

## Sec. 416.2 Establishment grounds and facilities – (Eight Standards with Examples)

### Standard 1

(a) 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 the 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.

*Examples of the failure to meet the requirements of this regulation are:*

- The plant's pest extermination company is applying an insecticide in a manner that is inconsistent with the instructions on the label.
- A two-gallon container of insecticide is stored on a rack next to bags of flour in the ingredient dry storage area.

### Standard 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.

*Examples of the failure to meet the requirements of this regulation are:*

- Flaking or peeling paint on the walls or ceilings of edible product areas.
- Two holes in the glass board of a wall in an edible product area permitting moisture to penetrate the wood behind it.
- Open gaps in the drop ceiling of the spice room because two fiberglass plastic ceiling panels have warped and are no longer seated correctly on metal cross straps.
- An exposed gap/separation at the wall-floor juncture in the equipment and utensil washroom because two brick tiles that cover it are gone.

(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.

*Examples of the failure to meet the requirements of this regulation are:*

- There is an accumulation of dust on the ceiling around air vents in the fresh sausage packaging room.
- There are fat particles and hog hair from the previous days' production on the wall behind the dehairing machine.

(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.

*Examples of the failure to meet the requirements of this regulation are:*

- There are open gaps or cracks around several outside doors and pipes entering the plant.
- A window without a screen has a broken window pane.
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- There is a crack in the exterior block wall of the ingredient storage room.

(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.

*Examples of the failure to meet the requirements of this regulation are:*

- Inedible containers with byproducts to be used as animal or pet food are commingled with containers that have edible offal in them in a cooler.
- The denaturing or decharacterizing and packing of inedible byproducts and the handling and packing of edible offal is in a room too small to keep employees and products separated.

### **Standard 3**

(c) Light. 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.

*Examples of the failure to meet the requirements of this regulation are:*

- There is low lighting in the gizzard-peeling area that prevents a plant worker from inspecting the product.
- The lighting at the boneless meat reinspection area is not adequate to determine the wholesomeness of the beef trimmings.

### **Standard 4**

(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.

*Examples of the failure to meet the requirements of this regulation are:*

- There is air from an area where raw product is handled flowing into an area where ready-to-eat product is handled.
- A foul odor emanating from a restroom is entering an area where product is processed and handled.
- Diesel fumes from parked trucks are being drawn into the receiving coolers.
- Beaded condensate is on the bottom of a refrigeration unit (not equipped with a drip pan) in an area where product is processed, handled, or stored.

## **Standard 5**

(e) Plumbing. Plumbing systems must be installed and maintained to:

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

*Examples of the failure to meet the requirements of this regulation are:*

- The water flow rate for removing inedible poultry viscera from the production room is inadequate, allowing the viscera to pile up in the trough.
- There are no water outlets in an area of the official premises that requires the removal of fat, grease, blood, meat juices, feathers, manure, etc.

- (2) Properly convey sewage and liquid disposable waste from the establishment;

*Examples of the failure to meet the requirements of this regulation are:*

- There is a clogged drain in a production area allowing waste water to backup onto the floor.
- An ice storage compartment allows the water from melted ice to collect in the bottom.
- A grease trap located on the official premises is giving off a foul odor.

- (3) Prevent adulteration of product, water supplies, equipment, and utensils and prevent the creation of insanitary conditions throughout the establishment;

*Examples of the failure to meet the requirements of this regulation are:*

- A dead-end pipe is attached to a potable water supply line.
- A waste water drainage pipe that is a few feet above the floor and runs along the wall of the cutting and boning room has a small leak at an elbow.

- (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;

*Examples of the failure to meet the requirements of this regulation are:*

- Water from drip pan drainage lines is flowing across the floor to the floor drain located in the middle of the cooler.
- There is an accumulation of liquid and suspended solids (waste water) in a low area of the production room floor where employees walk.

- (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

*Examples of the failure to meet the requirements of this regulation are:*

- A water hose not equipped with a vacuum breaker to prevent back-siphonage has its nozzle submerged in the evisceration trough drain.
- There is a cross-connection with a shut off valve between the potable water supply and the nonpotable water supply.

- (6) Prevent the backup of sewer gases.

*Examples of the failure to meet the requirements for this regulation are:*

- When you find a drain in the plant emitting sewer gases, it is creating an insanitary condition, and there is noncompliance with the requirements of 416.2(e)(6).
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- For example, if you found a floor drain in a cooler allowing the release of sewer gases, you should document this noncompliance on an NR under procedure 06D01.

## **Standard 6**

- (f) Sewage disposal. 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, and led, 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.

*Examples of the failure to meet the requirements for this regulation are:*

- The plant has no documentation on file from a State or local health authority for approval of a **private** sewer system when approval is required.
- The plant's toilet bowls and urinals drain into the plant's grease recovery catch basin.

## **Standard 7**

- (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.

*Examples of the failure to meet the requirements for this regulation are:*

- Water at a sufficient temperature is not available at any of the water outlets in a room where product is processed, handled, and stored.
- The plant cannot produce documentation that its municipal water supply complies with the National Primary Drinking Water regulations or a potability certificate.
- The plant's current water potability certificate for its private well is two years old.

- (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 used 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.

*Examples of the failure to meet the regulatory requirements for the reuse of water, ice, and solutions that contacts edible product are:*

- Reusing a brine solution to chill bologna without filtering, screening, or treating it to reduce physical, chemical, and microbiological contaminants.
- Reusing water from raw vegetable rinsing operations to chill cooked hot dogs.

- (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.

*Examples of the failure to meet the requirements of this regulation are:*

- The plant doesn't rinse the kill room floors with potable water after washing them with reconditioned water.
- The plant used reconditioned water to formulate a pickle solution that was pumped into hams.

- (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.

*Examples of the failure to meet the requirements for this regulation are:*

- Reusing chemically treated water from employee restrooms to clean antemortem pens.
- Reusing water that has never contained human waste, is free of pathogens, but has not been subject to measures that reduce physical, chemical, and microbial contamination to rinse raw vegetables to be used in meat food products.

- (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.

*Examples of the failure to meet the requirements of this regulation are:*

- Using reuse water not meeting the use conditions of paragraphs (g)(1) through (g)(5) in the vapor lines serving **edible** product rendering equipment.
- Using water from a lake not meeting the use conditions of paragraphs (g)(1) through (g)(5) in hog **scalding vats and dehairing machines**.
- Using water from a well not meeting the use conditions of paragraphs (g)(1) through (g)(5) for washing the floors and equipment in **edible** product departments.
- Using reuse water not meeting the use conditions of paragraphs (g)(1) through (g)(5) to flush evisceration troughs in **edible** product areas.

## **Standard 8**

### **(h) Dressings 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.

*Examples of the failure to meet the requirements for this regulation are:*

- Used toilet tissue is on the floor around several commodes in a restroom used by production employees.
- Both receptacles in the dressing room are overflowing, allowing used paper towels and trash to be tracked around.

- (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.

*Examples of the failure to meet the requirements for this regulation are:*

- There are no paper towels at the only hand wash sink in the ready-to-eat product room.
- There is no hand cleaner in the dispenser for the only hand wash sink in the cutting and boning room.

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

*Examples of the failure to meet the requirements for this regulation are:*

- A plastic trash container in the lunchroom has a hole in the bottom, allowing food particles to fall out onto the floor and liquids to drain onto the floor.
- A plastic trash container outside the receiving office in the ingredient dry storage area has a buildup of soil on the inner surface that is giving off a foul odor.