre. An additional aspect of the new requirements covers all sizes of dairy operations. Whether you milk 20 or 700 cows, if your farm is found to be in danger of polluting surface waters, your operation may require a CAFO permit.

The new regulations have been handed down from the U.S. Environmental Protection Agency (EPA), and they come with no real surprise. This issue has been the topic of conversation within the agricultural sector for quite some time now, especially in the dairy industry, with regards to phosphorus feeding management. The new rules, designed with some flexibility at the state level, are more practical and less costly than the original proposal in December of 2000.

The new guidelines are designed in the interest of cleaner and purer water, while maintaining the viability of agriculture as we know it today. It is a historical combination of effort and interest on the part of the EPA and the USDA. The two agencies have combined to protect national waters from nutrient over-enrichment by combining mandatory and voluntary nutrient management programs, replacing programs that were more than 25 years old, and not adequate to protect water resources.

Some of the new definitions related to dairy operations are as follows.

- Large CAFOs are now defined as a dairy that has at least 700 dairy cows, and/or 1,000 heifers.

- A medium CAFO is defined as one that has at least 200 dairy cows, and/or 300 heifers, as well as a man-made ditch or pipe carrying manure, or animals come into contact with surface water running through the area where they are confined.

- You may also be designated a CAFO if your permitting authority finds that you

are adding pollutants to a water body.

- Some rules applying to other aspects of animal production were changed, including eliminating the exemption that excuses CAFOs from applying for permits if they only discharge during large storms; eliminating the exemption for operations that raise chickens with dry manure systems; and extending coverage to immature swine and immature dairy cows. Lastly, the new rule increases public access to information through CAFO annual reports.

You will need to apply to your state permitting authority for a permit if your farm qualifies as a CAFO. All dairy cow or heifer CAFOs must implement a nutrient management plan, submit annual reports to your permitting authority, keep your permit current until you completely close your operation and remove all manure, and keep records of your nutrient management practices for at least five years.

The plan must allow for assuring adequate manure storage capacity, proper handling of dead animals and chemicals, diverting clean water from the production area (area where animals are housed and manure is stored), keeping animals out of surface water using site specific conservation practices, developing ways to test manure and soil, assuring appropriate use of nutrients when you spread manure, and keeping records of your nutrient management practices.

For medium and designated dairy cow or heifer CAFOs, the permitting authority may set additional requirements for your nutrient management plan that will depend on the permit writer's best professional judgment, which could be similar to the requirements for large dairy cow or heifer CAFOs.

Large dairy cow or heifer CAFOs will also be required to design a production area to contain all of manure plus the runoff

from a once-in-25-years, 24-hour rainfall event, install depth markers in liquid manure storage structures, inspect your production area weekly and all water lines daily, and correct any problems you find as soon as possible.

Operators must apply manure at rates that meet permitting authority's standards; analyze manure for nutrient content at least once a year; analyze the soil from land application fields for phosphorus content every five years; avoid applying manure to any land within 100 feet of surface water from time to time; inspect land application equipment for leaks; and keep records for at least five years on the date, recipient, amount, and nutrient content of any manure that is transferred to other persons. Information about the nutrient content of your manure must be provided to the recipient of any transferred manure (information from the EPA website, www.epa.gov).

The final addition to national nutrient management laws requires large CAFOs to prepare and implement a site-specific nutrient management plan for manure application. Land application will be based on the nutrient management plan that establishes application rates based on crops needs for the greatest concentration of the limiting nutrients, nitrogen and phosphorus. Soil tests will determine which of those nutrients is present in the greatest concentration, and the plans will revolve around the crop removal of that nutrient.

Approximately 15,500 livestock operations across the country will be affected by the new restrictions. Until now, there were about 4,500 farms covered by permits. With the changes, the EPA expects that number to increase by about 11,000 farms required to apply for permits by the year 2006.

How will this affect the dairy industry? Well, the good news is that the cost of implementing the new program is well below the original estimation of \$980 million per year, now estimated at \$335 million per year for all animal production facilities. The bad news is that the cost to the national dairy industry will be approximately \$150 million for affected producers. Again, that is below what was initially expected. Some of the stricter proposed changes were lessened, and some leniency was allowed at the state level which has reduced the cost of the program.

The somewhat complicated changes will affect about 3,400 dairy producers nationally. Of those, 1,500 have 700 cows or more. The 1,900 smaller operations are located in geographic areas of targeted regulation.

To aid in the cost of implementation, congress increased monies available for land and water conservation programs in the 2002 Farm Bill by \$20.9 billion, bringing the total funding for the programs to \$51 billion over the next decade.

The Environmental Quality Incentives Program (EQIP) was authorized at \$200 million in 2002, and is expected to increase to \$1.3 billion in 2007. Of these funds, 60 percent must go to livestock operations. Secondly, new technology is being perfected to aid farmers in meeting the new rules. Technologies in manure management, such as composters and anaerobic digesters are being

studied as viable aids in helping producers comply with tighter restrictions.

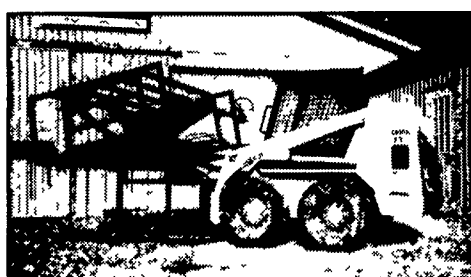
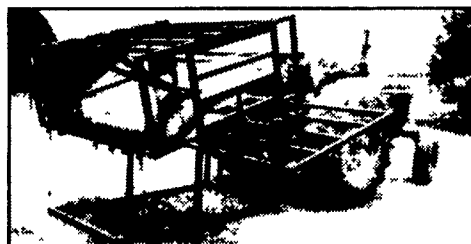
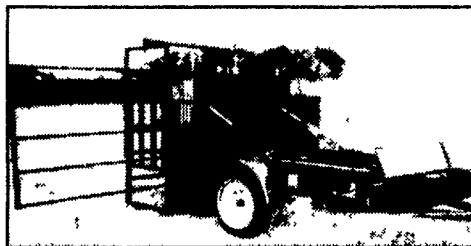
Another positive aspect of the new regulations is the expected immediate reductions in pollution of surface and ground water. The amount of phosphorus released will be reduced by a projected 56 million pounds, and nitrogen releases by more than 100 million pounds. In addition, the regulations are projected to prevent release of more than two billion pounds of sediments and a million pounds of metals.

When these reductions are made public, it will enhance the nation's agricultural image of land stewardship and concern for the environment. While it may cause initial setbacks and adaptation for our industry, it will also secure it as a permanent, viable part of our economy.

As an industry, we have already been making changes and moving toward the regulations that have recently been proposed. Over-supplementation of nutrients such as nitrogen, and more recently, phosphorus, has been on the forefront of dairy news and research. There has been a nationwide effort to reduce the amount of these nutrients excreted in dairy manure. This idea was spurred by the expectation that the new regulations were forthcoming. Because our industry has been proactive in adopting such practices, we are well-positioned to deal with the new rules.

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