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ALLOW DISPOSAL OF DEAD LIVESTOCK BY COMPOSTING

Senate Bill 1093 as passed by the Senate First Analysis (7-1-98)

Sponsor: Sen. George A. McManus, Jr.
**Senate Committee: Farming, Agribusiness,
and Food Systems**
House Committee: Agriculture

THE APPARENT PROBLEM:

According to a Michigan State University Department of Animal Science staff paper, "Disposing of Swine Carcasses and After-birth by Composting," dated March 1998, "In the last decade, swine producers have been challenged with the increasingly difficult task of disposing of dead pigs and after-birth on the farm." According to the United States Department of Agriculture's 1995 National Animal Health Monitoring System, over 90 percent of the estimated 90,000 tons of dead livestock ("mortality") generated each year in the United States are disposed of through burning, burial, and rendering. However, each of these methods has its shortcomings, whether economic, environmental, access, or public concerns, and in the past decade, the use of composting to dispose of animal "mortality" has increased considerably. According to the Michigan Department of Agriculture, the Michigan livestock industry is advocating the use of composting of dead livestock, but this would require legislation. The department has asked for legislation to do this.

THE CONTENT OF THE BILL:

The bill would amend the act regulating the bodies of dead animals (Public Act 239 of 1982) to allow the disposal of dead animals by processing at a composting structure.

"Composting structure" would be defined in the bill to mean a structure designed and built for the sole purpose of composting organic material and dead livestock but not poultry. (The bill would further define "livestock" to mean "any species of animal used for human food or fiber or those species used for service to humans." "Livestock" would include cattle, sheep, new world camelids, bison, captive cervidae [that is, deer-like animals, such as deer and elk], ratites [flightless birds such as ostrich, emu, and kiwi], swine, equine, aquaculture species, and rabbits.)

The bill would authorize the Department of Agriculture to promulgate rules regarding the construction and operation of a composting structure. Until rules were promulgated, composting structures would follow standards contained in a Michigan State University Extension staff paper (ANS Mimeo No. 369).

Though the definition of "composting structure" applies to livestock only, which excludes poultry, the bill also would authorize carcasses resulting from mortality intrinsic to a livestock and poultry operation under common ownership or management to be composted together if the composting structure met the act's requirements for both a composting structure and a poultry composting structure, as well as all rules applicable to each structure.

Composting structures could be used to compost only the normal and natural daily mortality associated with a livestock production unit under common ownership or management. Any increase in mortality would have to be reported immediately to the director of the department, and no carcasses resulting from such an increase in mortality could be added to the composting structure without the director's permission.

The director of the department would be authorized to inspect each composting structure (as he or she now is able to do with regard to each facility and vehicle licensed under the act and each poultry composting structure) and to authorize alternative methods of composting not only livestock but also poultry for emergency, commercial, research, or other applications.

Currently, the department may bring an action either (a) to obtain a declaratory judgment that a method, act, or practice is a violation of the act or a rule promulgated under the act, or (b) obtain an injunction against a person who is engaging (or who is about to engage) in a method, act, or practice that violates the

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act or a rule promulgated in the act. The bill would add that venue in an action brought under the act would be the county in which the person was engaging (or was about to engage) in the violative method, act, or practice.

The bill also would allow the director of the department to bring a civil action, through the attorney general, for a violation of the act or a rule promulgated under the act. If the court found that a violation had occurred, it could impose a civil fine of up to \$5,000 for each violation. The director would be required to advise the attorney general when a person failed to pay an administrative or civil fine imposed under the act, and the attorney general then would be required to bring a civil action to recover the fine. In addition, after notice and an opportunity for a hearing, and upon a finding that a person had violated a provision of the act, the director could impose an administrative fine of up to \$1,000 for each violation. The director could issue a warning rather than an administrative fine if he or she found that a violation occurred despite the exercise of due care or if the violation did not result in significant harm to human health or to the environment.

In addition to any other defense available under law, a person could present as a defense to an administrative or civil action brought under the act evidence that, at the time of the alleged violation, he or she had been in compliance with the act and rules promulgated under the act. The bill also would add a new section to allow a person who was aggrieved by an order issued by the Department of Agriculture under the act to request an administrative hearing under the Administrative Procedures Act.

MCL 257.653 et al.

FISCAL IMPLICATIONS:

According to the Senate Fiscal Agency, the bill would have a minimal fiscal impact on state and local government due to increased revenue from civil fines, and greater enforcement authority. (5-15-98)

ARGUMENTS:

For:

Currently, burning, burial, and rendering are the most common options available for disposing of dead livestock occurring in the normal operation of livestock operations, but each of these disposal options has problems. Incineration eliminates diseases, but is

costly, especially when done in compliance with applicable clean air regulations to avoid air pollution. Burial is relatively inexpensive, but difficult in winter, when the ground is frozen, which sometimes means that additional facilities are needed to store livestock carcasses until spring, when the soil thaws enough for burial. Where watertables are high, carcasses decay less rapidly, and burial has the potential for polluting groundwater. Buried carcasses also can be dug up by scavengers, which then increases the chance of spreading disease. Finally, rendering, which effectively controls transmissible diseases and which produces several animal by-products that can be sold as useful commodities, is not always available. And even where it is available, reportedly it is not available to small-volume livestock operations. According to the MSU paper, for example, 100 to 200 sows farrow-to-finish may be too small to economically justify service by a rendering plant. Even when rendering is available, there may be public criticism because of odors generated from the rendering plant.

Composting, however, is an effective, safe, and economic alternative disposal method. Composting reduces the mass and volume of organic material, whether plant or animal material. An on-farm composting demonstration project (which included swine carcasses and afterbirth) conducted by Michigan State University, with support from the Department of Agriculture, showed that, when properly done, there are minimal odors, flies and fly larvae are controlled, and predators are not a problem. Thus, for example, with good sanitation and management, flies are controlled, and the heating of compost piles to temperatures of 120 degrees Fahrenheit effectively kills fly larvae. Mice, rats, and other predators are not a problem unless animal tissue is not covered completely, but composting bins with fronts can prevent predators from accessing livestock compost piles.

The March 1998 MSU paper describing the demonstration project reports that the "goal of on-farm composting was to eliminate the recognizable parts of

the carcass so that the material [could] be applied to cropland in an aesthetically acceptable fashion." Generally, the finished compost material obtained was dark brown in color and had an odor variously described as "sweet, sour, musty, earthy, slightly pickled, and ammonia-like." After secondary composting, pieces of hide were no longer visible, and while a few large bones remained, they were brown in color and easily crushed with a shovel or shattered by the beaters of a manure spreader.

According to the MSU research paper, composting is currently being used in this country by a small number of swine producers as an alternative way of disposing of on-farm dead swine and afterbirth. It is an approved method of dead pig and afterbirth disposal in Missouri, Ohio, Minnesota, Iowa, South Dakota, North Carolina, and Arkansas (with some of the states listed requiring special permits), but remains unavailable to producers elsewhere. In Michigan, in 1993, an evaluation of on-farm poultry composting was completed by Michigan State University researchers, and demonstrated the efficacy and safety of composting as an alternative disposal method for dead birds. As a result, Public Act 228 of 1993 amended the dead animal disposal act to include composting as a method of dead poultry disposal.

Although the initial impetus for the bill appears to be with the swine industry, other livestock industries are experiencing the same increases in size and concentration that created a need for alternative methods of disposing of dead poultry and that affect the swine industry. Legalizing livestock composting would provide an economical, effective, and environmentally safe disposal alternative for dead livestock. The bill would do just this.

Against:

Some argue that composting operations should be required to get permits or to be licensed, which the bill would not do. Also, some local units of government may have to modify their local laws regarding the disposal of solid waste to allow legal composting of livestock carcasses.

POSITIONS:

The Department of Agriculture supports the bill. (6-29-98)

The Michigan Pork Producers Association supports the bill. (6-29-98)

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■ This analysis was prepared by nonpartisan House staff for use by House members in their deliberations, and does not constitute an official statement of legislative intent.