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CODE OF PRACTICE FOR POULTRY FEED PROCESSING AND TRANSPORTATION



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Deviation: Failure to comply with requirements or exceeding fixed, critical limits

Disinfection: Process of removing undesirable microorganisms. The process is carried out by chemical or steam cleaning

Reduction: Grinding or another kind of physical breakdown of a product

Feed: Feedstuffs, premixtures, additives, animal feed, feed mixtures, and all other types of products used for the feeding of animals

Feed company: A public or private company that carries out any kind of activity that is a part of the production, preparation, storage, transport or distribution of feed, including all producers who produce, prepare or store feed for the feeding of animals at their own farm

Findings of salmonella: Findings of salmonella demonstrated by cultivating isolate

Approved own-check/audit: In this code of practice, an approved own-check/audit is considered a part of a company's own-check scheme, which has been approved by the reference group in accordance with this code of practice

Roughage: Hay, straw, fresh greens, raw fruit, vegetables, root crop, cut branches, leaves, and ensilage products

Corrective action: An action that is performed to remedy a deviation. The action must include the remedy of defects, handling of the product, and prevention of recurrence as well as documentation of corrective action

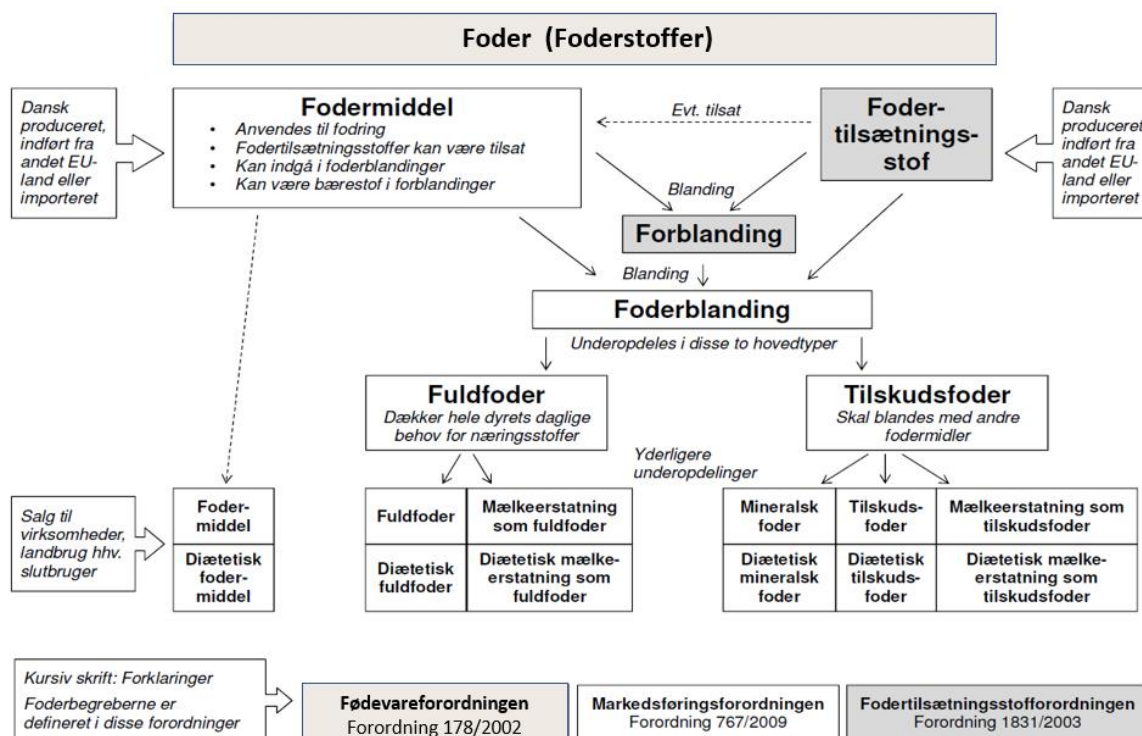
Oil-containing feedstuffs: Oil-containing feedstuffs are described in the catalogue of feed materials in the Commission Regulation EU 68/2013

Transport unit: A unit that transports feed

Heat treatment: A process which the feed is subjected to in order to obtain a minimum temperature 81°C

Zone division: Cold zone = unclean zone prior to heat treatment. Warm zone = clean area from/after heat treatment

Schematic overview of feed (feedstuffs):



Source: The Danish Veterinary and Food Administration

All feed used for the commercial production of eggs and meat poultry in Denmark is presumed to be produced and handled in compliance with current legislation for feed and feed companies.

All member companies of the Danish Egg Association, the Meat Poultry Committee, DAKOFO and its member companies, which produce and transport poultry feed, are committed to adopt this code of practice.

A complete list of the companies, which have adopted this code of practice, has been published on www.danskfjerkrae.dk.

The code of practice for the production and transport of poultry feed becomes effective on 1st April 2021.

Other parties may adopt the code of practice at their own request.

The signing parties hereby confirm that the code of practice has been agreed on and implemented as described.

On behalf of DAKOFO

On behalf of the Meat Poultry Committee

On behalf of the Danish Egg Association

Other parties

Copenhagen on ____/____ 2021

1. REFERENCE GROUP

The code of practice is an agreement between the following parties:

- The Danish Egg Association
- The Meat Poultry Committee
- DAKOFO

A code of practice is required as part of the national salmonella control program.

The Danish Veterinary and Food Administration has evaluated that this code of practice is sufficient to prevent salmonella from entering the production chain and to ensure that any salmonella introduced will be removed efficiently from the production chain.

1.1. MEMBERS OF THE REFERENCE GROUP

The reference groups have the following members:

- An external chairman appointed by the reference group
- Four representatives appointed by DAKOFO
- Four representatives appointed by the Danish Egg Association and the Meat Poultry Committee
- One representative of The Danish Veterinary and Food Administration
- One observer (representative) from an external auditing company
- One observer appointed by DAKOFO
- One observer appointed by the Danish Egg Association
- If required, the reference group may call in external assistance

Members of the reference group are bound to participate in the reference group's meetings. Each individual body must ensure this. Poultry producers cannot be appointed as representatives or observers. Observers do not have a right to vote.

Appendices and minutes of meetings of the reference group are confidential, and only the reference group and The Danish Veterinary and Food Administration have access to them. The reference group informs relevant business partners regularly of the team's work and decisions, both as regards revising the code of practice and other non-confidential information.

The reference group ensures that the code of practice is adhered to and regularly discusses action intended to target and develop the code of practice and make it more efficient.

The Danish Agriculture & Food Council makes a secretariat available and is responsible for the chairman's remuneration. The reference group convenes as required, however, at least once a quarter. The secretariat convenes the meetings on behalf of the chairman.

A current list of the reference group's members is available on www.danskfjerkae.dk.

1.2. CHAIRMAN AND VICE-CHAIRMAN

The reference group is headed by an external chairman and a vice-chairman. The chairman is employed by The Danish Agriculture & Food Council and appointed on the basis of his professional qualifications in the areas of microbiology and risk assessment. The current chairman may be replaced and thus dismissed according to the contract in force.

An evaluation committee consisting of four persons appointed by the reference group appoints a new chairman. The evaluation committee includes at least one member from a university with micro-biological expertise in the area.

In situations where the chairman is absent, his duties will be performed by the vice-chairman. The vice-chairman is appointed by the reference group for a maximum period of two years. The appointment takes place at the first quarterly meeting in odd years. The vice-chairman is appointed from among the members of the reference group.

2. OBJECTIVE AND SCOPE

The objective of this code of practice is to define rules for the production, handling, and transport of feed for commercial poultry production (eggs and broilers) in order to avoid the occurrence of salmonella in feedstuffs.

As a minimum, the code of practice complies with applicable legal requirements for the control of salmonella in feedstuffs. Should legislation be revised, the code of practice will be updated accordingly.

The code of practice specifies guidelines for process control, audit reporting, use of results, and implementation of corrective action. The code of practice is structured in accordance with the Hazard Analysis Critical Control Points, the HACCP principles, as specified in the Codex Alimentarius.

The Danish Veterinary and Food Administration supervises the code of practice through its representation in the reference group. However, The Danish Veterinary and Food Administration may still subject a feed company approved according to the code of practice to focused control during relevant campaigns.

Danish as well as foreign companies, which are registered and approved according to current legislation, may adopt the code of practice. This also applies to factories where production is carried out in separate facilities.

The code of practice also deals with special situations during the transport of feedstuff in the case of an outbreak of notifiable and other contagious diseases.

The code of practice will be revised at least every fifth year.

3. APPROVAL OF AUDITING COMPANY

When approving an auditing company, the reference group must ensure that the following minimum requirements are observed:

The auditing company must have written procedures for:

- Conduct of audit
- Sampling
- Preparation of audit reports containing definitions of deviations by colour (see Section 4.3.)
- Feedback to the companies, including reaction if the code of practice has not been observed
- Follow-up on previous deviations, and reflective action

The external auditing company must have an organisation/structure with the responsibilities and the authorities, which ensure that the control is carried out. This also includes education and training of the persons who conduct the audits.

Auditors who carry out process controls must, as a minimum, be able to document:

- Knowledge of current legislation on feedstuffs and the Danish order on the hygiene of feedingstuffs
- Insight into the technical processes at feed companies
- Knowledge about the identification and determination of critical control points in relation to feed hygiene
- Relevant microbiological knowledge
- Knowledge of HACCP
- Knowledge of auditing
- Impartiality towards the factories they audit

The laboratory conducting the tests must be accredited in accordance with ISO 17025.

No more than 24 hours may pass between sampling and start of the test. The auditing company must ensure that the audit report is sent to the recipient as soon as possible after the tests are finished.

The reference group continuously assesses the work done by the external auditors by reviewing the audit reports during the meetings of the reference group.

4.1. OBTAINING A CERTIFICATE OF APPROVAL

New feed companies and transport units (see Section 10) must be visited – an external audit – by an approved auditing company. The visit involves an audit and a review of the company according to the code of practice. On the basis of the visit and the samples taken during the visit, the auditing company will prepare a report, describing the company and any action deemed necessary to obtain a certificate of approval. The auditing company and/or the reference group may request further documentation of the conditions at the property, if the available documentation is insufficient.

New vehicles, trailers, semi-trailers, etc. at already approved companies may be approved by submitting a washing certificate to the auditing company. The washing certificate must be approved by the auditing company before the vehicle is allowed to transport poultry feed.

All companies covered by the code of practice must prepare an own-check scheme (HACCP program) as described in Section 6, Appendix 2. The own-check scheme is approved by the reference group based on recommendations by the chairman and the auditing company.

It is possible to apply for certificates of approval for several separate lines at the same factory.

If a factory which has already been approved wants to divide the factory into several separate lines, each of them with its own certificate of approval, the reference group may grant certificates of approval for all lines if the most recent audit has confirmed that the lines are complying with the code of practice.

A conditional certificate of approval means that the company may only deliver feed to breeding stocks (see Appendix 1). A conditional certificate of approval is valid for a maximum of six months after which the company has to obtain a certificate of approval to continue in the scheme. In special cases, the reference group may grant an exemption so the conditional certificate of approval will be valid for 12 months.

New companies being approved will always be granted a conditional certificate of approval for the first three months.

Companies with a knockout (KO) must always start with a conditional certificate of approval (see Section 4.4)

A certificate of approval means that the company has been approved for the delivery of feed to breeding herds, central breeding operations, parent stock operations, and breeding stocks (see Appendix 1). Certain circumstances may prevent the company from obtaining/maintaining the certificate of approval (see Section 4.4).

The review of the auditing companies' audit reports is a fixed item on the agenda of the reference group's quarterly meetings.

New applications will be dealt with at the reference group's next meeting.

4.2. MAINTAINING A CERTIFICATE OF APPROVAL

All companies covered by the code of practice are approved for one quarter at a time.

The approval is given based on their handling of control measures, the results of the company's microbiological monitoring program, and the report issued by the audit authority.

The company's own-check scheme must include a microbiological monitoring program. The monitoring program must define the sampling location, the weekly sampling frequency per production line, a test program describing the test methods used, sampling procedures and instructions, and the handling of samples until the test is started as well as the communication of the results.

The company must examine samples of product residues, deposits or similar from areas at the facility, which may constitute a hygienic risk (product build-up, condensation, and cross contamination). As a minimum, the samples must be examined for the occurrence of salmonella and coliform bacteria.

The company must take out at least three weekly samples from each production line as part of its own-check scheme, unless the company can document special circumstances that may reduce this sampling frequency. This is based on the reference group's evaluation.

The company must perform corrective action if fixed critical limits are exceeded (see Appendix 6). The test results of the own-check must be available and assessed during the audit. Documentation of corrective action and an evaluation of the effect of the corrective action of the own-check scheme must also be available.

4.3. AUDITING BY AN EXTERNAL AUDITING COMPANY





Each quarter, all companies will be subjected to an unannounced audit. In addition to this, the company may request an additional visit.

During each audit, the company is reviewed with a view to assessing the production hygiene and documented compliance with the code of practice. During the visits, a minimum of five relevant samples are taken of product residues, deposits and similar from each production line at the facility, which may constitute a hygienic risk (product build-up, condensation, cross contamination, etc.) for testing for salmonella, coliform bacteria, and total plate count. If there are no deposits, product residues or similar, samples may be taken by means of a swab test. The assessment of deviations and critical limits are defined in Appendix 6.

The tests must be conducted in accordance with appropriate ISO, NMKL, NordVal or Afnor validated methods.

After the audit, a confidential audit report is sent to the feed company as well as a copy to the chairman and the vice-chairman of the reference group.

The status in the audit report is defined on the basis of the colour codes below:

Approved =		(green)	Major deviation =		(yellow)
Minor deviation =		(blue)	Knockout =		(red)

The cost of conducting the external audit will be paid by the individual company.

4.4. CHANGE OF STATUS OR WITHDRAWAL FROM THE CODE OF PRACTICE

4.4.1. KO AND KO HANDLING

For feed companies:

If the auditing company finds reasons for withdrawal of the certificate of approval, the chairman will be contacted. It is then up to the chairman to evaluate if a direct KO is to be given or if the matter should first be discussed with the reference group. Only the chairman or the vice-chairman may announce a KO.

The first certificate of approval granted after a KO will always be a conditional certificate of approval.

For transport units:

If the auditing company finds reasons for withdrawal of the certificate of approval (KO), it may inform the transport unit directly of its decision. The transport unit is considered as withdrawn from the code of practice. The certificate of approval may be re-obtained by submitting an approved washing certificate.

In very special cases, the reference group may decide to re-approve feed companies and transport units based on other premises than those described below. This will be based on an actual evaluation and a discussion by the reference group.

4.4.2 FINDINGS OF SALMONELLA

If salmonella is found in samples taken during an audit or during a company's own-check, the feed company must stop its deliveries of poultry feed immediately. The chairman will issue a KO to the company. The reaction to it must comply with the description in the diagram in Section 4.4.7.

If it is a matter of just one single case, the company may resume its deliveries of feed after a new approved audit has been conducted. An exemption may be granted in special cases so the approval will be granted merely on the basis of the results of the company's own-check, provided the own-check proves that the company is salmonella-free again. The chairman decides when re-approval of the company is possible.

If there are repeated findings (two or more) of salmonella, deliveries may not be resumed before the reference group has re-approved the company. This requires a minimum of two extra audits on the premises. During the period between the two audits (minimum one week), there must be a certain production of feed at the facility in order to have an actual production period on which to base the evaluation. The reference group must ensure that the above-mentioned procedure is complied with, thus allowing the company to be re-approved as soon as possible.

Besides, the company must clean and disinfect the production line – as a minimum from start of the heat treatment up to and including the company's delivery area.

Remaining feed (produced after the last negative sample reply) must be destroyed or heat treated again.

Although an extra, announced audit has been conducted, results from an ordinary unannounced audit during the same quarter must also be available before the company is entitled to a certificate of approval.

In the case of salmonella findings in feed which the feed company evaluates as being harmless, the company is not obliged to inform The Danish Veterinary and Food Administration.

Further reference is made to Appendix 8, Action plan in the case of salmonella findings at a feed company.

4.4.3. HEAT TREATMENT REQUIREMENTS NOT OBSERVED

If, during an audit, it is found that the heat treatment requirement has not been observed, all production and deliveries of poultry feed must cease. The chairman is contacted immediately, and the chairman issues a KO.

A change from KO to a conditional certificate of approval requires that the documentation of heat treatment is found satisfactory.

The reference group may request an adapted audit (maybe without sampling) with specific follow-up on the actual case.

In case of failure to comply with the own-check scheme in terms of heat treatment, the feed company must inform the chairman immediately. If timely correction action has not been implemented, a KO may be issued to the company.

4.4.4. FINDINGS OF COLIFORM BACTERIA

If two repeated samples taken by an auditing company and taken in the same position show a number of coliform bacteria exceeding 10,000 CFU per gram, the company has two weeks to document that they have cleaned and disinfected the premises. Besides, a sample reply must be available, proving that the number of coliform bacteria is below the limit value. If this cannot be documented, the chairman will announce that the company's status changes from a certificate of approval to a conditional certificate of approval.

The company may obtain a certificate of approval again if a new audit proves that all conditions are acceptable.

In case of many repeated findings of coliform bacteria in numbers exceeding 10,000 CFU per gram during own-checks, the chairman – after discussing the situation with the reference group – may request that the company performs corrective action on the premises to ensure a reduction of the number of coliform bacteria. Thus, the actual cases are also evaluated in relation to previous conditions and other conditions on the premises.

4.4.5. OTHER IMPORTANT CONDITIONS FOR WITHDRAWAL OR CHANGE OF STATUS

A company that is covered by the code of practice and which, in two successive quarters, has not obtained a certificate of approval is considered to be withdrawn from the code of practice, unless the reference group grants an exemption.

If a company exceeds the critical points of the code of practice and/or acts unreflectingly and/or fails to correct issues they have been made aware of, the reference group may withdraw the company's certificate of approval.

The company may join the code of practice again as described in Section 4.1.

If a company is unable to maintain its certificate of approval or if it decides itself to withdraw from the code of practice, the company must inform the code of practice secretariat, the auditing company, and The Danish Veterinary and Food Administration of its decision.

4.4.6. OTHER DEVIATIONS

Apart from the aforementioned deviations, the auditing company also deals with minor and major deviations.

They appear from the diagram of the assessment of deviations in Appendix 6.

4.4.7. SCHMEATIC SURVEY OF DEVIATIONS AT COMPANIES AND CONSEQUENCES

Critical limit	Consequence	Reaction
<p>Findings of salmonella</p> <p>OWN-CHECK AND/OR EXTERNAL AUDIT</p>	<p>KO (Knockout)</p> <p>Production and deliveries cease</p> <p>Company and chairman are contacted immediately</p>	<p>Findings during own-checks: The company has to inform the chairman immediately.</p> <p>Findings in samples during audit: The auditing company informs the company and the chairman immediately.</p> <p>The chairman instructs the company to stop production and deliveries of poultry feed immediately.</p> <p>First finding: Production and delivery may be recommenced when a new, announced audit finds the company salmonella-free, or if the Reference group grants an exemption because the company's own-check has verified that the company is salmonella-free, and the chairman has agreed to it.</p> <p>Repeated findings: Production and deliveries may be recommenced when the reference group has re-approved the company after two announced audits. Production must be carried on for at least one week between the visits.</p>
<p>Heat treatment requirements not observed</p> <p>OWN-CHECK AND/OR EXTERNAL AUDIT</p>	<p>KO (Knockout)</p> <p>Production and deliveries cease</p> <p>Company and chairman are contacted immediately</p>	<p>Lack of compliance during own-check: The company immediately informs the chairman.</p> <p>Findings of missing compliance during audit: The auditing company immediately informs the company and the chairman of the deviation.</p> <p>The chairman instructs the company to stop production and deliveries of poultry feed immediately.</p> <p>Change from KO to conditional certificate of approval is possible when the Reference group again finds the documentation of heat treatment satisfactory.</p> <p>The reference group may require that an audit be conducted (possibly adapted and without sampling) with specific follow-up on the current matter before they grant a re-approval.</p>
<p>Findings of two subsequent samples with a number of more than 10,000 CFU/gram coliform bacterial at the same sampling position</p> <p>OWN-CHECK AND/OR EXTERNAL AUDIT</p>	<p>Major deviation</p> <p>Company and chairman are contacted immediately</p> <p>Status change to "conditional certificate of approval"</p>	<p>If two repeated samples taken by the auditing company and taken in the same sampling position show a number of coliform bacteria higher than 10,000 CFU per gram, the company must document within two weeks that they have cleaned and disinfected the premises. Besides, a sample reply must be available, proving that the number of coliform bacteria is below the limit value. If this cannot be documented, the chairman will announce that the company's status changes from a certificate of approval to a conditional certificate of approval. The company may obtain a certificate of approval again if a new audit proves that all conditions are acceptable. In case of many repeated findings of coliform bacteria in numbers exceeding 10,000 CFU per gram during own-checks, the chairman may – after discussing the situation with the reference group – request that the company performs corrective action on the premises– corrective action that must ensure a reduction of the number of coliform bacteria. Thus, the actual case is also evaluated in</p>

		relation to previous conditions and other conditions on the premises.
Other circumstances OWN-CHECK AND/OR EXTERNAL AUDIT	Other deviations	The chairman and the auditing company discuss the deviation and evaluate if the case must be dealt with by the reference group.

5. GENERAL DOCUMENTATION AND COMMUNICATION

This documentation is needed to show the company's compliance with all requirements in the code of practice:

Every quarter, the auditing company prepares a confidential audit report and attaches the test results for the samples taken during the audit. The audit report is sent to the company, and a copy is sent to the chairman and the vice-chairman. The report must point out any inadequacies and suggest corrective action.

Based on the review of the company's status, the auditing company's recommendations, potential deviations, and discussions in the reference group, the chairman will – after consulting the reference group – decide which companies will be granted a certificate of approval, and which companies will be granted a conditional certificate of approval for the next quarter.

A mail will subsequently be sent to the company, informing it of the certificate granted.

The validity period (one quarter) is stated in the certificate of approval ("valid until"), though subject to a change of status during the mentioned quarter.

After each update, the secretariat sends a list of granted certificates of approval to the members of the poultry business, to The Danish Veterinary and Food Administration and DAKOFO. The list is published in L&F's monthly newsmagazine. The list of certificates is available on www.danskfjerkrae.dk.

In case that a status changes, the secretariat will inform the aforementioned parties.

5.1. ORIENTATION AND COMMUNICATION IN CASE OF FINDINGS OF SALMONELLA

When samples from an own-check or an audit detect salmonella, the chairman of the reference group must be informed hereof immediately by phone. The telephone numbers of the chairman and vice-chairman appear from www.danskfjerkrae.dk.

If the chairman is not available, the vice-chairman must be contacted. The chairman issues a KO to the company.

All deliveries of poultry feed discontinue, and the feed company informs buyers of feed about the period between the latest taking of negative samples and the date of KO.

The chairman of the reference group immediately sends the information to the secretariat, which updates the list of granted certificates of approval.

Activities after the handling of salmonella findings on the premises:

The company must prepare a comprehensive description of the activities related to the review of findings, subsequent action, and results hereof. This description must be sent to the chairman as soon as possible after the finding and handling of it.

The description of activities must include:

- Date of taking positive samples and indication of the position where they were taken
- Date of most recent cleaning and disinfection, indicating cleaning method and area
- Date of taking the latest negative own-check samples
- Test reply to new own-check samples

- Date of notifying customers
- Information on review of instructions and information to personnel
- Date of production start-up, indicating type of feedstuff
- Date of requested visit by an auditor and its conclusion

The description of the activities must be sent to the chairman and the vice-chairman as well as the auditing company.

6. ESTABLISHING AN OWN-CHECK SCHEME

This section describes the conditions that must be in order prior to the approval of the feed company's own-check scheme based on the HACCP principles (see Appendix 2). As a minimum, the feed company must state the responsibilities for production and cleaning procedures.

6.1. OWN-CHECK SCHEME

The own-check scheme must contain a description of procedures, which ensure that the following general hygiene rules are observed.

The factory area must be tidy and clean.

The factory area must be well drained with an incline towards the drainage. The factory area must be covered with concrete, asphalt or a similar solid material, and there must be no vegetation.

Practical measures preventing access or stay of insects, birds, rodents, and other animals must be implemented.

Incoming feedstuff must be checked for the presence of mould, water damage, and signs of contamination from e.g. insects, birds, and rodents.

The feedstuffs must be handled and stored separately from other feed mixtures. During storage, the feedstuff must be protected against the ingress of moisture and condensation (see also Section 6.5)

Measures must be taken to control and reduce the formation of dirt and dust in the factory facilities. All irrelevant packaging, equipment, etc. which may gather dust is to be removed after use.

Measures must be taken to avoid contamination of finished goods by goods that have not been subjected to heat treatment as described in this code of practice.

The company's own-check scheme must, as a minimum, include the following:

- Description of the sampling procedure and way of labelling of own-check samples
- Sampling plan in order to gradually ensure that critical spots on the entire warm side are included in the sampling process
- Description of the procedure ensuring unambiguous labelling of samples in relation to sampling place and time
- Registration of sampling
- Description of the procedure for the handling of sample test results
- Plan for corrective action and general follow-up on defects

The testing laboratory must have a quality management system comprising:

- Description of procedures for the receipt of samples, handling of samples, and registration of results
- Description of the handling of method descriptions
- Validation of test results
- Documentation of education and training of personnel

Accredited company laboratories are not covered by the code of practice.

Non-accredited company laboratories are audited by the external auditing company once a year. An independent report about this control is sent to the company, the chairman, and the vice-chairman of the reference group.

6.2. SCOPE

The company must describe which production lines and/or transport units are covered by the code of practice. If some units are not covered, the company must be able to document that comprehensive units are kept separately from units in which feed is handled that has not been produced in accordance with this code of practice. The separation must also apply to all phases from heat treatment up to and including delivery of finished goods at the place of consumption.

6.3. PROCESS DESCRIPTION

The production run and the handling from receipt of feed up to and including delivery of finished goods at the place of consumption are illustrated in a flow diagram. The flow diagram or additional descriptions must include the descriptions mentioned in Section 6.4. The company must include any further relevant information.

6.4. FLOW DIAGRAMS AND LAYOUT DRAWINGS

All phases of processing and handling – from receipt of feedstuffs up to and including delivery of the finished goods at the place of consumption are illustrated in a flow diagram, indicating the product flow, including return flows.

Fixed, critical control points (CCP) according to Appendix 2 are marked in the flow diagram. Layout drawings are made which show where equipment, transport roads, etc. are located in each room, on each floor and in each zone – cold and warm zones are indicated.

The transport of finished goods is described. This includes specified process descriptions, manuals, and instructions for the transport of finished goods.

6.5. SUITABILITY OF THE PROCESS PLANT

The suitability of the process plant must be evaluated on the basis of these parameters:

- The feed inlet must be protected against moisture and made in a way that allows cleaning.
- When choosing materials and design of machines, equipment, and fixtures it must be ensured that efficient cleaning is possible.
- After the heat treatment, the feed must be taken directly to the cooler where it is cooled until it reaches storage stability. Belt and tower coolers must not be used. Condensation in the cooler must be avoided.
- Air supply to the coolers and pneumatic transport of heat-treated feed must be supplied from a suited location that is protected against dust from feedstuffs and non-heat-treated feed. The content of other impurities must be minimal.
- The coater used after cooling must be designed in a way that condensation and deposits are reduced to a minimum, and cross contamination is avoided (e.g. by placing the coater in a separate room).

- Chain conveyors and lift floors which, in the process, are located after the heat treatment facility must be accessible for inspection and cleaning.
- Feed mixtures which have not reached the correct temperature are taken round the cooler and subjected to a new heat treatment.
- Complete physical separation of warm and cold zones on the premises must be ensured.

The own-check scheme must be revised at least every second year.

The auditing company must be informed of changes in the scheme. The revised own-check scheme will be assessed during the next audit.

The company is obliged to inform the auditing company in case of equipment modifications or other things that may influence the determination or control of the critical control points – and also revise the own-check scheme accordingly.

The person in charge of quality matters is obliged to inform the auditing company of relevant changes in its own-check scheme and submit the information every second year.

The reference group will be informed hereof during the review of the audit report at the meetings of the reference group.

The following parameters must be observed during the heat treatment process:

- All poultry feed must be subjected to a heat treatment in order to ensure that the feed is exposed to a brief heating of up to 81°C at some point during the processing.
- Vitamins, pro-vitamins, and chemically well-defined substances with a corresponding effect, minerals and trace elements, enzymes, flavourings, and vegetable oil, added in a liquid form for coating, are exempted from heat treatment, as risk assessments ensure that they do not constitute a risk of introducing salmonella.
- Fat added after the heat treatment must have been heat-treated before it is purchased.
- The setpoint must lie before stop or recirculation. Control is carried out according to:
 - The meal temperature, if it can be documented that a temperature of 81°C has been reached at a point during the heat-treatment process
 - or a temperature measured at a point during the heat-treatment process, where a minimum of 81°C must be reached.

The temperature aimed at must be measured and registered at least once every minute, unless the reference group has granted an exemption. A calculated pellet temperature is too uncertain, and the method is not acceptable.

If aiming at the meal temperature, measurements must be made at least every second hour and must verify that a minimum temperature of 81°C has been reached at some point during the heat-treatment process. If measurements are made by the TAD method, measurements must be made every fourth minute as a minimum.

- New heat treatment processes and measuring systems must be verified and validated by the reference group before being commissioned.
- It must be possible to take out a sample of the feed for manual temperature measurement at some point during the heat treatment process in order to verify that a temperature of 81°C has been reached.
- Any feed that has not reached the specified temperature must be led round the cooler for a new heat treatment or for destruction. This process must be controlled automatically according to the chosen setpoint. The temperature documentation must show whether the feed has been taken directly to the cooler or round the cooler.
- It must be possible to remove the setpoint sensors and check them in relation to a calibrated reference thermometer. The process must be corrected according to the calibration result. The company must document that this control has been performed.
- The thermometers used must be calibrated in accordance with the approved own-check scheme.
- The time lag of the logging must not exceed 120 seconds for the temperature measurement and the registration of the re-pelletisation, respectively.
- The registered temperatures must be archived for minimum of six months and be accessible to the auditing company and to The Danish Veterinary and Food Administration. A back-up of the data must be made.
- The company must perform controls on an on-going basis to show that the documentation of the heat treatment complies with the requirements, thus allowing prompt action in the case of deviations. The frequency of these controls must be laid down in the own-check scheme.
- The company must, at any time, be able to document the function of the trap box during manual lowering of the process temperature.
- Under production conditions where much higher temperatures are used for the treatment of feed, it must be possible to request an exemption of the temperature-measuring frequency from the reference group.

The following procedures for cleaning and disinfection must be complied with:

- The company must draw up a program for cleaning and disinfection.
- The description of the program must, as a minimum, contain information about the method, the frequency, and the cleaning/disinfecting agents used.
- The cleaning process must remove residues and deposits as they will result in building up bacteria, including salmonella. This applies in particular to moist locations, e.g. where there is a risk of condensation.
- Cleaning should be done without the use of water and mainly mechanically by removing deposits and residues.
- Dust is removed by vacuuming.
- Cleaning with pressurised air must, as a rule, only take place in silos and cold zones.
- Daily cleaning of equipment and areas for the dosage of flavourings and other additives is a requirement if dosing is done after the heat treatment.
- Only cleaned surfaces should be disinfected. Use a broad-spectrum disinfectant.
- All cleaning performed must be documented regularly.

Appendix 4 shows an overview of the required minimum cleaning frequency of this part of the company and the transport systems in which production takes place after heat treatment. The cleaning frequency for other parts of the company, including silos for heat-treated feed, is determined by the company itself.

9. RISK OF CROSS CONTAMINATION

The locations where there is a risk of cross contamination must be identified. The own-check scheme must show the measures taken to avoid cross contamination.

Rules must be specified, stating how the personnel may move from one zone to another of the company. Special attention must be paid to avoiding carry-over from the non-heat-treated side (cold zone) to the heat-treated side (warm zone). Potential change of clothing must be described here, e.g. at the entrance to the cooler and the loft for finished goods.

Rules must be specified, stating how the personnel may move between two separate lines in order to avoid carry-over.

The air inlet to the cooler must be positioned in a way that prevents the risk of contaminating the air with feed from the cold zone.

10. TRANSPORT

This section describes the prerequisites for the transport of poultry feed. The company must, as a minimum, lay down the responsibilities for transport and cleaning of the transport units.

All transport units used must be closed pressure units allowing cleaning and disinfection. They must be approved in accordance with Section 4.1. Exemptions may be granted for other transport means after approval by the reference group.

The transport unit must be undamaged, clean and tidy. The logistic control of poultry-feed transport is evaluated on the basis of an audit of the logistics department of each single company.

All samples taken from transport units must be tested for salmonella and coliform bacteria.

In all transports, measures must be taken to avoid cross contamination.

Logbooks are completed for all transport units. The list of approved feed companies shows the number of transport units approved for this specific company.

Moving of feed from one silo to another at an agricultural facility will require a new heat treatment of the feed.

The following materials may be transported in approved vehicles and does not require subsequent cleaning and disinfection:

- Whole grains and non-oil-containing seeds which have **not** been in contact with other feedstuffs during transport, storage, and handling
- Feed that has been produced on production lines approved according to this code of practice

However, it must always be checked that the transport unit is clean; if necessary, it must be cleaned before it may transport poultry feed again. Documentation of the cleaning must be available.

The following materials may be transported in approved vehicles, but the vehicles must subsequently be cleaned and disinfected:

- Whole grains and whole seeds that have been exposed to a risk of contact with other feed during the transport
- Feed that has been produced on production lines that are not approved according to this code of practice.
- Feed returned from an agricultural facility, regardless of the original feed company's status in relation to the code of practice
- Products, which are not feed or used for feeding

10.1 PRODUCER'S OWN TRANSPORT

A poultry producer's own transport of whole grains and non-oil-containing whole seeds for mixing at home; if they are brought directly from the field to his own closed silo or to a storage that complies with feed legislation, the transport must take place in transport units that have been cleaned prior to the transport. The transport equipment must be disinfected if there is a risk of contamination, e.g. after the transport of animals, products hereof or other items, which usually constitute a special risk of being contaminated with salmonella.

The transport of home-mixed feed at the owners own facility must take place in closed and cleaned transport units.

The following procedures must be observed when transporting poultry feed:

- The company prepares an own-check scheme based on the HACCP principle for all transport equipment used for the transport of poultry feed.
- The own-check scheme must define cleaning plans for all transport equipment.
- Cleaning must be done once a week as a minimum, and disinfection is performed as required, though as a minimum once a month.
- The drivers must complete continuous registrations (logbooks) of transports carried out, including receipts from the persons responsible for all actions (transport, cleaning, and disinfection).
- The logbook for the current month must be available on/in the transport unit.
- Immediately after the end of a month, the registrations will be collected for central archiving at the logistics office.
- The logistics office must be able to account for all registrations and transports performed during the current quarter at any time.
- Lists of the total number of vehicles that transport poultry feed must be available at the logistics office, including logbooks and updates concerning replaced vehicles.
- As a minimum once a month, a test result for each transport unit must be available based on a scrape test or swab test intended for checking for salmonella and coliform bacteria.
- Test results are stored centrally and must be available to the auditing company.
- Transport procedures and manuals must be prepared with instructions to the drivers.
- If a transport unit has transported feed from non-approved factories or other types of goods, cleaning and disinfection, including documentation in the logbook, must be performed – in accordance with Section 10.
- If transport units are also used for internal transport of feed mixtures or whole grains or whole seeds at agricultural properties or for bringing them home from the farm to a feed company, the rules laid down in Section 10 must be observed.

11. SUITABILITY OF RECEIVING FACILITIES

The purchaser of the poultry feed is responsible for keeping the receiving facilities according to good hygiene practices in order to avoid contamination of feed, transport vehicle, and equipment during unloading.

The producer's business partners – slaughterhouses and egg packing stations – must ensure that the purchaser of the feed observes the following conditions:

- A proper passable road must lead to and from the place of unloading, and the place where the unloading takes place must be well drained and have a firm surface.
- The silos must be accessible and well maintained to ensure secure loading in accordance with the labour inspection's guidelines.
- Fixed installations must be equipped with a blind cover and designed in a way to prevent problems with condensation.
- All recipients must have their own inlet hose as mentioned in Section 5. The unloading hose must be kept close to the unloading place and, after use, be stored where it is protected from rodents, moisture and dust (possibly in a sealed pipe). All inlet hoses must be equipped with closed end caps during storage.
- If there is no inlet hose at the property, the inlet hose used will be left at the farm after unloading, and the owner of the farm will be invoiced for it.
- The area around the feed silos must be tidy, and it must not be used for placing dead animals, fertilisers or other items from the poultry barn or other locations.
- The owner must remove feed waste immediately after each unloading process.
- Poultry manure must be kept in a place where the transport vehicle does not get in contact with it when driving to and from the unloading place.
- Two appropriate containers must be placed at the silo – one for waste (boot swabs, etc.) and one for mail (e.g. feed samples). They must be marked "WASTE" and "MAIL", respectively. It must be possible for the driver to throw waste (packed in a sealed bag) directly into the "WASTE" container from the vehicle. If this is not possible, the bag is thrown from the vehicle so it will land as close as possible to the container.
- When unloading using a hopper, this equipment must be protected against rain and groundwater.
- Containers for dead animals must be placed at a distance from the feed-receiving facilities.
- When new installations are being built, separate roads must be used for the transport of feed.

The reference group continuously observes the status of the area and is entitled to contact the involved business partners to ensure that conditions are put in order.

In the case of an outbreak of both notifiable and non-notifiable diseases in the poultry production, reference is made to Appendix 7.

12.1. COMPANIES (PRODUCERS) WHO MIX THE FEED AT THEIR OWN FACILITY

In this code of practice, home mixing means that the feed is reduced at the producer's own property.

The following rules apply to home mixing:

- Heat-treated feedstuffs, supplementary feed mixtures and similar from an approved feed company may be used for home mixing.
- Whole, oil-containing seeds, products hereof and liquid oil may not be used. However, whole oil-containing seeds may be used if the company has been granted an exemption according to the Danish Regulation No 731 on feed and feed companies of 29 May 2020, Section 5, Subsection 12, provided that Section 12.2 of the guidelines has been observed.
- Whole grains and non-oil-containing whole seeds may be used for home mixing if they are brought from the field directly to the farm's own silo or to a storage that meets the legislation on feed.
- It is presumed that whole grains and whole seeds used are salmonella-free. When harvesting and especially during the transport and storage of whole grains and whole seeds, contamination with salmonella must be prevented.
- Grains, feedstuffs, supplementary feed mixtures, etc. must be stored separately.
- All feed must be stored in solid sealed silos or other forms of sealed storage facilities.
- Storage facilities used for the storage of feed must be protected from birds, rodents, and other pests.
- Feed mills and internal transport systems must be closed and kept dry and clean.
- The feeding plant must be designed in a way that allows cleaning and disinfection.
- The room, in which the feed mill stands, must be kept tidy and clean.

The ground feed may be stored for a maximum of five days and may only be used at the producer's own facilities.

12.2 EXEMPTIONS AND REQUIREMENTS FOR THE USE OF WHOLE OIL-CONTAINING SEEDS AND OILS.

Prior to using oil-containing seeds grown at the producer's own property or heat-treated liquid oil (min. 81°C) for home mixing of feed, the producer must apply for and be granted an exemption from The Danish Veterinary and Food Administration. Documentation of the exemption granted must be available.

When using oil-containing seeds, they must be mixed with other whole grains and whole seeds prior to grinding.

When using oil-containing seeds, the plant must be audited and approved, cf. requirements below. Approval will take place at the reference group's quarterly meetings, as will the granting of a certificate of approval. Home mixers may only be granted a CC and are therefore not required to obtain a C within six months (see Section 4.1).

Compliance with the code of practice requires that the use of oil-containing seeds or oils for home mixing is subject to the requirements below:

- An audit is required if whole, oil-containing seeds, which are not heat-treated, or heat-treated liquid oil are used for home mixing.
- An unannounced audit is conducted twice a year. If conditions are not in order, the number of audits is increased to four times a year in the following two quarters.
- The audit is conducted by an auditor who has been approved by the reference group, and who has technical knowledge of feed plants.
- The audit must be performed during the first month after production start.

- The audit focuses on the feed mill, the process, storage of the feed as well as the cleanliness of the room and plant where the feed mill is placed.
- During each audit, five samples are taken and tested for salmonella and coliform bacteria.
- Own-check samples to be tested for salmonella are taken every month in the form of process samples. The test results must be available at an audit.
- In case of salmonella findings, the feed production will be stopped immediately, and the home mixed feed must be replaced by complete feedingstuff produced according to this code of practice. Findings of salmonella at the facility will be reported to The Danish Veterinary and Food Administration. A new audit is required before the facility may be approved anew.
- In case of two subsequent findings of more than 10,000 coliform bacteria in samples taken during an audit, extraordinary cleaning and disinfection and afterwards a new approving audit are required before the facility may be granted a certificate of approval.
- Cleaning and disinfection procedures must be available in writing and accessible during an audit. In addition, it must be documented that the procedures have been observed.
- Registrations of the feed applied and the storage of feed must be available during an audit.
- Documentation of pest control conducted by a professional pest control company must be available during an audit.
- If the producer wishes to stop using oil-containing seeds and oil, he may return to making home mixed feed according to Section 12.1.
- The cost of conducting the audit is paid by the producer himself.

12.3. COMPANIES (PRODUCERS) WHO FEED WHOLE GRAINS/SEEDS TO BREEDING STOCKS WITHOUT REDUCING THE GRAINS/SEEDS AND WITHOUT THE USE OF OIL-CONTAINING SEEDS

When feeding whole grains and whole seeds without reducing them, the following rules apply:

- It is a condition that the whole grains and whole seeds are salmonella-free (harvesting and especially transport and storage of whole grains and whole seeds, however, may result in contamination with salmonella).
- Storages used for the storage of whole grains and whole seeds must be protected from birds, rodents, and other pests.
- Documentation of pest control must be available.
- Whole grains and whole seeds must be stored separately from other raw materials.
- Section 10 of the code of practice, which deals with the transport of feed mixtures, also applies to the transport of whole grains and whole seeds.
- Descriptions of the cleaning of transport systems must be made, and the cleaning performed must be registered.

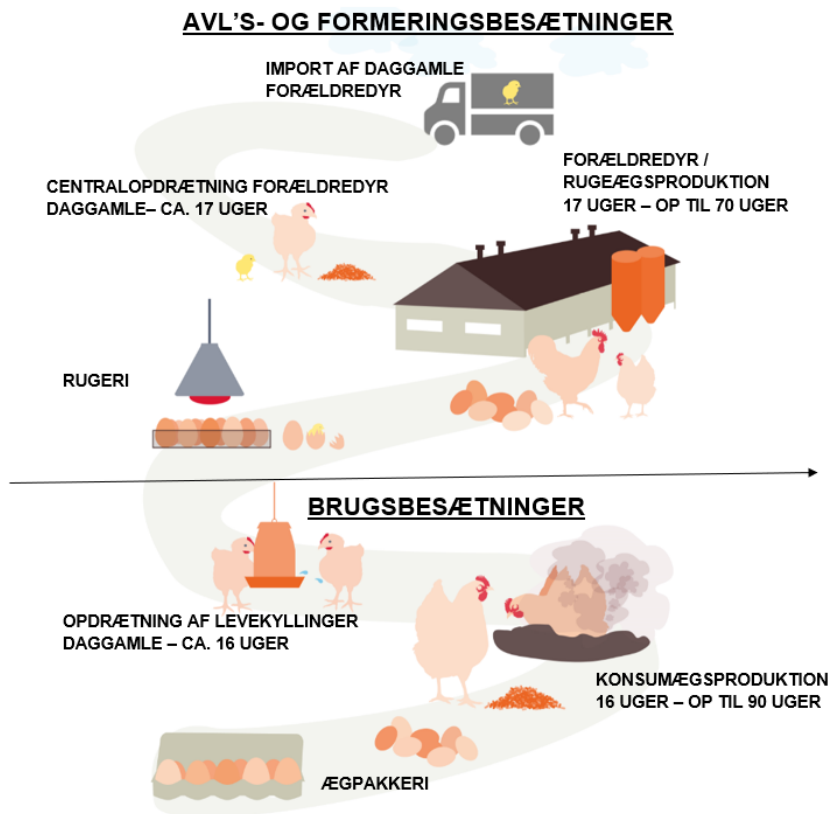
12.4. USE OF WHOLE GRAINS IN PARENT-STOCK LITTER

When feeding whole grains in parent stock groups, the grain used must be taken directly to own sealed silo after harvest.

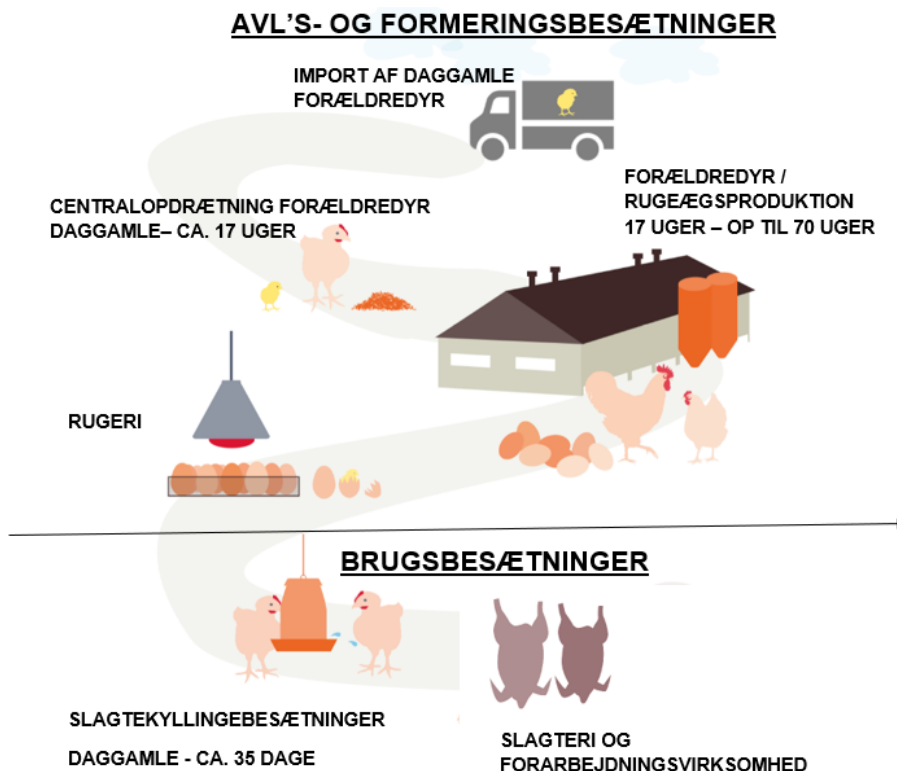
13. ROUGHAGE THAT DOES NOT REQUIRE HEAT TREATMENT

If considered salmonella-free, the following may be used: hay, straw, fresh greens, raw fruit, vegetables, root crop, cut branches, leaves, and ensilage products.

APPENDIX 1.1. PRODUCTION OF TABLE EGGS



APPENDIX 1.2. PRODUCTION OF BROILERS



APPENDIX 2. HACCP CODEX (HAZARD ANALYSIS CRITICAL CONTROL POINTS)

The company must prepare an own-check scheme based on the HACCP principles. Responsibilities for performing a risk assessment, specification of critical control points, limits, and monitoring scheme as well as specification and implementation of corrective action must be described.

The following definitions are used in this Section:

Critical limit: A value or a criterion, which separates acceptable from unacceptable

(To) control: To take all necessary precautions to ensure and maintain compliance with the criteria specified in the audit programme.

Setpoint: Activities required to prevent and remove risk factors or reduce their presence to an acceptable level

APPENDIX 2.1. RISK ASSESSMENT

A list is made of potential risk factors, which may result in the occurrence of salmonella in feed mixtures – in each phase of the production process. For each point the likeliness of failure is assessed, and the seriousness of this is assessed. Help may be found in the form in Appendix 3.

APPENDIX 2.2. DETERMINATION OF CRITICAL CONTROL POINTS

In this code of practice, critical control points in the production are places, work processes, process phases or parts of the production chain, which – when they are controlled – will remove or reduce a risk factor to an acceptable level. In this case, the risk is the occurrence of salmonella in the feed mixtures.

A critical control point is characterised by a parameter that may be registered and which separates acceptable from unacceptable.

The critical control points must be identified on the basis of the process description in Section 6 and the risk assessment described in Appendix 2.1. For this purpose, the decision tree outlined in Appendix 3 may be used. All risk factors that may be considered critical control points may be identified by reviewing all risk factors described in the procedure in the decision tree.

A critical limit must be set for each control point. This limit must be observed in order to ensure that the point is under control. Exceeding a critical limit means that the point is not under control, and corrective action is required.

When determining the critical control points, there must be a reference to them in the flow diagram.

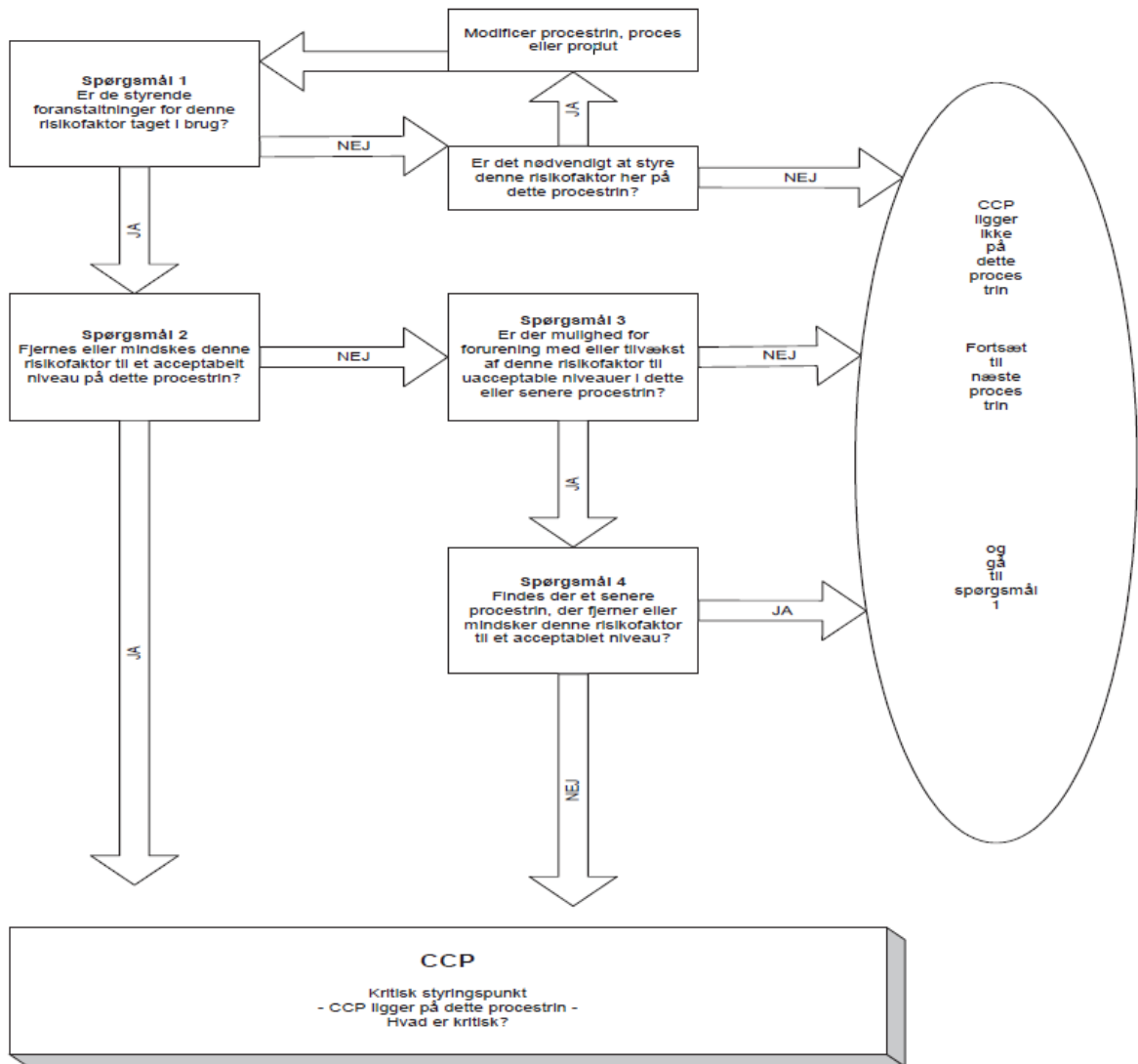
APPENDIX 2.3. MONITORING CRITICAL CONTROL POINTS

For each critical control point, it must be decided how to monitor it and how to observe the set limit.

APPENDIX 2.4. CORRECTIVE ACTION

If the monitoring process shows that a control point is exceeded, it must be decided which corrective action should be taken. Help may be found in the form in Appendix 6.

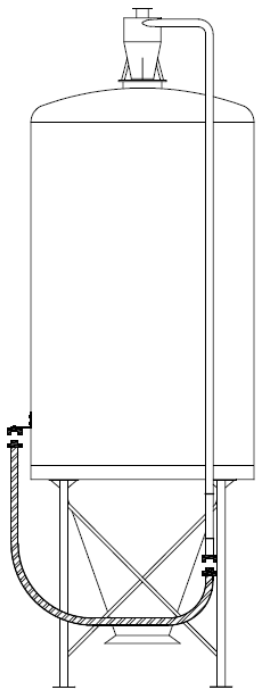
Responsibilities for the implementation of corrective action must be determined.



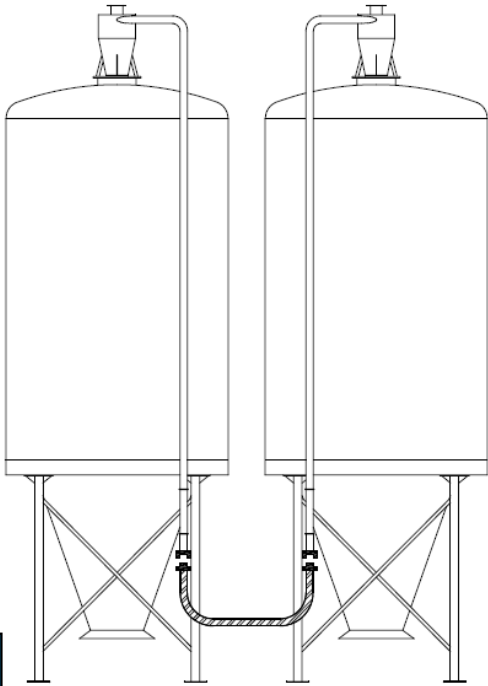
Below, you will find a survey of processes during and after heat treatment and the frequency of required control and cleaning.

Process	Required control and cleaning
Heat treatment unit	Daily cleaning and disinfection of equipment, if required
Return flow	Weekly cleaning and disinfection, if required
Coolers	Daily cleaning and disinfection, if required Less frequent cleaning and disinfection may be adequate, provided that the coolers show no deposits during the daily inspection.
Granulator and strainer	Cleaning once a week
Grease coating and addition of additives	Daily cleaning
Transport systems (ends of chain conveyors, lift floors, etc.)	Inspection and cleaning minimum once a week
Moist surfaces	Should be avoided or reduced. If moist surfaces exist, they should be cleaned and disinfected frequently.
Silos for heat-treated feed	Cleaning as required and every time they are emptied.
Silo tops	Cleaning as required

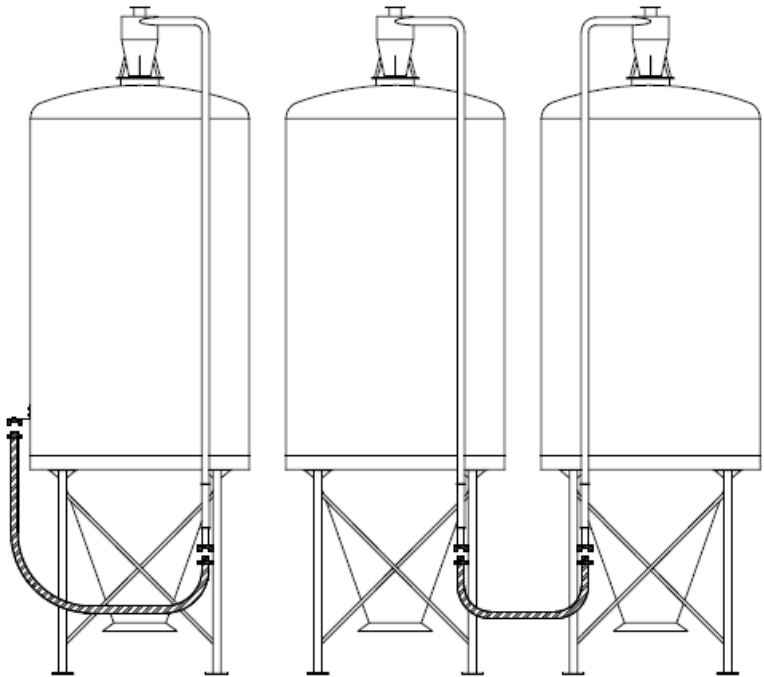
One silo



Two silos



Three silos



Assessments include the following terms:

- KO: Knockout
- Major deviation
- Minor deviation
- C status: Certificate of Approval
- CC status: Conditional Certificate of Approval

Reaction means a change in delivery status, i.e. change from C to CC status or from CC status to withdrawal from the code of practice, depending on the kind of deviation. If it is a matter of a deviation assessed as a KO, the company / transport unit will immediately be deprived of its C and DD status, thus withdrawn from the program.

The following applies to feed companies:

Criterion	During audit	Acceptance criterium	Assessment of deviation	Reaction
Scrape tests from production equipment	<p>Scrape / swab samples are taken from critical points in the production equipment.</p> <p>As a minimum, five samples are taken per line.</p> <p>The samples are tested for salmonella, coliform bacteria and plate count, cf. current rules.</p>	<p>Salmonella: not found in the scrape samples.</p> <p>The sample is positive when verified as positive by cultivating.</p>	KO (red)	<p>Immediately upon finding.</p> <p>The auditing company contacts the company and the chairman of the reference group.</p>
		<p>Coliform bacteria: $\leq 10,000$ per gram found in one or several scrape samples</p>	Major deviation (yellow)	<p>Major deviation by exceeding an acceptance criterium in one or several scrape samples.</p> <p>Change of status to CC if exceeding an acceptance criterium in one or several scrape samples taken in the same sampling position during two subsequent audits.</p> <p>The auditing company contacts the factory and the chairman of the reference group.</p> <p>The status may only be changed from C to CC. If the company is already holder of a CC, the reference group evaluates action towards the company.</p>

		Total count: < 1,000,000 per gram and no occurrence of yeast, mould and/or gram-negative bacteria in one or several scrape samples taken in the same sampling position during two subsequent visits	Minor deviation (blue)	Minor deviation by exceeding an acceptance criterion in one or several scrape samples. Major deviation by exceeding an acceptance criterion in one or several scrape samples taken in the same sampling position during two subsequent audits.
Heat treatment	Manual measurement of the pellet temperature during audit	Minimum 81°C	KO (red)	If the heat treatment requirement has not been observed, the chairman of the reference group is informed immediately, and at the same time the company is requested to come up with an explanation and a plan for corrective action.
	Random sample control of documentation of re-pelletisation/return flow / bypass	Re-pelletisation at pellet temperature below 81°C		
	Random sample control of temperature registrations	Documentation of compliance with the heat treatment requirement (logging at maximum 120 seconds time lag)		
	Control of deviation report(s) in case of insufficient documentation of heat treatment	A satisfactory deviation report including corrective action(s) has been prepared after previous inadequate documentation of heat treatment		
	Control of the calibration status of setpoint sensors, factory thermometers / thermometers, and reference thermometers	Correct correction of setpoint sensor(s) Temperature sensor(s) and factory thermometer may not deviate by more than 1°C (this does not apply to reference thermometers that are calibrated externally)		
		Calibration frequency observed	Major deviation (yellow)	If an acceptance criterium has been exceeded
	Back-up	Back-up, documenting the observance of the heat treatment requirement	Major deviation (yellow)	Failure to take back-up

Cleaning standard	Visual assessment during audit	Clean and tidy	Major deviation (yellow)	In case of repeated requests and/or simultaneous detection of a major deviation or several minor deviations
	Control of archiving	Observed	Minor deviation (blue)	In case of repeated requests and / or simultaneous detection of a major deviation or several minor deviations
Cross contamination	Action to prevent cross contamination	Observed	Major deviation (yellow)	In case of repetitions or simultaneous detection of other major deviations and / or several minor deviations
Own-check	Micro-biological own-check data	Frequency and number are observed	Major deviation (yellow)	In case of repetitions or simultaneous detection of other major deviations and / or several minor deviations
	Follow-up when exceeding the limit value for coliform bacteria set at < 10,000 per gram	Documentation of performed action is available	Major deviation (yellow)	In case of missing documentation or follow-up or repeated findings of limit values in samples taken in the same sampling position or simultaneous detection of other major deviations and / or several minor deviations
Pest control	Control of the factory's follow-up on pest control reports	Documentation of follow up	Minor deviation (blue)	In case of repetitions or missing follow-up on the reports from the pest control company.

The following applies to transport companies:

Criterion	During audit	Acceptance criterion	Assessment of deviation	Reaction
Transport unit used for the transport of finished goods	Taking of scrape / swab samples from critical positions in containers during control of vehicle	Salmonella not found in the sample	KO (red)	Immediately upon detection
		The sample is positive, when verified as positive by cultivating		The external auditor contacts the logistics office and the chairman of the reference group
		Coliform bacteria: $\leq 10,000$ per gram found in the sample	Major deviation (yellow)	When exceeding the acceptance criterion
		Total count: $< 1,000,000$ per gram and absence of yeast, mould, and / or gram-negative bacteria	Minor deviation (blue)	When exceeding the acceptance criterion
Own-check	Monthly sampling of scrape / swab samples as part of an own-check	Frequency observed	Major deviation (yellow)	When exceeding the acceptance criterion
	Follow-up when the limit value for coliform bacteria, $< 10,000$ per gram, has been exceeded	Documentation of implemented action is available	Major deviation (yellow)	Repeated failure to provide documentation of follow-up
Handling of logistics related to the transport of finished goods	Control of logbooks	Requirements for transport from non-HACCP approved factories and / or transport with raw materials have been observed	KO (red)	Immediate contact to the owner of the property if findings by the external auditor
	Control of registrations for cleaning and disinfection of transport vehicles	Weekly cleaning frequency and monthly disinfection frequency have been observed	Minor deviation (blue)	In the case of missing documentation of cleaning

APPENDIX 7. SPECIAL CIRCUMSTANCES IN CASE OF OUTBREAKS OF NOTIFIABLE AND OTHER CONTAGIOUS DISEASES

The following rules must be observed in connection with the transport at poultry facilities located in a zone where there is an outbreak of a notifiable disease. In case of outbreaks of other contagious poultry diseases, the outbreak of the disease must be evaluated in collaboration with the industry, DAKOFO, and the reference group prior to launching the following measures:

- The driver who delivers the feed must wear disposable gloves and disposable footwear during the entire delivery process.
- Hose connections must be disinfected before they are connected.
- The customer's own inlet hoses must be used.
- If the customer does not have an inlet hoses, the hoses following the vehicle are used and left at the customer's. The transport company will invoice the customer for the hoses.
- Once the unloading is finished, hose couplings and air inlets are disinfected, and a disinfectant is sprayed into the pipe, where the feed comes out.
- The driver removes disposable gloves and disposable footwear close by the vehicle before leaving the farm. The driver places the disposable gloves and disposable footwear on a rubbish bag that is spread out on the ground. Once removed, the driver steps away from the rubbish bag and packs the rubbish bag, including the disposable rubbish, into a plastic bag, seals it and leaves it on location close to the vehicle.
- The farmer is responsible for making a rubbish bin available and marking it.
- The farmer is responsible for collecting the rubbish bag and placing it into the rubbish bin close to the feed silo.
- Back at the company, the undercarriage is hosed down on the washing site.

The transport unit is not allowed to deliver feed to another poultry stock after having delivered to an infected stock until a minimum of 12 hours later.

In the case of notifiable diseases, the guidelines specified by the authorities must be observed as well.

APPENDIX 8. ACTION PLAN IN CASE OF SALMONELLA FINDINGS AT A FEED COMPANY

Apart from observing Section 4.4.2 Findings of Salmonella, and Section 5.1. Information and communication in the case of salmonella findings, the feed company must ensure proper handling of the salmonella findings according to the action plan below.

In its own control scheme, the feed company must register all commercial customers that have a poultry production. The registration must include information about the sizes of the flocks, kinds of companies, number of silos, and silo capacities at the farm. This set of data must ensure quick and safe handling if salmonella is found at the factory.

A contact person must be appointed at the feed company; this contact person is contacted in case of salmonella findings.

APPENDIX 8.1. ACTION PLAN

The laboratory must immediately – by phone and in writing – inform the contact person at the feed company about any findings of salmonella-positive samples.

The laboratory gives a sample ID of the specified positive sample, so the sampling position can be found at the feed company.

The contact person at the feed company informs other relevant employees at the feed company. The production of poultry feed on the production line in question is stopped.

The stated period of time is mapped back to the most recent negative sample.

A survey is formed of the breeding stocks to which feed has been delivered that was produced on this line in the factory in question and in the period mentioned.

All commercial customers involved who carry on poultry production are contacted by telephone and told that a salmonella-sample from the factory has been tested positive. During this conversation, the customer receives the following information:

- Withdrawal of the feed is offered as soon as possible. The feed will be withdrawn within a maximum of three days and replaced by ordinary standard feed after mutual agreement (same phase, same coccidiostats, etc.) or it will be replaced by a mix that is being processed at the moment, if possible.
- The customer is informed of the actual time for the withdrawal of the feed as soon as possible.
- Actual circumstances concerning each stock are noted here (e.g. culling of animals, moving of animals, possibility of using another silo, etc.).
- The customer may be offered acid additives to the drinking water for delivery as soon as possible.

Immediately after the phone call, involved customers will receive an e-mail with a standard letter that describes the guidelines for the action plan in case of salmonella findings at the feed company as well as possible remediable action at the poultry farm (cleaning of silo, change to a different silo, addition of acid additive to the drinking water, etc.).

Subsequently, the following criteria must be specified for the involved poultry stocks prior to planning a withdrawal:

- Type of company (egg-laying animals, meat poultry, parent stock, breeding stock, etc.)
- Size of poultry flock
- Age of the animals
- Silo capacity / empty silo available?
- Status of feed supply at the farm
- Expected, planned future delivery

The involved poultry flocks are prioritised on the basis of the following criteria with the intention of protecting the final consumers as well as possible:

- Size of the flock (the biggest flocks have highest priority)
- Age of the animals, assessed by equal types of companies (the youngest first)
- For meat poultry, central breeding operations and breeding for table egg production, the oldest animals have the highest priority
- Thereafter, sorting will be done in accordance with other possible solutions, e.g. extra silos, empty silos, etc.
- Small flocks (of less than 3,000 animals) will have the lowest priority due to the size of production.
- Further information about the conditions at the farms will be included in the prioritisation.

Once the prioritisation has been completed, all involved customers will be informed of the expected delivery dates. Assistance with vehicles and standard mixtures from other companies covered by the code of practice will be asked for, if required.