

STATE MEAT AND POULTRY INSPECTION PROGRAM

Facility Requirements Handbook

(Revised 12/2017)



**NORTH DAKOTA
DEPARTMENT OF
AGRICULTURE**

Introduction

The North Dakota Meat and Poultry Inspection Program (NDMPIP) operates with the following state laws and regulations to implement the program; North Dakota Century Code §4.1-31 and North Dakota Administrative Code §7-13. Within the administrative code the NDMPIP also adopted by reference some federal regulations, specifically; Title 9, Code of Federal Regulations (CFR), most sections of Part 300 to end. The facility and sanitation requirements regulations are within these regulations under a section called “Sanitation Performance Standards” (Parts 416.1-416.6).

The exact wording from the federal regulations is listed below in italics. Because these are actually federal regulations you will see the term “FSIS” rather than “NDMPIP”. However, because these regulations were adopted into state code, “NDMPIP” automatically replaces “FSIS”. Beneath most of the regulations there is additional information in regular font that provides better clarification for the regulations.

All meat processing establishments that fall under the jurisdiction of the NDMPIP must meet the facility and sanitation requirements listed below prior to operating and continue to abide by these regulations for the duration of their time in operation. Additionally, if establishments plan to retail meat products or other food products, they must also meet facility and operational requirements set by the ND Department of Health (NDDH). For more information on obtaining a retail license, contact the Food and Lodging Division of the NDDH at (800) 472-2927.

While these facility regulations allow for a large amount of flexibility in construction and design, they place the responsibility for the building design and materials used in the hands of the owner/operator. In other words, performance standards set the results to be achieved but not the specific means to achieve those results. Establishment owners/operators must build and maintain facilities and keep sanitation at a level necessary to prevent insanitary conditions and be conducive to the production of wholesome meat products that are free from contamination.

Submission of Floor Plans

Any individual building a new facility or making alterations to an existing facility must submit plans for NDMPIP review prior to construction. Plans must contain sufficient detail for the NDMPIP to review including;

1. Floor plan accurately drawn to scale
2. The plan must identify the intent for each room/area and should show the location of all processing and cleaning equipment
3. Entrances/exits, loading/unloading areas
4. Materials for all floors, walls, ceilings and work surfaces
5. Location of floor drains
6. Source of water supply and method of sewage disposal

Sanitation Performance Standards

§ 416.1 General Rules

Each official establishment must be operated and maintained in a manner sufficient to prevent the creation of insanitary conditions and to ensure that product is not adulterated.

Various types of bacteria and other microbial hazards will be introduced in meat processing establishments simply because of the nature of the product. These hazards enter into the plant through various means including; at slaughter, meat supplied through other slaughter plants or through employees. Some of the microbes are harmless and a natural part of the environment. Others are classified as 'pathogenic' meaning they cause disease in people or a foodborne illness. It is this second type of bacteria that need to be controlled and eliminated. Proper sanitation is paramount to achieving this.

Virtually all foodborne illness outbreaks could be prevented by proper sanitation. Past outbreak investigations have revealed the following deficiencies as factors involved in contaminating products; rodent droppings, rodents physically transferring microbes, fecal contamination of carcasses and meat products, improper sanitation of food contact surfaces. This list goes on and on. The important thing to remember is that sanitation is key in preventing contamination of food.

§ 416.2 (a) Establishment Grounds and Pest Control

The grounds about an establishment must be maintained to prevent conditions that could lead to insanitary conditions, adulteration of product, or interfere with inspection by FSIS program employees. Establishments must have in place a pest management program to prevent harborage and breeding of pests on the grounds and within establishment facilities. Pest control substances used must be safe and effective under the conditions of use and not be applied or stored in a manner that will result in the adulteration of product or the creation of insanitary conditions.

Although establishments are to have a pest management program, it need not be written. Considerations for an effective program include:

- Check your outside premises to verify that there are no breeding or harborage areas for pests. Will the weeds and grass surrounding your building permit harborage and breeding? Weeds and or grass must be kept mowed or be naturally scattered to prevent harborage and breeding. If the weeds are so dense as to permit concealment and breeding, your inspector will determine there is noncompliance with these regulations.
- Check within your establishment to verify that there is no harborage or breeding of pests by inspecting areas for evidence of pests.
- In order to verify that the pest control substances used are safe and used properly, generally you will either need to have some kind of documentation. This may be

product labeling or it may be specifications you received from the manufacturing company. You also need to ensure all substances are stored in a manner that will not result in product adulteration.

- Inspectors will verify compliance with this provision by making observations of the outside grounds and pest control. They will check the outside premises to verify that there are no breeding or harborage areas for pests. They will also verify that there is no harborage or breeding of pests within the establishment by inspecting areas of the establishment for evidence of pests. Noncompliance with this regulatory requirement does not have to involve evidence of pests.

§ 416.2 (b) Construction

(1) Establishment buildings, including their structures, rooms, and compartments must be of sound construction, be kept in good repair, and be of sufficient size to allow for processing, handling, and storage of product in a manner that does not result in product adulteration or the creation of insanitary conditions.

(2) Walls, floors, and ceilings within establishments must be built of durable materials impervious to moisture and be cleaned and sanitized as necessary to prevent adulteration of product or the creation of insanitary conditions.

(3) Walls, floors, ceilings, doors, windows, and other outside openings must be constructed and maintained to prevent the entrance of vermin, such as flies, rats, and mice.

(4) Rooms or compartments in which edible product is processed, handled, or stored must be separate and distinct from rooms or compartments in which inedible product is processed, handled or stored, to the extent necessary to prevent product adulteration and the creation of insanitary conditions.

Materials used for walls, floors and ceilings should be light colored for light reflection and sanitation. Whenever practical, materials that do not require painting should be used. Materials that are absorbent and difficult to keep clean are generally unacceptable. Examples of such unacceptable materials are wood, plaster board, and porous acoustical-type boards.

Commonly used acceptable materials for floors are sealed concrete, ceramic floor tile or a high quality epoxy sealant resistant to peeling. As a safety precaution, excessively smooth floors must be avoided. Commonly used acceptable materials for walls are glass board or glazed tile or other flat, non-absorbable material. Glass board is also a commonly used acceptable material for ceilings. If tiles are used for suspended ceilings they must be a non-absorbent tile with sealed seams or joints.

It is the establishment's responsibility to maintain the facilities in a manner that will not adulterate product or create insanitary conditions. Some examples of noncompliances inspectors observe regarding these provisions include; space around doors or windows allowing the entrance of vermin or dust; scaling rust or peeling paint on ceilings, walls or fixtures; surfaces that will absorb moisture such as wood; walls in production areas containing residues or mold growth.

These provisions also include the requirement to have adequate space in all areas of the plant that will permit each area to be maintained in a sanitary manner. For example, if the floors and walls cannot be cleaned regularly because of the overcrowded conditions, there is noncompliance with this provision.

§ 416.2 (c) Lighting

Lighting of good quality and sufficient intensity to ensure that sanitary conditions are maintained and that product is not adulterated must be provided in areas where food is processed, handled, stored, or examined; where equipment and utensils are cleaned; and in hand-washing areas, dressing and locker rooms, and toilets.

If an inspector observes an area of the establishment that appears to have inadequate lighting he or she will assess the condition by determining whether the lighting is adequate for the establishment to ensure that sanitary conditions are maintained, and that product is not adulterated. If this is the case, there is compliance with this provision. If the lighting is not adequate to ensure that sanitary conditions are maintained and that product is not adulterated, there is noncompliance with this provision. For example, if the lighting is not adequate to enable establishment employees to determine whether a substance on product is fecal material, the lighting is inadequate, and there is noncompliance.

§ 416.2 (d) Ventilation

Ventilation adequate to control odors, vapors, and condensation to the extent necessary to prevent adulteration of product and the creation of insanitary conditions must be provided.

Establishments must have adequate ventilation to control objectionable odors and vapors that could adulterate product or mask the odor of spoiled or otherwise adulterated product. Ventilation must also be adequate in all areas of the facility to control condensation, especially in areas where there may be exposed product.

An example where adequate ventilation would be questionable is: An inspector observes fog or smoke in the cooked meats cooler and learns it is from the establishment placing several trays of warm product in the cooler. If the inspector were to observe that the vapor in the room dissipated before forming any moisture on the ceiling, there would not be a noncompliance. If however the vapor coming from the warm product does form moisture on the ceiling, creating an insanitary condition, there would be a noncompliance with this provision.

§ 416.2 (e) Plumbing

Plumbing systems must be installed and maintained to:

- (1) Carry sufficient quantities of water to required locations throughout the establishment;*

- (2) Properly convey sewage and liquid disposable waste from the establishment;*
- (3) Prevent adulteration of product, water supplies, equipment, and utensils and prevent the creation of insanitary conditions throughout the establishment;*
- (4) Provide adequate floor drainage in all areas where floors are subject to flooding-type cleaning or where normal operations release or discharge water or other liquid waste on the floor;*
- (5) Prevent back-flow conditions in and cross-connection between piping systems that discharge waste water or sewage and piping systems that carry water for product manufacturing; and*
- (6) Prevent the backup of sewer gases.*

§ 416.2 (f) Sewage

Sewage must be disposed into a sewage system separate from all other drainage lines or disposed of through other means sufficient to prevent backup of sewage into areas where product is processed, handled, or stored. When the sewage disposal system is a private system requiring approval by a State or local health authority, the establishment must furnish FSIS with the letter of approval from that authority upon request.

All new establishments with private systems will be required to provide a letter of approval from the local sanitarian or representative from the ND Department of Health prior to being allowed to operate. Existing establishments will also be required to provide this documentation when requested by their inspector. To determine who the local sanitarian is in your area contact the Waste Management Division at (701) 328-5166.

§ 416.2 (g) Water supply and water, ice, and solution reuse

(1) A supply of running water that complies with the National Primary Drinking Water regulations (40 CFR part 141), at a suitable temperature and under pressure as needed, must be provided in all areas where required (for processing product, for cleaning rooms and equipment, utensils, and packaging materials, for employee sanitary facilities, etc.). If an establishment uses a municipal water supply, it must make available to FSIS, upon request, a water report, issued under the authority of the State or local health agency, certifying or attesting to the potability of the water supply. If an establishment uses a private well for its water supply, it must make available to FSIS, upon request, documentation certifying the potability of the water supply that has been renewed at least semi-annually.

(2) Water, ice, and solutions (such as brine, liquid smoke, or propylene glycol) used to chill or cook ready-to-eat product may be reused for the same purpose, provided that they are maintained free of pathogenic organisms and fecal coliform organisms and that other physical, chemical, and microbiological contamination have been reduced to prevent adulteration of product.

(3) Water, ice, and solutions to chill or wash raw product may be reused for the same purpose provided that measures are taken to reduce physical, chemical, and microbiological

contamination so as to prevent contamination or adulteration of product. Reuse that which has come into contact with raw product may not be used on ready-to-eat product.

(4) Reconditioned water that has never contained human waste and that has been treated by an onsite advanced wastewater treatment facility may be used on raw product, except in product formulation, and throughout the facility in edible and inedible production areas, provided that measures are taken to ensure that this water meets the criteria prescribed in paragraph (g)(1) of this section. Product, facilities, equipment, and utensils coming in contact with this water must undergo a separate final rinse with non-reconditioned water that meets the criteria prescribed in paragraph (g)(1) of this section.

(5) Any water that has never contained human waste and that is free of pathogenic organisms may be used in edible and inedible product areas, provided it does not contact edible product. For example, such reuse water may be used to move heavy solids, to flush the bottom of open evisceration troughs, or to wash antemortem areas, livestock pens, trucks, poultry cages, picker aprons, picking room floors, and similar areas within the establishment.

(6) Water that does not meet the use conditions of paragraphs (g)(1) through (g)(5) of this section may not be used in areas where edible product is handled or prepared or in any manner that would allow it to adulterate edible product or create insanitary conditions.

New establishments on municipal water supply will be required to provide a certificate or letter that states the establishment is connected to this water supply and that the water is certified as potable prior to being allowed to operate. Existing establishments must also have this documentation on file and provide it to the inspector when requested. **Regulations require that documentation certifying the potability of water from a private system be renewed at least semi-annually.**

§ 416.2 (h) Dressing rooms, lavatories, and toilets

(1) Dressing rooms, toilet rooms and urinals must be sufficient in number, ample in size, conveniently located, and maintained in a sanitary condition and in good repair at all times to ensure cleanliness of all persons handling any product. They must be separate from the rooms and compartments in which products are processed, stored, or handled.

(2) Lavatories with running hot and cold water, soap, and towels must be placed in or near toilet and urinal rooms and at such other places in the establishment as necessary to ensure cleanliness of all persons handling any product.

(3) Refuse receptacles must be constructed and maintained in a manner that protects against the creation of insanitary conditions and the adulteration of product.

Uniforms, frocks, aprons and cleaning equipment for processing area cleaning should not be stored in toilet rooms. The NDMPPIP recommends that vestibules separate toilet rooms from processing areas. If this is not possible (i.e. in existing establishments) and toilet rooms are directly connected to processing areas, physical separation should be maintained through self closing doors. This is to eliminate cross contamination potentials and break the mode of transmission for enteric (gastrointestinal) pathogens.

§ 416.3 Equipment and Utensils

(a) Equipment and utensils used for processing or otherwise handling edible product or ingredients must be of such material and construction to facilitate thorough cleaning and to ensure that their use will not cause the adulteration of product during processing, handling, or storage. Equipment and utensils must be maintained in sanitary condition so as not to adulterate product.

(b) Equipment or utensils must not be constructed, located, or operated in a manner that prevents FSIS inspection program employees from inspecting the equipment or utensils to determine whether they are in sanitary condition.

(c) Receptacles used for storing inedible material must be of such material and construction that their use will not result in the adulteration of any edible product or in the creation of insanitary conditions. Such receptacles must not be used for storing any edible product and must bear conspicuous and distinctive marking to identify permitted uses.

Under NDMPIP regulations establishments have the flexibility to choose whatever method they want to clean utensils and equipment to ensure that they are sufficiently cleaned and sanitized and kept in a sanitary condition so as not to contaminate or adulterate product. However, this is one area where NDDH requirements are more specific and must be considered if an establishment plans to have retail sales. Under NDDH establishments are required to have a three compartment sink for washing, rinsing and sanitizing equipment and utensils. The NDMPIP highly recommends this set up for all establishments since it is a proven method to effectively clean and sanitize.

§ 416.4 Sanitary Operations

(a) All food-contact surfaces, including food-contact surfaces of utensils and equipment, must be cleaned and sanitized as frequently as necessary to prevent the creation of insanitary conditions and the adulteration of product.

(b) Non-food-contact surfaces of facilities, equipment, and utensils used in the operation of the establishment must be cleaned and sanitized as frequently as necessary to prevent the creation of insanitary conditions and the adulteration of product.

(c) Cleaning compounds, sanitizing agents, processing aids, and other chemicals used by an establishment must be safe and effective under the conditions of use. Such chemicals must be used, handled, and stored in a manner that will not adulterate product or create insanitary conditions. Documentation substantiating the safety of a chemical's use in a food-processing environment must be available to FSIS inspection program employees for review. [In most cases the documentation will be "Material Safety Data Sheets."]

(d) Product must be protected from adulteration during processing, handling, storage, loading, and unloading at and during transportation from official establishments.

Meat and poultry products must be neither adulterated nor misbranded through the misuse of proprietary substances and nonfood compounds. Documentation substantiating the

safety of a chemical's use in a food-processing environment must be available for Inspection's review. The documentation will vary with the nature and intended use of that chemical. For example, for a pesticide, an establishment should have documentation showing that the compound is registered with EPA and the label information for the pesticide that indicates its use is appropriate in a food processing environment. For a chemical sanitizer used on food contact surfaces, an establishment should have documentation showing that the compound complies with the relevant Food and Drug Administration regulations in 21 CFR 178.1010. (Sanitizers meeting this requirement are usually identified as "Food Grade.") Meat and poultry establishments are responsible for ensuring that all proprietary substances and nonfood compounds are safe for their intended use and used appropriately. Establishments are free to choose whatever scientifically supportable method they find effective in limiting microbial growth in their operations.

§ 416.5 Employee Hygiene

(a) Cleanliness. All persons working in contact with product, food-contact surfaces, and product-packaging materials must adhere to hygienic practices while on duty to prevent adulteration of product and the creation of insanitary conditions.

(b) Clothing. Aprons, frocks, and other outer clothing worn by persons who handle product must be of material that is disposable or readily cleaned. Clean garments must be worn at the start of each working day and garments must be changed during the day as often as necessary to prevent adulteration of product and the creation of insanitary conditions.

(c) Disease control. Any person who has or appears to have an infectious disease, open lesion, including boils, sores, or infected wounds, or any other abnormal source of microbial contamination, must be excluded from any operations which could result in product adulteration and the creation of insanitary conditions until the condition is corrected.

An excerpt below from the FDA model food code explains the importance of employee health and hygiene:

Certain viral and bacterial agents will be transmitted from infected food workers into food. The agents of concern are known to be readily transmissible via food that has been contaminated by ill food workers.

There are different levels of risk associated with different levels of clinical illness. The first level relates to employees who have specific symptoms (e.g., vomiting, diarrhea, jaundice) while in the workplace. These symptoms are known to be associated commonly with the agents most likely to be transmitted from infected food workers through contamination of food. The first level also relates to employees who have been diagnosed with typhoid fever or an infection with hepatitis A virus (within 14 days of symptoms). The second level relates to employees who have been diagnosed with the specific agents that are of concern, but who are not exhibiting symptoms of disease because their symptoms have resolved. The third level relates to employees who are diagnosed with the specific

agents, but never develop any gastrointestinal symptoms. The fourth level relates to those individuals who are clinically well but who may have been exposed to a listed pathogen and are within the normal incubation period of disease.

The most significant degree of restriction and exclusion applies to the first level of food employee illness. Infected food employees in the first level are likely to be excreting high levels of their infectious pathogen, increasing the chance of transmission to food products, and thus on to those consuming the food.

For additional information and guidance for addressing health issues with plant employees see:

<http://www.fda.gov/downloads/Food/FoodSafety/RetailFoodProtection/FoodCode/FoodCode2005/ucm124017.pdf>

§ 416.6 Tagging insanitary equipment, utensils, rooms or compartments

When a Program employee finds that any equipment, utensil, room, or compartment at an official establishment is insanitary or that its use could cause the adulteration of product, he will attach to it a "U.S. Rejected" tag. Equipment, utensils, rooms, or compartments so tagged cannot be used until made acceptable. Only a Program employee may remove a "U.S. Rejected" tag.

Additional Facility Requirements for Official Establishments

Establishment owners/operators that plan to operate as official state-inspected will have additional facility requirements to meet. The regulations for these additional requirements are below.

§ 307.2 Other facilities and conditions to be provided by the establishment.

When required by the circuit supervisor [NDMPIP Director], the following facilities and conditions, and such others as may be found to be essential to efficient conduct of inspection and maintenance of sanitary conditions, shall be provided by each official establishment:

(a) Satisfactory pens, equipment, and assistants for conducting ante-mortem inspection and for separating, marking and holding apart from passed livestock those marked "U.S. suspect" and those marked "U.S. condemned" (pens, alleys, and runways shall be paved, drained, and supplied with adequate hose connections for cleanup purposes);

(b) Sufficient light to be adequate for proper conduct of inspection;

(c) Racks, receptacles, or other suitable devices for retaining such parts as the head, tongue, tail, thymus gland, and viscera, and all parts and blood to be used in the preparation of meat food products or medical products, until after the post-mortem examination is completed, in order that they may be identified in case of condemnation of the carcass; equipment, trucks, and receptacles for the handling of viscera of slaughtered animals so as to prevent contact with the floor; and trucks, racks, marked receptacles,

tables, and other necessary equipment for the separate and sanitary handling of carcasses or parts passed for cooking;

(d) Tables, benches, and other equipment on which inspection is to be performed, of such design, material, and construction as to enable Program employees to conduct their inspection in a ready, efficient and clean manner;

(e) Watertight metal trucks or receptacles for holding and handling diseased carcasses and parts, so constructed as to be readily cleaned; such trucks or receptacles to be marked in a conspicuous manner with the phrase "U.S. condemned" in letters not less than 2 inches high, and, when required by the circuit supervisor, to be equipped with facilities for locking or sealing;

(f) Adequate arrangements, including liquid soap and cleansers, for cleansing and disinfecting hands, for sterilizing all implements used in dressing diseased carcasses, floors, and such other articles and places as may be contaminated by diseased carcasses or otherwise;

(g) In establishments in which slaughtering is done, rooms, compartments, or specially prepared open places, to be known as "final inspection places," at which the final inspection of retained carcasses may be conducted (competent assistants for handling retained carcasses and parts shall be provided by the establishment; final inspection places shall be adequate in size and their rail arrangement and other equipment shall be sufficient to prevent carcasses and parts passed for food or cooking, from being contaminated by contact with condemned carcasses or parts; they shall be equipped with hot water, lavatory, sterilizer, tables, and other equipment required for ready, efficient, and sanitary conduct of the inspection; the floors shall be of such construction as to facilitate the maintenance of sanitary conditions and shall have proper drainage connections, and when the final inspection place is part of a larger floor, it shall be separated from the rest of the floor by a curb, railing, or otherwise);

(h) Retention rooms, cages, or other compartments, and receptacles in which carcasses and product may be held for further inspection (these shall be in such number and in such locations as the needs of the inspection in the establishment may require; they shall be equipped for secure locking or sealing and shall be held under locks or official seals furnished by the Department; the keys of such locks shall not leave the custody of Program employees. Every such room, compartment, or receptacle shall be marked conspicuously with the phrase "U.S. retained" in letters not less than 2 inches high; rooms or compartments for these purposes shall be secure and susceptible of being kept clean, including a sanitary disposal of the floor liquids; establishment employees shall not enter any retention rooms or compartments or open any retention receptacles unless authorized by Program employees);

(i) Adequate facilities, including denaturing materials, for the proper disposal of condemned articles in accordance with the regulations in this subchapter (tanks or other rendering equipment which, under the regulations in this subchapter, must be sealed, shall be properly equipped for sealing as specified by the regulations in part 314 of this subchapter or by the circuit supervisor in specific cases);

(j) Docks and receiving rooms, to be designated by the operator of the official establishment, with the circuit supervisor, for the receipt and inspection of all products as provided in Sec. 318.3 of this subchapter.

(k) Suitable lockers in which brands bearing the official inspection legend and other official devices (excluding labels) and official certificates shall be kept when not in use (all such lockers shall be equipped for sealing or locking with locks or seals to be supplied by the Department; the keys of such locks shall not leave the custody of Program employees);

(l) Sanitary facilities and accommodations as prescribed by Sec. 416.2(c), (d), (e), (f), and (h) of this chapter.

(m) In addition to any facilities required to accomplish sanitary dressing procedures, the following inspection station facilities for cattle and swine slaughter lines described in Sec. 310.1(b) of this subchapter are required:

(1) An inspection station consisting of 5 feet of unobstructed line space for each head or carcass inspector and, for viscera table kills, 8 feet for each viscera inspector on the inspector's side of the table.

(2) A minimum of 50 foot candles of shadow-free lighting at the inspection surfaces of the head, viscera, and carcass.

(3) A handwash lavatory (other than one which is hand operated), furnished with soap, towels, and hot and cold water, and located adjacent to the inspector's work area. In addition, for each head and viscera inspector on cattle slaughter lines, and each head inspector on swine slaughter lines, a sterilizer located adjacent to the inspector's work area.

(4) For mechanized operations, a line control switch located adjacent to each inspection station.

(5) Facilities to position tally sheets or other recording devices, such as digital counters, and facilities to contain condemned brands.

(6) For swine slaughter lines requiring three or more inspectors, and for those one- and two-inspector configurations where the establishment installs a mirror: At the carcass inspection station one glass or plastic, distortion-free mirror, at least 5 feet x 5 feet, mounted far enough away from the vertical axis of the moving line to allow the carcass to be turned, but not over 3 feet away, and so mounted that any inspector standing at the carcass inspection station can readily view the back of the carcass.