APPLICATION OF HACCP PRINCIPLES FOR THE MEAT INDUSTRY

GUIDANCE SHEET NO: 16

ESTABLISH A CORRECTIVE ACTION PLAN PRINCIPLE 5

CORRECTIVE ACTION PLAN

Corrective actions are the actions necessary when something goes wrong with the operation of the HACCP system that could result in an unacceptable level of food safety risk with potential to cause harm to the customer.

Corrective actions are a set of planned actions (recorded in a corrective action plan) that must be taken by nominated persons whenever monitoring shows that critical limits are not being achieved at any of the critical control points. There are two types of corrective action:

(1) **Corrective actions intended to prevent loss of control at a CCP:** This may become apparent when monitoring at a critical control point identifies a failure to achieve target values but the critical limits have not yet been breached. Appropriate responses to this type of event may be an adjustment of the process to prevent loss of control and an investigation into why the target values were not achieved.

(2) **Corrective actions to be taken when loss of control at a CCP has been identified:** This will be the case when monitoring has identified that a critical limit has not been achieved.

WHAT MUST BE DONE IF CONTROL IS LOST AT A CCP?

If monitoring shows that a CCP is out of control (the target value is not being achieved or the critical limit is not being met) prompt action must be taken to regain control at the CCP. When developing the corrective action-plan it is necessary to decide what corrective actions must be taken to:

- Restore control;
- Deal with affected product produced while out of control;
- Investigate the cause to avoid a repetition of the problem;
- Who is responsible for carrying out all of the corrective actions;
- What information is to be recorded, where and by whom;
- Who will check that corrective action is being carried out properly and where and how this check is to be recorded.

The development of suitable corrective actions is best illustrated through a case study (see box 1).

Box 1. Development of Corrective Actions for a CCP: "Chilling of Carcases"

Carcases must be kept chilled to prevent the growth of foodborne pathogenic and spoilage bacteria on the meat. The critical limits for chilled carcasses are as follows: 7°C (red meat), 4°C (white meat) and 3°C (offal). The critical limit is established once the carcase has cooled from room temperature to the required temperature. In the case of a red meat carcase cooling from 30°C to 7°C will take approximately 48 hours. The critical limit is monitored using temperature probes to record the air temperature of the chiller and the core temperature of the meat.

If the core temperature of a red meat carcase rises above 7C the critical limit has been breached and there is a risk of bacterial growth. Corrective actions will include:

- Reducing chiller temperature further;
- Moving the meat to another chiller;
- Hold the product while waiting for the results of a critical evaluation of batch involved, which may include microbiological sampling;
- Investigate, identify and rectify the cause of the failure of the chiller system to prevent it happening again.

Note the order of priority for corrective action,

Highest Priority: Restoring the correct core temperature of the product

High Priority: Prevent any potentially harmful products leaving the factory until shown to be safe.

Low Priority: Identification and repair of mechanical problems in the chiller unit

The low priority action is only done once product safety has been secured.

DEVELOPING A CORRECTIVE ACTION-PLAN

When developing a corrective action-plan you should consider the following:

- For each CCP, anticipate any problems that could occur and decide on corrective actions for each CCP to restore control (Always remember that effective control of food safety risks is your highest priority);
- Include all corrective action information in the HACCP plan;
- Make sure staff responsible for corrective actions have clear instructions and understand what they must do if there is a problem so that corrective action can be taken without delay;
- The manager / supervisor / designated member of staff must record the corrective action that has been taken and sign that it has been carried out correctly.

What are you going to do straight away? Think about the need to stop the process; quarantine the product; and make quick adjustments to relevant equipment or the process for example by increasing the process temperature or extending the process time.

What are you going to do about affected product that has been produced since the last good check? (This may be in storage/despatch.) This does not include recalling the product, because monitoring should be sufficient to capture the issue before the product has left the site. Think about the need to quarantine the product from the last good check i.e. product manufactured during out-of-control conditions, disposal of the product.

What are you going to do to in the future? Think about reworking the product if this is appropriate, carrying out an investigation (review cause and correction to prevent recurrence), disposal of the product if reworking is not possible.

Allocate clear responsibility for the corrective actions, for instance who is authorised to dispose/rework the product or take the appropriate corrective action.

Are all personnel trained and competent for performing the activities stated? Think about training and competency of personnel involved.

DOCUMENTATION AND RECORD KEEPING FOR CORRECTIVE ACTIONS

Document the corrective actions to be taken when a CCP exceeds its critical limit and who is responsible for this action, or other actions such as disposal, rework.

Relevant records must be kept including:

- Training records;
- What happened to the batch of product that was affected by the corrective action;
- Written procedures that contain the details of the corrective actions for each CCP and who has the authority to authorise the corrective actions.

COMMON PROBLEMS WITH CORRECTIVE ACTION-PLANS

Corrective actions focus only on technical matters, for example, repairing the refrigeration units and not on the fate of the potentially unsafe food.

Corrective action is not taken or is deliberately postponed – when control is lost and corrective action is not taken, food safety is endangered and potentially unsafe product may reach the customer / consumer – inactivity is unacceptable.

Corrective action is delayed – this may be due to confusion between line staff, supervisors and management as to who is responsible for which element of the necessary corrective action or what that action should be. A review of instructions and / or training may be needed.

Corrective action records are not kept or are incomplete or inaccurate – this may give management a false impression that there are no problems. It is in the interests of all parties that the operator should understand food safety risks and how these may be better managed.

Corrective action is initiated but not completed.

The same corrective actions occur repeatedly, suggesting that food safety management procedures and / or the HACCP plan are seriously flawed. If corrective actions have to be taken repeatedly there is something wrong with the company's food safety management system. This requires urgent investigation of possible causes, for example, unclear staff instructions, failing or difficult to use equipment, insufficient training etc.