Background:

The USDA Food Safety and Inspection Service (FSIS) has been in the rulemaking process for many years to regulate practices for sanitation and recordkeeping of beef ground in retail stores. Maintaining records on meat ground at retail has remained both an issue of concern by regulators, as well as a challenge for some retailers, recent food safety recalls and field inspection activities have raised the issue for more immediate action. FSIS has been very direct and persistent about issuing a proposed rule requiring recordkeeping at retail for grinding meat.

Twice yearly, the federal agencies publish a regulatory agenda with a list of the rules that they plan to publish. The proposed rule “Records to be Kept by Official Establishments and Retail Stores That Grind or Chop Raw Beef Products (Grinding Logs)” first appeared on the Federal Regulatory Agenda on December 12, 2012. A proposed rule published in July of 2014 and the final rule, with the same name, published in December 2015.

The reason that FSIS strongly pursued required recordkeeping is to protect public health. If there are illnesses linked with products, FSIS investigates the source of the contamination. If meat from multiple suppliers is used and no or limited records are maintained, the investigation stalls at the retail store and the supplier and often the potential hazard cannot be identified. In some cases, this uncertainty can be the difference between recalling product from one day or product from several months.

In outbreaks, there have been significant media and congressional pressure on USDA asking them to explain why records were not available. Since USDA already had statutory and regulatory authority, there was a perceived gap in recordkeeping at retail, which USDA addressed through rulemaking.

USDA Authority:

FSIS has the authority to require records and access to records under 21 USC 642 (a)(2) and regulations 9 CFR 320.1 (b) (1) (i), 9 CFR 320.1 (b) (1) (ii), and 9 CFR 320.1 (b) (1)(iv).
Recordkeeping at retail:

According to FMI surveys, over three quarters of FMI members maintained records on the meat products ground at retail prior to the rulemaking process. The level of detail in the records varies and the individual data points vary, but the majority of retailers reporting to FMI maintain these records.

In “Sanitation Guidance for Beef Grinders” published by FSIS in 2011, the agency provided sample tables requesting the following information:

- Store Name
- Store Address
- Employee Name
- Today’s Date:
- Time of Grind
- Lot/Batch Number
- Exact name/Type of Product Produced
- Package Size of Product Produced
- Amount (in pounds) of Product Produced
- Production Code of Product Produced
- Manufacturer, Name of Source Material Used for Product Produced
- Supplier Lot Numbers, Product Code and/or Pack Date of Source Material Used
- Establishment Information from Label of Source Product Used (Est #, ph #, contact info)
- Grinder Cleaned and Sanitized Between Source Materials? If Yes, Date and Time
- Comments

On an FMI survey, the most commonly recorded items on records were:

- Date Ground
- Product Ground
- Establishment number of supplier
- Quantity in lbs of product being ground
- Supplier name
- Supplier Date
- Lot Number
- Time grinder cleaned
- Time product ground
- Employee at retail (initials)

The FSIS Final Rule requires the following:

a. The establishment numbers of the establishments supplying the materials used to prepare each lot of raw ground beef product;

b. All supplier lot numbers and production dates;

c. The names of the supplied materials, including beef components and any materials carried over from one production lot to the next;

d. The date and time each lot of raw ground beef product is produced; and

e. The date and time when grinding equipment and other related food-contact surfaces are cleaned and sanitized.
Basic Regulatory Requirements

Cleaning and Sanitation of Equipment:
The FDA Food Code requires all food contact surfaces be cleaned at least every four hours. The food code allows for cleaning less frequently than every four hours if the utensils and equipment are held in a refrigerated room and cleaned according to the frequencies provided in the food code. Section 4-602.11

FSIS expects sanitation standard operating procedures (SSOPs) to be developed that address the cleaning of food contact surfaces, equipment, utensils, implements, and the processing areas. FSIS expects for the SSOPs to specify how frequently everything will be cleaned and include a verification procedure for cleaning.

Employee Training and Employee Health and Hygiene:
Proper training of all employees with access to the meat case, packaging area, and grinding areas is essential. Only properly trained employees should be allowed to work in the meat department, handle meat, and operate equipment.

The Food Code and/or local and state regulations have requirements for employee health and hygiene including illness procedures, and policies for handwashing, proper clothing, coverings, hair restraints, gloves, etc. Make sure all regulations are followed by all retail employees.

Importance of “Breaks” in the production cycle:
Breaks in the production cycle are critical and should not be overlooked. A break in the production cycle is a combination of a complete cleaning and sanitation step in conjunction with no carryover of product. This can be the difference between recalling product from one day or product from several months.

Documenting cleaning and sanitation is imperative. Documentation can be done on the same records as the meat grinding records or on separate records.

Importance of avoiding carryover:
The second very important factor is to process carry over or discard it. If product cannot be processed on a daily basis, have a plan for using it up every two days, or three days, or worst case weekly in order to limit exposure should there be a recall. If the equipment is cleaned, and product is carried over to the next day, those two days of production are now linked. If this is done day after day, there is no break in production and all of the product becomes one huge lot. This can lead to rolling recalls and there are many examples in the meat industry of months of product being recalled because of carry-over and no breaks in production. There are also examples of very small recalls because of clean breaks and appropriate recordkeeping.

Lessons Learned:
In the case of outbreak investigations, a few practices make it very difficult to piece together information and can halt investigations. Examples of these include:

- Product from several suppliers combined in the grinder and not recorded
- Trim mixed with other product and not recorded, for example bench trim mixed with chubs and not recorded
- Supplier name recorded but no other identifying information such as the establishment number which is a true identifier. (Many suppliers have similar names)
- Incomplete or inaccurate forms
- Carryover and no true breaks in the production cycle
Lotting at Retail:

The package produced at retail must be linked with the “lot” of ground product. The simplest way to do this is by placing an identifiable code, product name and date on the product label that links the package to the lot of meat ground for which there is a record.

The lot should have a supportable definition and should link the packaged product to the source material. Some companies will have several lots a day because they clean and sanitize frequently, and some will only have one lot a day. Most companies are producing multiple types of ground product throughout the day that should be labeled differently but the true lots run from sanitation cycle to sanitation cycle because those have a break in the production cycle and minimal chance of contamination between lots.

Product Handling Practices:

- Grind chubs or tubes first and start with the highest lean percentage.
- Other products such as store-generated trimmings should be ground at the end of the grinding session and segregated from other products (some companies grind first thing in the morning; and clean and sanitize before and after grinding trim). The goal is to separate trim from other products and to have it be as small of a lot as possible.
- Rotate supply first-in first-out and pay attention to sell-by dates
- Avoid mixing species unless intentional and clearly labeled. Clean and sanitize equipment between species.
- Store trim in clean and sanitized lugs and hold under refrigeration.
- Properly label all trim lugs with the primal source, date, time and employee

Best Practices

Examples of Best Practices

- Best Practices in Product Handling
  - Avoid mixing products from different suppliers
  - Avoid mixing chubs and trim
  - Avoid grinding re-work or pull-backs (if they are ground, make sure they are separated from other product and clearly documented in the records)
- Electronic record keeping
  - Most retailers are maintaining records on meat ground at retail and some have moved from paper records to electronic records. Meat suppliers are placing scanable barcodes on boxes. When the meat is ground, the barcode is scanned and this information goes to a central database. The accuracy of the information is much better than paper records and the speed of retrieving information is much faster. However, the capital costs are higher. Companies using the technology are very encouraged with the results and no one seems to be returning to a paper based system. This may also have additional benefits for other labeling/tracing requirements.
• Managing trim and higher risk products
  - USDA considers bench trim from primals, subprimals, and boxed beef higher risk products and directs USDA inspectors to collect samples during the surveillance activity *(FSIS Directive 8010.1 Rev 4)*. Managing trim can be challenging and takes some extra work, but is necessary to protect public health and reduce risk. Some retail companies have stopped using trim and only grind chubs. If trim is ground, it needs to be carefully handled, properly recorded, ground in limited lots and labeled.

• Managing carryover
  - Many companies have developed a system for either eliminating carryover on a daily basis, or running carryover first thing in the morning, and following the run with a cleaning and sanitation step. If carryover is not managed, it can expand the scope of a recall even with documented sanitation steps.

• Cleaning and sanitizing as needed, even if more frequent than every 4 hours
  - Many companies are cleaning and sanitizing at the following frequencies: throughout the day, between each run, between each species change, before and after grinding trim; and companies are breaking the product into lots between the cleaning and sanitizing steps. It is a proactive way to manage product, reduce liability and link product to records.

**Reasons to Maintain Records**

1. Required by USDA
2. Assists in an investigation and helps to identify problems faster and therefore protect public health
3. Reduces chance of having a recall at retail
4. Reduces liability in case of a food safety issue
5. Reduces publicity in case of a food safety issue
6. Reduces amount of product recalled and financial burden

Contact the FMI Department of Food Safety Programs at **202-220-0661** for assistance or questions.
Sample Ground Meat Record for Retail Stores
Consistent with FSIS Final Rule

USDA Food Safety Inspection Service (FSIS) has completed the rulemaking process to regulate practices for recordkeeping in retail stores related to meat grinding. USDA requires that retailers maintain records to identify each lot of ground meat prepared at the store. Records of all source materials used in grinding, including trim, is expected by the agency.

FMI has prepared a simple chart on the following page that contains the required information for USDA. Feel free to use this chart if you have not implemented recordkeeping procedures or would like to modify your existing chart.

Along with recordkeeping, proper sanitation, employee training and hygiene, and control of product carry-over are all essential management tools.

Contact the FMI Department of Food Safety Programs at 202-220-0661 for assistance or questions.

<table>
<thead>
<tr>
<th>Date and Time of Grind</th>
<th>Supplier lot #s, Product Code and/or pack date of Source Material (from supplier label)</th>
<th>Establishment Number of Supplier (providing source material)</th>
<th>Retail Label (name of product on retail label)</th>
<th>Date and Time Equipment Cleaned &amp; Sanitized</th>
<th>Comments</th>
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Maintain records at the store for one year past the grind date.