

Monitoring

The regulation that applies to monitoring is:

9 CFR 417.2(c)(4)—*List the procedures, and the frequency with which those procedures will be performed, that will be used to monitor each of the critical control points to ensure compliance with the critical limits*

You will verify the monitoring requirement by performing the HACCP 01/02 procedures. You could use either the recordkeeping or review and observation component, or both.

The thought process you should use when verifying regulatory requirements includes:

- gathering information by asking questions;
- assessing the information; and
- determining regulatory compliance.

This thought process should be utilized when verifying all of the regulatory requirements.

Gather information by asking questions

Verify the regulatory requirements for monitoring by reviewing the HACCP plan, reviewing HACCP records, observing establishment employees performing monitoring activities, and taking measurements at CCPs. When verifying the monitoring requirements, seek answers to the following questions.

1. Does the HACCP plan list the monitoring procedures and frequencies that are used to monitor each of the critical control points to ensure compliance with the critical limits?
2. Are the monitoring procedures being performed as described in the HACCP plan?
3. Are the monitoring procedures being performed at the frequencies for the CCPs listed in the HACCP plan?
4. Are the critical limits met?

Assess the information

To answer these questions you should:

- Review the HACCP plan
- Review the HACCP monitoring records
- Observe the establishment employees perform monitoring activities
- Take measurements at critical control points

Now let's review each of these activities in detail.

Reviewing the HACCP Plan

When reviewing the establishment's HACCP plan you will determine whether it includes the monitoring procedures and frequencies that are used to monitor each critical control point. It is very important for you to be familiar with the monitoring procedures and frequencies in the current HACCP plan. You should review the HACCP plan each time the monitoring requirement is verified since the establishment can modify the plan without notifying inspection.

Monitoring Example 1: *You are performing the 03D01 procedure at a canning facility and have randomly selected to verify the monitoring requirement for the metal detection CCP for the Vienna sausage product. You review the establishment's HACCP plan and find that it specifies monitoring personnel will observe that the metal detector is functioning as designed by passing the seeded sample through the metal detector and observing that the metal detector properly detects and rejects the seeded sample. The plan states that this monitoring procedure is to be performed hourly and results recorded. Based upon your review of the plan, you decide the monitoring procedures and frequencies for this CCP are included in the HACCP plan.*

Reviewing HACCP Monitoring Records

You may decide to use the recordkeeping component to verify the monitoring requirement to determine if the establishment is performing the monitoring procedures at the frequency specified in the HACCP plan.

Monitoring Example 2: *You are performing the 03F01 procedure at a dry sausage establishment and have randomly selected to verify the monitoring requirement for the fermentation CCP, using the recordkeeping component. The HACCP plan states that the pH of 3 pieces from each smokehouse will be measured at the completion of the fermentation cycle. Reviewing yesterday's record in the HACCP office, you find that monitoring personnel have recorded pH for 3 pieces from each smokehouse prior to initiating the cook cycle as per the HACCP plan for this CCP. You determine that the establishment's monitoring frequency for this CCP is in compliance. You have also verified that the critical limits were met.*

Observing Establishment Employees

You should observe an establishment employee performing HACCP monitoring activities to determine whether the procedures are being carried out as written in the HACCP plan.

Monitoring Example 3: *You are performing the 03F01 procedure at a dry sausage establishment, you decide to perform the review and observation component as part of your verification of the monitoring requirements for the pH CCP. The HACCP plan states that the pH of 3 pieces from each smokehouse will be measured at the completion of the fermentation cycle. You observe the establishment monitoring personnel as they use the pH meter to determine pH for each of 3 pieces from one smokehouse and document the results on the monitoring records. From your observation, you determine that the*

establishment is in compliance with the monitoring procedure as it is described in the HACCP plan.

Taking Measurements at Critical Control Points

You may also take measurements at certain critical control points in the process.

Monitoring Example 4: *You are performing the 03F01 procedure at a dry sausage establishment and have randomly selected to verify the monitoring requirement for the cooking CCP. You proceed to the cooking unit area and observe that a batch is near the end of the cook cycle. You take a temperature of product when it is removed from the cooking unit. You then compare your temperature reading with the temperature that was recorded by the establishment monitoring personnel. You determine that the establishment is in compliance because your temperature reading is within the critical limit and compares with the reading as recorded by establishment monitoring personnel.*

Determine compliance

After you have gathered and assessed all available information pertaining to the monitoring requirement, you must determine regulatory compliance. If you find that the establishment has met all monitoring regulatory requirements, then there is no regulatory noncompliance. If you find that the establishment has not met all monitoring regulatory requirements, there is noncompliance. You will receive more information about making compliance determinations in a later section.

Noncompliance with the Monitoring Requirement

The following are examples of noncompliance with the monitoring requirement.

- 1. The HACCP plan specifies that monitoring personnel will check the pH of 4 pieces of summer sausage from each smokehouse prior to initiating the cook cycle. The HACCP plan states that 2 pieces will be randomly selected from the front racks, and 2 pieces will be randomly selected from the rear racks. You observe that the smokehouse operator takes all 4 pieces only from the front racks. **The establishment is not conducting the monitoring procedures as specified in the HACCP plan.***
- 2. The HACCP plan specifies that the surface temperature of 3 pieces of packaged, sliced product exiting the post lethality steam tunnel will be monitored hourly by establishment personnel and recorded. You review the record and find that the monitoring checks were recorded every 2 hours. Upon further inquiry, you determine that the monitoring checks were actually being performed every 2 hours. **The establishment is not performing the monitoring procedures at the frequencies specified in the HACCP plan.***

- 3. The HACCP plan specifies that the temperature inside the post lethality steam tunnel will be maintained at a minimum of 180°F at the center of the tunnel. You observe the temperature gauge on the side of the equipment and find that it reads 177°F. **The critical limit for the CCP is not met.***

You will document any noncompliance in accordance with our discussion of documentation and enforcement in a later section.