

TITLE 8: AGRICULTURE AND ANIMALS
CHAPTER I: DEPARTMENT OF AGRICULTURE
SUBCHAPTER b: ANIMALS AND ANIMAL PRODUCTS (EXCEPT MEAT
AND POULTRY INSPECTION ACT REGULATIONS)PART 90
ILLINOIS DEAD ANIMAL DISPOSAL ACT

Section

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AUTHORITY: Implementing and authorized by the Illinois Dead Animal Disposal Act [225 ILCS 610].

SOURCE: Regulations Relating to the Disposal of Dead Animals, filed January 17, 1972, effective January 27, 1972; filed December 6, 1972, effective December 16, 1972; codified at 5 Ill. Reg. 10458; amended at 7 Ill. Reg. 852, effective January 10, 1983; amended at 8 Ill. Reg. 5937, effective April 23, 1984; amended at 13 Ill. Reg. 3681, effective March 13, 1989; amended at 16 Ill. Reg. 11773, effective July 8, 1992; amended at 18 Ill. Reg. 14917, effective September 26, 1994; amended at 20 Ill. Reg. 294, effective January 1, 1996.

NOTE: In this Part, superscript numbers or letters are denoted by parentheses; subscript are denoted by brackets.

Section 90.5 Definitions

For the purposes of this Part, the following definitions shall apply:

"Compost" means the humus-like product of the process of composting waste, which may be used as a soil conditioner.

"Composting" means the biological treatment process by which microorganisms decompose the organic fraction of waste, producing compost.

"Fish" means the bodies and parts of bodies of all animal aquatic life and the parts or waste thereof.

"Poultry" means chickens, turkeys, domestic game birds, and domestic water fowl.

"Poultry litter" means a nitrogen source such as manure or cake (i.e., the wet, compact crust that forms around feeders and waterers or litter such as found in layer operations and slatted-floor breeders).

"Straw" or "bulking agent" means straw or any alternative carbon source including, but not limited to, corn stover, soybean pods and trash, hay, sawdust, grass clippings, rice and peanut hulls, tomatoes, peat moss, pomace of grapes, wood chips, bark, shredded brush, and leaves.

(Source: Added at 16 Ill. Reg. 11773, effective July 8, 1992)

Section 90.10 Plant Facilities

If, upon first inspection, the facility of the renderer, blender or collection center fails to meet the requirements set forth in Section 10 of the Illinois Dead Animal Disposal Act [225 ILCS 610/10] and the rules of this Part, the applicant shall be granted sixty (60) days in which to correct the deficiencies specified. At the end of the period for correcting the deficiencies, another inspection shall be made. If upon inspection the deficiencies have been corrected, a license shall be issued.

(Source: Amended at 18 Ill. Reg. 14917, effective September 26, 1994)

Section 90.20 Plant Premises

- a) Plants shall be separated by a permanent wall and apart from any other part of the business operation.
- b) The location of new plant facilities shall be in compliance with local zoning ordinances before the Department will issue a license.

(Source: Amended at 8 Ill. Reg. 5937, effective April 23, 1984)

Section 90.30 Annual Truck Permits (Repealed)

(Source: Repealed at 8 Ill. Reg. 5937, effective April 23, 1984)

Section 90.40 Truck Operator's Records (Repealed)

(Source: Repealed at 8 Ill. Reg. 5937, effective April 23, 1984)

Section 90.50 Odors and Insects Shall Be Controlled

- a) The licensee shall maintain the facilities in such sanitary manner as to eliminate, insofar as possible, all odors and insects.
- b) In the case of collection centers, all rendering materials shall be picked up at the collection center and transported to the rendering plant daily, except during subfreezing weather.

(Source: Amended at 8 Ill. Reg. 5937, effective April 23, 1984)

Section 90.60 Salmonella Control For Renderers and Blenders

- a) A separate building or storage area shall be provided for the purpose of storing the finished products in order to avoid contamination after completion of processing.
- b) No tools or equipment used in handling the unfinished product shall be used in storage areas, or in handling of finished product.
- c) Renderers and blenders shall provide toilet, showering, dressing, and disinfecting facilities.
- d) Live steam shall be provided for scrubbing and cleaning floors and equipment.
- e) Rodent and vermin control shall be diligently practiced. Uncontrolled animals and birds shall not be tolerated on the premises.
- f) Buildings and surrounding grounds shall be kept clean and free from refuse, trash, or the accumulation of product or products of processing, including paunch manure.
- g) Any authorized representative of the Department shall be allowed access to inspect inventory during regular business hours and to take samples at the request of the Federal government, the licensee or manufacturer using the product, for the purpose of laboratory diagnosis to determine if salmonella is present.

(Source: Amended at 8 Ill. Reg. 5937, effective April 23, 1984)

Section 90.70 Inspection of Premise (Repealed)

(Source: Repealed at 8 Ill. Reg. 5937, effective April 23, 1984)

Section 90.80 Identification of Receptacles

All barrels used for transporting and storage of scrap or used cooking grease and oils shall be clearly marked "inedible" with letters of such size as to be readily distinguishable. Barrels shall be embossed or imprinted with a code assigned by the Department to the licensee.

(Source: Amended at 8 Ill. Reg. 5937, effective April 23, 1984)

Section 90.90 Records (Repealed)

(Source: Repealed at 8 Ill. Reg. 5937, effective April 23, 1984)

Section 90.100 Transportation and Transactions (Repealed)

(Source: Repealed at 8 Ill. Reg. 5937, effective April 23, 1984)

Section 90.105 Owner Transportation to Landfill

When an owner or person employed by the owner is transporting a dead animal to a landfill that is open and willing to accept animals, the following guidelines shall be followed:

- a) The most direct route shall be utilized.
- b) The bed of the vehicle transporting the animal shall have covering to prevent leakage to the road surface (e.g., plastic covering or barrels).
- c) The animal shall be covered during transport.

(Source: Added at 20 Ill. Reg. 294, effective January 1, 1996)

Section 90.110 On-The-Farm Disposal

Persons disposing of animals, poultry, fish, or parts of bodies thereof, other than to a licensed renderer, shall comply with the following:

- a) Disposal by Burning
 - 1) No open burning will be permitted.
 - 2) Any disposal by burning must be performed with an incinerator that is in compliance with the Illinois Environmental Protection Act [415 ILCS 5].
- b) Disposal by Burying

- 1) Burial shall be on the premises owned or operated by the owner of the dead animal.
 - A) Location shall be in an area where runoff will not contaminate water supplies or allow leachate to discharge into streams, ponds or lakes.
 - i) Dead animals shall not be buried less than 200 feet from a stream, private potable water supply well, or any other potable water supply source, except in accordance with Section 14.2(b) of the Illinois Environmental Protection Act.
 - ii) Dead Animals shall not be buried within the applicable 200 or 400 foot minimum setback zone of an existing community water supply well as established pursuant to Section 14.2 of the Illinois Environmental Protection Act.
 - B) Dead animals shall not be buried less than 200 feet from any existing residence not owned or occupied by the owner of the animal.
 - C) No more than a ratio of one pound of dead animals per one square foot of surface area shall be buried on an annual basis. No more than 3,000 pounds of dead animals shall be buried in each site location, and the same site shall not be used more frequently than once every two years for burial purposes. There shall be no more than three (3) site locations within a radius of 120 feet.
- 2) Burial depth shall be sufficient to provide at least a six-inch compacted soil cover over the uppermost part of the carcass. Precautions shall be taken to minimize soil erosion.
- 3) The abdominal cavity of large carcasses shall be punctured to allow escape of putrefactive gasses.
- 4) Lime or other chemical agent shall not be used to prevent decomposition.
- 5) Precautions shall be taken at the site of burial necessary to prevent any disturbance by animal or mechanical means.
- 6) Disease and nuisance vectors are to be minimized and controlled.
- 7) Final cover or settling shall be limited to a 5% or less slope differential from the normal gradient of its general surroundings.
- 8) Burial site locations shall be available for inspection by Department personnel

during normal working hours.

- c) Disposal of poultry by composting. Persons disposing of poultry by means of composting shall comply with the following requirements:
- 1) The composter shall meet the following criteria:
 - A) A roof shall cover the entire composting area.
 - B) An impervious, weight-bearing foundation such as concrete shall be used.
 - C) Rot-resistant building materials such as preservative-treated lumber shall be used.
 - D) The composter shall consist of primary and secondary bins.
 - E) The size of the composter shall be based on the farm's projected mortality rate of poultry, in which one pound of dead poultry per cubic foot of primary compost space per day is provided.
 - 2) Composting shall comply with the following guidelines:
 - A) A mixture of one part dead poultry (by weight), one and one-half part poultry litter, and one-tenth part of straw shall be used. For example: 400 pounds of dead poultry will require 600 pounds of poultry litter and 40 pounds of straw.
 - B) Layering shall be done in the following order, starting from the floor: (First layer) Straw, poultry litter, straw, birds, and poultry litter. Second and subsequent layers: straw, birds, and poultry litter.
 - C) A 36-inch probe-type thermometer shall be inserted daily into the pile to check the temperature. Within two to four days, the temperature should peak between 135° F. and 150° F.
 - D) Once the temperature begins to fall from the peak (normally 7 to 10 days), the material shall be removed to the secondary treatment bin.
 - E) After 7 to 10 days in the secondary bin, the compost may be agronomically distributed over land under cultivation or reused in the composting process. For the purpose of this subsection, the agronomic rate is the annual application rate of poultry compost, either alone or in combination with other nutrient supplying materials, that is necessary to achieve a reasonable crop yield without exceeding crop nutrient

requirements.

- 3) The composted material may be substituted for up to one-half of the poultry litter and one-half of the straw.
- d) Disposal of fish by composting. Persons disposing of fish by means of composting shall comply with the following requirements:
- 1) The composter shall meet the following criteria:
 - A) A roof shall cover the entire composting area.
 - B) An impervious, weight-bearing foundation such as concrete shall be used.
 - C) Rot-resistant building materials such as preservative-treated lumber shall be used.
 - 2) The base layer shall meet the following criteria:
 - A) Use 6 to 12 inches thick of a bulking agent.
 - B) Be no more than 6 to 8 feet wide, but as long as necessary to accommodate the day's supply of compost material.
 - 3) Composting shall meet the following guidelines:
 - A) Composting layer shall consist of a mixture of one part fish, three parts bulking agent and one part recycled compost (if available) or bulking agent and shall be mixed prior to use in the composting layer. The mixing of the materials for the composting layer shall be done in a manner to prevent leakage (e.g., stock tank, bucket, mixing drum).
 - B) The cover layer shall consist of two parts bulking agent and two parts recycled compost (if available) or two parts bulking agent and should reach a thickness of 6 to 12 inches.
 - C) Layering shall be done in the following order starting from the concrete: base layer, composting layer (fish, bulking agent and recycled compost), and cover layer. The composting and cover layers are piled on top of the base layer to form a trapezoid no higher than 4 feet.
 - D) Additions to the compost pile are done by adding new material to the end of the pile.
 - E) A probe-type thermometer shall be inserted daily into the pile to check the

temperature. The temperature should peak between 140° F. and 165° F. The material can be recycled after it has composted for at least 2 to 3 weeks, and its temperature has dropped to air temperature.

- F) After the temperature has dropped to air temperature (normally 2 to 3 weeks), the composted material may be used in the composting layer, or after one month, the composted material may be agronomically distributed over land under cultivation or reused in the cover layer. For the purpose of this subsection, the agronomic rate is the annual application rate of fish compost, either alone or in combination with other nutrient supplying materials, that is necessary to achieve a reasonable crop yield without exceeding crop nutrient requirements.
- (e) Disposal of swine by composting. Persons disposing of swine by means of composting shall comply with the following requirements:
- 1) The composter shall be located entirely over impervious foundation materials.
 - A) One of two foundations shall be used:
 - i) impervious soil (permeability equal to or less than 1×10^{-7} cm/sec. as defined in Section 651.0703 "Geotechnical considerations in waste facility siting", Agricultural Waste Management Field Handbook, Soil Conservation Service, U.S. Department of Agriculture, 1992). A 4 to 6 inch base of ungraded (varying particle size) field lime over the soil foundation is suggested as a runoff control measure.
 - ii) an impervious, weight-bearing foundation such as concrete or asphalt.
 - 2) Surface water shall be diverted away from the composter.
 - 3) Location shall be in an area where runoff will not contaminate water supplies or allow leachate to discharge into streams, ponds or lakes.
 - A) Composter shall not be constructed less than 200 feet from a stream, private potable water supply well, or any other potable water supply source, except in accordance with Section 14.2(b) of the Illinois Environmental Protection Act.
 - B) Composter shall not be constructed within the applicable 200 or 400 foot minimum setback zone of an existing community water supply well as established pursuant to Section 14.2 of the Illinois Environmental

Protection Act.

- 4) The composter shall consist of primary and secondary bins. The size of the composter shall be based on the farm's projected mortality rate of swine during any three-month period. The primary and secondary bins shall each contain a minimum of 10 square feet of composting area for each 1000 pounds of carcass to be composted.
- 5) The composter shall be constructed of permanent rot-resistant wall materials, such as preservative-treated wood, concrete, or precast concrete such as highway lane dividers. Each composter bin shall be three sides of a rectangle or square. One side of the bin shall be left open for loading, unloading and mixing the compost. In emergency situations, hay bales of 48 inches or greater in diameter may be used on a temporary basis in the above configuration of side walls.
- 6) Composting shall comply with the following guidelines:
 - A) Sawdust shall be the primary carbon source material. Sawdust from treated wood products shall not be used in any composting processes under any circumstance. Other carbon source materials may be used for no more than fifty percent (by volume) of the total carbon source, with sawdust making up the remaining fraction. When more than one carbon source material is used, sawdust shall be distributed by mixing throughout the secondary carbon source materials. Other carbon source materials could include chopped straw or chopped corn cobs.
 - B) It is expected that sawdust will be required in the ratio of approximately one cubic foot of sawdust per ten pounds of carcass (3.7 cubic yards of sawdust per 1000 pounds of carcass). A supply of sawdust shall be stockpiled and maintained on the premises at all times when the composter is in operation.
 - C) Each compost bin shall have a layer of sawdust a minimum of 10 inches deep placed on the floor before the first carcass is placed in the bin. There shall be a minimum of 10 inches of sawdust between the carcass and each of the vertical walls of the bin. The carcass shall be covered with a minimum of 10 inches of sawdust. Sawdust shall be added to the pile as composting begins, daily or as frequently as needed to sustain a 10 inch cover of sawdust over all carcasses in the bin's uppermost layer.
 - D) A compost thermometer with a probe at least 36" long shall be obtained and used daily to measure the temperature of the compost in the middle of each bin. The compost temperature should reach 135 to 160 degrees F.

(57 to 71 C.) and be recorded daily. Compost temperature indicates microbial activity and stage of composting process. The composting process shall be managed in such a way that the heating and decomposition can proceed to completion. If aerobic composting does not begin with 7 days, i.e., if temperatures do not rise above 135 F., the compost pile shall be turned and moisture content of the sawdust adjusted to allow the process to proceed. Temperature records shall be available for examination until the compost is disposed of as in subsection (G) below.

- E) Sawdust and carcasses may be placed in the bin until the bin is full.
- F) All compost from the primary bin shall be allowed to undergo a second composting phase as follows:
 - i) When the temperature surrounding the last carcass placed in the composter drops below 130 degrees F. (typically up to three months after the last carcass addition), the compost in that bin shall be transferred to a second bin and allowed to reheat, through a second composting cycle. Moisture shall be added to the compost as needed to promote further composting activity.
 - ii) Compost shall remain in the second bin for the duration of the secondary composting cycle (typically three months). Temperature of the compost shall be measured using the compost thermometer to monitor the composting process.
- G) Finished compost shall be agronomically distributed over land under cultivation or reused in the composting process. Finished compost may be returned to the primary composting bin in the ratio of up to 50 percent finished compost to fresh sawdust. For the purpose of this subsection, the agronomic rate is the annual application rate of swine compost, either alone or in combination with other nutrient supplying materials, that is necessary to achieve a reasonable crop yield without exceeding crop nutrient requirements.

(Source: Amended at 20 Ill. Reg. 294, effective January 1, 1996)

Section 90.120 Collection Center

A collection center shall comply with the following requirements:

- a) The location of a collection center shall be in compliance with local zoning ordinances before the Department will issue a license.

- b) The collection center shall be covered by a metal roof or other permanent type structure. The building shall be equipped with louver-type ventilators which are so screened as to prevent rodents and other animals, birds, flies, and insects from entering.
- c) Hot water or steam shall be provided to thoroughly clean the collection center premises.
- d) The collection center equipment and premises shall be disinfected with a product approved by the United States Department of Agriculture (9 CFR 71.10 (1995)). Incorporation by reference does not include any amendments or editions beyond the date specified and may be viewed and/or copied at the Department's Springfield office.

(Source: Amended at 20 Ill. Reg. 294, effective January 1, 1996)

Section 90.130 Disposal By Collection Center of Unusable Materials

Paunch manure, quantities of hair, feathers, and other unusable materials shall be routinely disposed of by burning, burying or spreading with manure spreader on cultivated ground not used for pasture of livestock.

(Source: Added at 8 Ill. Reg. 5937, effective April 23, 1984)