



## Poultry Processing in Michigan

### A schematic to help guide those starting a poultry processing facility

Authors: Erica Rogers, Jeannine Schwehofer, and Tina Conklin, Michigan State University Extension  
February 2020

#### Poultry Processing in Michigan

Poultry inspection at the federal level is performed by the U.S. Department of Agriculture (USDA) Food Safety Inspection Service (FSIS) to enforce the [Poultry Products Inspection Act](#). Poultry is defined as chicken, turkey, duck, geese, or other (guinea fowl, black swan). The USDA allows for poultry slaughter or processing exemption for processing of less than 20,000 birds annually. The USDA poultry processing exemption may dictate additional requirements by the Michigan Department of Agriculture and Rural Development (MDARD) for selling poultry to the public. Depending on who (private consumers, retail establishments, restaurants, and others) and how (live bird vs. poultry carcass or cut-up parts) the exempted poultry is sold will determine licenses and procedures that must be followed from other state agencies.

In USDA exemptions 1 – 2 (Figure 1), most facilities that slaughter and process animals for the owner's personal use and fall under the USDA custom exemption are also exempt from state inspection and licensure. This poultry cannot be sold or donated. Shipping containers are labeled with the following: a. the producer's name, b. the producer's address, and c. the statement, "Exempt P.L. 90-492" and packages should be marked "Not for Sale." However, a retail establishment slaughtering and selling live birds on site is required to be licensed and inspected by MDARD.

State law requires that establishments under the USDA poultry exemption and selling products require a food license from MDARD (exemptions 3 – 7, Figure 1). Establishments that are under continuous inspection by USDA do not require a license from MDARD. Producers that fall under USDA exemption but choose not to process their own poultry must have their birds processed at either a USDA-inspected or MDARD-licensed establishment in order to sell or donate it. A food warehouse license from MDARD may also be needed.

A USDA or MDARD exemption does not exempt you from obtaining the proper permits for wastewater through the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Water Resources Division or drinking water wells through your local health department (LHD).



**To contact an expert in your area, visit [msue.anr.msu.edu/experts](http://msue.anr.msu.edu/experts) or call 888-MSUE4MI (888-678-3464)**

MSU is an affirmative-action, equal-opportunity employer, committed to achieving excellence through a diverse workforce and inclusive culture that encourages all people to reach their full potential. Michigan State University Extension programs and materials are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status or veteran status. Issued in furtherance of MSU Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Jeffrey W. Dwyer, Director, MSU Extension, East Lansing, MI 48824. This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by MSU Extension or bias against those not mentioned.



Figure 1: Steps to become a poultry processing facility in Michigan

Is the poultry processing exempt from USDA inspection?

No



Go through USDA for Grant of Inspection.

Yes



Start here: Determine what **one** USDA exemption you fall under (declare one annually).

1. Personal Use Exemption
2. Custom Slaughter/Processing Exemption
3. Producer/Grower – 1,000 Birds/Year Limit Exemption
4. Producer/Grower – 20,000 Birds/Year Limit Exemption
5. Producer/Grower or Other Person Exemption (20,000 Birds/Year)
6. Small Enterprise Exemption (20,000 Birds/Year)
7. Retail Exemption (store/dealer/restaurant)

**USDA Exemptions 1 or 2**



If **custom exempt**, MDARD license may not be needed.

1. Shipping containers bear: a. the producer's name, b. the producer's address, and c. the statement, "Exempt P.L. 90-492" and packages should be marked "Not for Sale."
2. Maintain records of production and sales of less than 1,000 birds per year.



Wastewater Management Options



**USDA Exemptions 3 – 7**

Register exemption with USDA and apply for MDARD license.



Contact:

1. Contact the local township or city for **zoning ordinance**.
2. Contact the local health department (LHD) for your in-bound water supply. The LHD may direct you to the Michigan Department of EGLE depending if it is a private or municipal water supply.
3. Contact **MDARD** at 800-292-3939.



Use **MDARD–Licensed Processing Facility** requirements to become a **licensed** facility (Reference 21 CFR 117<sup>1</sup>).

1. Current Good Manufacturing Practice, Hazard Analysis, And Risk-Based Preventive Controls for Human Food



### Best Management Practices for Wastewater

1. Collect blood and properly dispose of it (see “Options to Manage Bodies of Dead Animals” section), greatly reducing the biological oxygen demand (BOD) level going into the wastewater.
2. Separate solid materials (such as feathers) from the wastewater by placing screens over drains.
3. Maintain floor drains and internal grease traps.
4. Test wastewater for constituent concentrations.

### Wastewater Management Options

1. Off-Site Disposal Options:
  - A. Connection into municipal sanitary sewer; pretreatment may be needed **OR**
  - B. Pump and haul wastewater options:
    - Contract with a [Liquid Industrial Byproduct Transporter](#) to pump and haul away **OR**
    - Haul your own wastewater to a wastewater receiving facility. Contact EGLE, [Materials Management Division](#) (Jeanette Noechel, 586-494-5091), for requirements.
2. On-Site Wastewater Disposal Options:

Processing wastewater **cannot** be combined with the on-site sanitary septic system.

  - A. For discharging wastewater on your property, contact EGLE, [Water Resources Division, Groundwater Permits Unit](#), 517-284-5570, or your local [EGLE District Office](#) for more information.
    - Groundwater Discharge permit applications can be found on [MiWaters](#).
    - See Act 451, Part 31 “Water Resources Protection” promulgated Part 22 “[Groundwater Quality Administrative Rules](#)” that specifies wastewater must be permitted by Water Resources Division of EGLE.

### Options to Manage Bodies of Dead Animals

Other waste generated during poultry processing including feathers, viscera and blood must be disposed of according to the [Bodies of Dead Animals Act](#). In that act, the definition of “dead animals” includes “any part of the bodies, or any material produced from the bodies of animals that have been slaughtered.” Options for disposal include landfill, rendering, compost, incineration, burial, and anaerobic digestion.

1. Landfill – contact an [EGLE licensed landfill](#) and see if they accept carcass waste.
2. Render – contact a [licensed rendering facility/dead animal dealer](#).
3. Composting – can occur on-site or at a [registered composting facility](#). If you choose to compost on-site, reference the following for composting procedures:
  - A. [Bodies of Dead Animals Rules](#)
  - B. [Michigan Animal Tissue Compost Operational Standard](#)
  - C. [Carcass Composting - A Guide to Mortality Management on Michigan Cattle Farms \(E3197\)](#)
4. Incineration – see [Act 451, Part 55](#) “sources of air pollution” states that incinerators must be permitted by Air Quality Division of EGLE.
5. Anaerobic digestion – is required to be done under these conditions:
  - A. Temperatures of 95 to 145 degrees Fahrenheit
  - B. Hydraulic retention time greater than 20 days
  - C. pH of 6.8 to 7.5
  - D. Volatile solids loading in the range of 0.02 to 0.25 pounds of volatile solids per cubic foot
  - E. Total solids of the digester contents not to exceed 20% (200,000 ppm)
6. Burial – sites must have no contact with surface or ground water and must be at least 200 feet from wells. The [Bodies of Dead Animals Rules](#) (page 3) allows for individual and common graves.



### Requirements to Become a MDARD Licensed Processing Facility

To become a MDARD licensed poultry processor, building design and processing methods must comply with [21 CFR 117](#).

The following are general guidelines of physical requirements for a food business. Copies of the [Michigan Food Law, Act 92](#), the [2009 Michigan Modified Food Code](#), and a plan review workbook are available from the department's website. Plan reviews are mandatory for businesses that have food service (food for immediate consumption). Additional information is available on the department's website [www.michigan.gov/mdard](http://www.michigan.gov/mdard).

1. The floor must be smooth and easily cleanable. Acceptable materials include sealed cement, commercial grade vinyl tile, or the equivalent. Carpeting is not allowed in food processing or storage areas.
2. Walls and ceiling must be smooth, easily cleanable, and nonabsorbent. In food-processing areas, acceptable materials include fiberglass board panels, ceramic tile, commercial grade formica, vinyl-coated ceiling tiles, or the equivalent. In other areas, high-gloss epoxy paint is acceptable.
3. All lights in food processing, display cases, or areas where open food is handled must be shielded, coated, or otherwise shatter resistant.
4. A three-compartment utensil washing sink, with at least one drainboard (for air-drying equipment) is required. The sink bays must be adequate in size to immerse the largest piece of equipment for washing. A separate hand sink is required in food processing, warewashing, and service counter areas. A mop sink is required in the building (not in the food-processing area). All sinks must have hot and cold running water. Hand sinks must have soap, paper towels, and signage.
5. Preparation and processing tables must be easily cleanable (that is, stainless steel, plastic laminate, or the equivalent). Wood is not acceptable, except for a hardwood baker's table for bakery products.
6. Accurate, working thermometers are required in all hot and cold food cases.
7. Toilet facilities must include: be fully enclosed, be power vented to outside air, have a self-closer on door, have single service paper towels or hot-air dryer, have soap, hot and cold running water, and covered wastebasket. Toilet facilities cannot open in to food-processing area. Hooks or lockers must be supplied for employee clothing and cannot be in the toilet room.
8. Ventilation for cooking equipment (ovens, fryers, broasters, stoves, and others) – approval obtained from mechanical inspector.
9. It is the business owner's responsibility to meet all local and state building code requirements, including electrical, plumbing, mechanical, and building.
10. If the facility is on a private well, approval of the well must be done by the LHD and meet applicable rules and state law. Acceptable water test results for coliforms and partial chemistry are required prior to licensure.
11. A facility cannot discharge process wastewater into the existing sanitary septic system. Contact EGLE for process wastewater discharges that may or may not include sanitary waste (see "Wastewater Management Options" section). For the permitting of **only** sanitary sewage into a septic system, contact your [local health department](#).
12. If the proposed facility is to be a home-based business, all equipment and processing must be done in a room used only for that purpose. All equipment, sinks, storage, or anything associated with the business must be physically separated from personal items. All of the above listed requirements must be met. Approval from local township, city, and/or county zoning department is strongly recommended.
13. Slaughter, scalding, and plucking can occur outside. The poultry carcass must be transferred inside the facility through a space or hole in the facility. The outside area where the slaughter occurs must be smooth and cleanable with a cover over the top to prevent cross contamination. A pest management Standard Operating Procedure will be needed to minimize issues associated with pests.

To contact an expert in your area, visit [msue.anr.msu.edu/experts](http://msue.anr.msu.edu/experts) or call 888-MSUE4MI (888-678-3464)



### Processing Example Scenarios

Example scenarios are listed below for annual poultry production. Of the processing options selected for each scenario, **only one needs to be selected**. For example, in Scenario A, the poultry could be processed on the farm **or** taken to a licensed MDARD facility **or** USDA-inspected facility. The example of restaurants in the scenarios listed could include other foodservice establishments (such as schools, churches, fraternal organizations, and others).

**Scenario A:** Raise 350 birds and sell them to friends and family.

Processing:  Farm  MDARD-licensed facility  USDA-inspected facility

*Notes: Must sell the live birds to owner for their own consumption; cannot be sold or donated if processed on farm.*

**Scenario B:** Raise 1,000 birds and sell them to restaurant.

Processing:  Farm  MDARD-licensed facility  USDA-inspected facility

**Scenario C:** Raise 12,000 birds and sell them to grocery store and restaurant.

Processing:  Farm  MDARD-licensed facility  USDA-inspected facility

**Scenario D:** Raise 350 birds and sell them at a farmers market.

Processing:  Farm  MDARD-licensed facility  USDA-inspected facility

**Scenario E:** Raise 1,500 birds and sell them to friends and family.

Processing:  Farm  MDARD-licensed facility  USDA-inspected facility

**Scenario F:** Raise 20,001 birds and sell them to friends and family, farmers market, grocery store, or restaurant.

Processing:  Farm  MDARD-licensed facility  USDA-inspected facility

*For additional information, contact:*

*Erica Rogers, Environmental Management Extension Educator: [roger392@msu.edu](mailto:roger392@msu.edu) or 814-441-1356*

*Jeannine Schwehofer, Senior Meat Quality Extension Educator: [grobbej@msu.edu](mailto:grobbej@msu.edu) or 810-989-6935*

*Tina Conklin, Director of the MSU Food Processing and Innovation Center and Associate Director of the MSU Product Center – Food-Ag-Bio: [conkli74@msu.edu](mailto:conkli74@msu.edu)*

**To contact an expert in your area, visit [msue.anr.msu.edu/experts](http://msue.anr.msu.edu/experts) or call 888-MSUE4MI (888-678-3464)**