Regulations for disposal of poultry waste for Onsite Mobile Processing Units: Iowa

Mobile Processing Waste
Waste streams from mobile poultry processing units include:
- wastewater generated from scalding, rinsing and cooling of the birds;
- solid material such as the feathers, heads, feet and entrails.

Iowa Department of Natural Resources (DNR) regulates the disposal of livestock processing waste. Protecting water resources and preventing nuisance conditions are the primary goals of Iowa’s regulations. On-farm management of relatively small quantities of processing waste is preferred by producers and regulators, alike.

Iowa law allows for two favored alternatives for the management of poultry processing waste: 1) burial and 2) composting. Burial is well suited to the small producer given its simplicity. Composting is a viable solution for the larger producer or in cases where access to burial sites may not be available.

Burial
On-farm burial can occur without a sanitary disposal project permit provided it is done in accordance with regulations that require certain operational and locational requirements to be followed.¹

Locational requirements
Burial must occur:
- at least 100 feet from a private well and 200 feet from a public well;
- at least 50 feet from the property line and 500 feet from the nearest neighboring residence;
- outside the boundaries of a floodplain, wetland or shoreline area; and
- at least 100 feet from surface water including intermittent streams.

Operational requirements
- Processing waste must be disposed on the farm where it was produced.
- No more than 400 chickens per acre per year may be disposed of.
- Disposal must occur in well-drained soils.
- The bottom of the pit must not be greater than six feet deep.
- Waste must be immediately covered with at least 6 inches of soil and finally covered with no less than 30 inches of soil.

What is a Mobile Processing Unit?
Also referred to as Mobile Slaughter Units, MPU’s are either an open or closed trailer structure towed behind a vehicle where animal meat processing can take place in various locations, often on the farm of origin where the animals were raised. The units often contain all the necessary components to complete animal slaughter and processing similar to fixed units, but on a smaller scale and in various locations. Producers who do not process large volumes of animals and do not want to transport animals off farm may use a MPU. MPU’s are operated by the producer or by trained individuals who contract their processing unit and services to the producer.

Why this is important
MPU processing waste has the potential to contaminate water resources, pose a risk to human health and the environment or create nuisances if not properly managed. On-farm management of relatively small quantities of processing waste is preferred by producers and regulators alike. Maintaining adequate separation distances from water resources and neighbors can help avoid problems.

Detailed information regarding the regulations that apply to poultry processing waste from mobile units can be found by contacting the Iowa Department of Natural Resources, Land Quality Bureau Waste Section, at (515) 281-6807 or by email at webmaster@dnr.iowa.gov.

¹ Locational requirements, cont’d
Composting

If burial is not a viable option, composting may be. Composting facilities do not need a permit if they meet the conditions of the applicable rules and maintain compliance with general operational standards. Iowa DNR encourages those who wish to compost to contact local DNR officials for technical assistance.

Operational requirements

The operation must:

- minimize leachate as well as run-on and run-off;
- prevent ponding;
- be done on an all weather surface;
- be done in a way that minimizes odor, dust, litter, noise, risk to public health and general nuisance;
- incorporate waste into the compost operation within 24 hours of being processed;
- maintain a base layer of 12-24 inches with 6-12 inches of bulking agent between layers of animals, and an additional 12 inches of cover material to prevent leaching, odors and scavenging;
- ensure that waste is not removed from the compost until all soft tissue is fully decomposed;
- ensure that composted material is applied to cropland in a manner that prevents runoff to water of the state.

Wastewater Management

Iowa DNR staff conclude that given the relatively small quantities of wastewater generated from mobile processing, the wastewater can safely be spread on agriculture fields away from surface water, wells, property lines, and neighboring residences. The locational standards for burial and composting facilities can serve as guidelines when choosing a location to landspread the wastewater.

Regulations Cited

1 Iowa Administrative Code 567-100.4(455B). General conditions of solid waste disposal.

2 Iowa Administrative Code 567-105.6(455B,455D). Specific requirements for composting dead farm animals.

3 Iowa Administrative Code 567-105.3(455B,455D). General requirements for all composting facilities not exempt pursuant to 105.2(455B,455D)

For More Information

Iowa Department of Natural Resources
Land Quality Bureau Waste Section
(515) 281-6807 or webmaster@dnr.iowa.gov

This information was assembled by Mike Degen, who enjoyed a 30 year career with the Wisconsin Department of Natural Resources providing technical assistance, compliance assurance and regulatory oversight in a variety of environmental programs including wastewater, drinking and groundwater, surface water quality, solid and hazardous waste management and environmental cleanup. His most recent work was in the agricultural runoff program, promoting clean water practices on the farm.