

2007 NC Swine Farm Environmental Performance Standards Act

In July 2007, North Carolina became the first state in the nation to ban the construction or expansion of new lagoons and sprayfields on swine farms by passing the Swine Farm Environmental Performance Standards Act. The Act also sets strict health and environmental standards for any new waste management systems on swine farms. In addition, the Act establishes a voluntary cost-share program to help swine farmers convert existing lagoons to cleaner systems.

Although the legislation advances the effort to responsibly address waste from the state's 10 million hogs, it does include two industry-sponsored provisions that will require close monitoring. First, the Act allows for the replacement of lagoons that present an "imminent hazard." Second, the Act authorizes a methane capture pilot program that will allow up to 50 farms to receive financial compensation for producing electricity by capturing methane from existing lagoons, without requiring that participants meet the environmental performance standards mandated for new systems. The concern with both of these provisions is that they may lead swine farmers to continue using lagoons in lieu of converting them to cleaner systems. Environmental Defense will work to ensure that these two provisions are narrowly applied and that they do not hinder the overall effort to place cleaner systems on all hog farms across the state.

The Swine Farm Act is the result of a long effort by many groups and individuals to convert North Carolina's large farming operations to cleaner waste management methods, with 2007 marking the culmination of several factors that led policy makers to finally undertake serious reform. Against the backdrop of an expiring moratorium on the construction of new waste lagoons, the need and opportunity to pass meaningful legislation was spurred by public outcry for progress on the hog front; major strides toward the identification of innovative waste management alternatives; federal and state interest and funding, including a federal appropriation of almost \$450,000 for technical assistance to administer the cost-share program; strong economic evidence showing that addressing the problem would not only tackle major pollution problems but also generate tremendous economic growth; and leadership of forward-thinking swine farmers.

In addition to the Swine Farm Act, the General Assembly provided funding to test and repair or replace contaminated drinking water wells, regardless of the source of pollution. This fund, called the Bernard Allen Memorial Emergency Drinking Water Fund, will help to ensure that all North Carolinians have access to clean drinking water, including those whose wells have been affected by agricultural pollution like swine waste.

More work will be required to meet the ultimate goal of converting all existing hog farms to clean treatment systems. Environmental Defense is committed to making that goal a reality.

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Section Analysis

§ 1 – Establishes Performance Standards and Prohibits New Lagoon and Sprayfield Systems.

- The law makes clear that from this point forward any new or expanded swine operation must have a waste treatment system that meets stringent health and environmental standards,* including:
 - The elimination of the discharge of hog waste to surface water and groundwater;
 - The substantial elimination of atmospheric emissions of ammonia;
 - The substantial elimination of odor;
 - The substantial elimination of the release of disease-transmitting vectors and airborne pathogens; and
 - The substantial elimination of nutrient and heavy metal contamination of soil and groundwater.
- **Bans construction or expansion of lagoons and sprayfields.** Under the law, new or expanding hog farms are prohibited from constructing lagoon and sprayfield systems. The Act does not require the closure of existing farms that are in compliance with current federal, state and local regulations.
- **Allows for limited replacement of failing lagoons.** A failing lagoon may only be replaced when it presents an “imminent hazard,” meaning a situation that is likely to cause an immediate threat to public health or irreparable damage to the environment, such as a lagoon that is expected to rupture and cannot be repaired. To qualify for this limited exception, a farmer must be in compliance with permit requirements, must construct the new lagoon in compliance with all current legal requirements and best available control technology, and must upgrade all components of the waste management system to current legal standards. Lagoons located in the 100-year floodplain cannot be replaced. The provision requires all lagoon replacements to be reported annually.

Notably, the new law imposes new restrictions on the replacement of failing lagoons.

§ 2 & 3 – Establishes a Lagoon Conversion Cost-Share Program; Establishes Funding Account.

The lagoon conversion cost-share program is a voluntary program that will help farmers put innovative systems on existing farms. Payments will range from 75-90% of the cost to install the new system, depending on when farmers apply. The program cannot fund farm expansion. The NC Division of Soil and Water Conservation will administer the program and is authorized to establish an advisory committee to assist in its implementation. The Act also establishes an account that will serve as a depository for state funding as well as monies granted from federal and private entities for the conversion program.

§ 4 – Establishes a Swine Farm Methane Capture Pilot Program. The pilot program will study the ability to capture methane from swine operations for the generation of electricity. The program is limited to 50 farms, which must be producing electricity no later than September 2010. The program will be administered jointly by the NC Department of Environment and Natural Resources and the NC Utilities Commission, which are charged with prioritizing projects based in part on their ability to reduce environmental pollutants, including ammonia. The statute requires annual reporting, and limits the payment for electricity to no more than \$0.18 per kilowatt hour, for a maximum of seven years.

§ 5 – Pre-Existing Agreements Not Affected. The Act does not supersede any pre-existing agreements between the pork industry and the Attorney General, including the Attorney General’s agreement with Smithfield Foods, signed in 2000. Under that agreement, Smithfield Foods is required to install innovative waste management systems on all of its company-owned farms in North Carolina, once cleaner systems have been deemed economically feasible.

* Currently, the NC Attorney General’s agreement with Smithfield Foods quantifies these standards as follows: zero discharge of animal waste to surface and groundwater; 80% reduction in ammonia emissions; reduction of odor intensity levels at farm boundary to no more than 2 on a scale of 0-8; a 99.9% reduction in pathogens; total nitrogen reduction of 75%; and 50% reduction in total phosphorus, copper and zinc. These standards will serve as the basis for future rulemaking.