

Annex 8.5 Additional control plans

Additional control plan Aflatoxin B1

Fundamentals

The additional control plan must be adhered additionally to the annual analyses which are required within the QS scheme according to the **Guideline Feed Monitoring**.

Scope

The additional control plan has to be followed by

- compound feed producers (production scope 71)
- feed material producers, (production scope 72)
- small scale feed material producers (production scope 73)
- private labeller (production scope 74)
- traders (including delivery trading without storage; production scope 76)

Responsibilities

Each QS certified company, which receives maize or processed maize (feed material), has to fulfil this additional control plan. If the supplier is certified by QS or a QS recognized standard and therefore complies with the requirements of the respective standard already, this additional control plan is not applicable for the purchaser.

In contrast to the obligation to take part in the QS monitoring also delivery traders (traders without storage capacity) have to adhere this additional control plan. For example: A delivery trader delivering maize to a QS certified compound feed producer. The maize is directly delivered from the country of cultivation to the compound feed producer. The trader needs to apply this additional control plan and depending on the classification of risk needs to forward the analysis result to the compound feed producer.

Requirements

Risk classification for countries of cultivation

The countries of cultivation are classified in different categories (high, medium and low risk). The classification is based on a potential risk by weather conditions in the respective countries, as well as former analysis results and notifications from the European rapid alert system RASFF.

Table 1: Risk classification for countries of cultivation

High	Medium	Low
<ul style="list-style-type: none"> • Serbia 	<ul style="list-style-type: none"> • all other countries which are not mentioned under 'high' or 'low' 	<ul style="list-style-type: none"> • Austria • Belgium • Czech Republik • Denmark • Estonia • Finland • France • Germany • Iceland • Ireland • Latvia • Lithuania • Luxembourg • Netherlands • Norway

High	Medium	Low
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- Poland
- Sweden
- UK

The country of cultivation of the maize should always be known. If the country of cultivation is not known, classification as high risk is applicable.

In addition to the classification made by the standard owner, the precautionary principle always prevails. This means that a company always has to consider and calculate the possible risk of Aflatoxin B1 in maize or processed maize from a country of cultivation as well as the storage conditions until receiving or processing the products. If necessary, the products have to be analysed.

Sampling

The requirements for sampling depend on the risk classification for the country of cultivation, means of transport and storage of the products. For high and medium risk, the sampling has to be done in accordance with the **Commission regulation (EU) No 691/2013** amending **Regulation (EC) No 152/2009** as regards methods of sampling and analysis. For low risk the sampling has to be done in accordance with the **Guideline Feed Monitoring**.

The company applying this additional control plan sends at least 4 kg of sample material (maize/ by-product) to the laboratory for preparation and analysis. The preparation and analysis by the laboratory are in accordance with the following conditions:

- The sample is fully grinded and homogenized before the final sample and out of it the sample for analysis are taken.
- The final sample is at least 500 grams.
- The sample for analysis is prepared from the final sample.
- The remains of the final sample are retained for potential re-analysis.

The sampling of the raw material must always be related to the batch. This means, the sample to be analysed must be taken from one batch of the same origin (country of cultivation). Two or more different origins must not be mixed. A batch (according to **Regulation (EU) 767/2009**) means an identifiable quantity of feed determined to have common characteristics, such as origin, variety, type of packaging, packer, consignor or labelling. In the production of processed maize, a "batch" or "lot" is defined as a unit of production from a single plant using uniform production parameters or a number of such units, when produced in continuous order and stored together.

Table 2: Overview of requirements for sampling

Means of transport	Requirements regarding	Risk classification		
		High	Medium	Low
Seagoing vessel	Samples per batch	1 sample per hold	1 sample per hold	Risk-oriented according to guideline feed monitoring on HACCP basis
	Location of sampling	Country of cultivation (port of loading)	port of loading or port of unloading	port of loading or port of unloading

Means of transport	Requirements regarding	Risk classification		
		High	Medium	Low
All other transportation	Sampler	Sampler of an independent superintendent organization accredited according to ISO 17020 or ISO 9001 or GAFTA certification	Sampler of an independent superintendent organization accredited according to ISO 17020 or ISO 9001 or GAFTA certification	According to guideline feed monitoring
	Samples per batch	Truck: 1 sample per batch (max. 1.000 t) ¹	Truck: 1 sample per batch (max. 2.000 t) 1	Risk-oriented according to guideline feed monitoring on HACCP basis
		Train: 1 sample per batch (max. block train)	Train: 1 sample per batch (max. block train)	
		Inland waterway vessel or coaster: 1 sample per inland waterway vessel or coaster	Inland waterway vessel or coaster: 1 sample per inland waterway vessel or coaster	
	Location of sampling	Truck: Country of cultivation or destination	Truck: Country of cultivation or destination	No specification
		Train and Inland waterway vessel or coaster: Country of cultivation (place of loading)	Train and Inland waterway vessel or coaster: Country of cultivation (place of loading)	
	Sampler	According to guideline feed monitoring	According to guideline feed monitoring	According to guideline feed monitoring

¹ One sample has to be analysed per lorry; pooling of several lorry supplies, which belong to one batch, is possible (max. 1.000 t or 2.000 t)

Feed material producers which process maize are also allowed to conduct the analysis exclusively in the final products.

In case the sampling dates back more than 3 months a new sampling is required.

If the whole batch in the warehouse is not accessible for sampling, a sampling plan should be made and documented, that covers the accessible part of the batch. The part of the batch that has not yet been sampled and analysed, should be monitored once it is possible and safe to get access.

In case of stored batches and reanalysis after 3 months, the highest measured Aflatoxin B1 value (from all sampling moments) is leading since it is not obvious that Aflatoxin B1 content could decrease over time. All analysis results applicable for the batch (also those which are older than 3 months) must accompany the batch.

Analysis and data entry

The analyses which are commissioned by QS certified companies as part of this additional control plan, may only be conducted by QS recognized laboratories. Furthermore, these analyses have to be entered into the QS feed monitoring database in accordance with the requirements described in the **Guideline Feed Monitoring**.

As the sample type "Additional control plan" needs to be selected.

Note: *If a sample has to be taken according to the additional control plan and gate-keeping, sampling according to the additional control plan is sufficient. In this case, "Gate-Keeping" is to be specified as the sample type and the addition "was sampled according to additional control plan" is to be added under remarks.*

Exceeding of limits or guidance values

In the case of an exceedance of the legal maximum value or a QS guidance value (QM-Milk maximum level or QM-Milk action threshold for products intended for feeding dairy cows in QM-Milk dairy farms) for aflatoxin B1, it has to be proceeded according to the guideline Feed Sector (chapter 2.1.4 Incident and crisis management and chapter 2.8.4 Control of faulty products) as well as to the guideline Feed Monitoring (chapter 5.1 Incident and crisis management). In the case of an exceedance the legal maximum level or QM-Milk maximum level, the customer of the products (client) has to be informed immediately.

Handling of analysis results and forwarding to the customer

- High and medium risk of the country of cultivation:
The analysis results must be available before processing or sale and forwarded to the customer (positive release).
For medium risk, the following procedure may be applied: In cases where maize is stored longer than 3 months in a silo and is not accessible for sampling before delivery to the customer, sampling may be carried out during loading. The results must be available before unloading at the customer or at least before the next processing step or feeding (if there is a written agreement between the seller and the customer).
 - For unprocessed maize, the analysis results which can be clearly assigned to the batch, need to be attached to the batch.
 - Feed material producers which process maize are also allowed to conduct the analysis exclusively in the final products. The analysis results need to be clearly assignable to the batch (maize by-products).
 - Feed material producers which process maize and conduct analyses in the raw materials have to confirm in written form to their customer that the additional control plan for the incoming maize was applied. Additionally, the end products have to be analysed by the feed material producer according to an internally determined control plan considering the concentration factors. These results need to be reported to the customer on his request or in the case of values $\geq 3 \mu\text{g}/\text{kg}$ (for direct delivery to QM-Milk participating dairy farms: $\geq 2,5 \mu\text{g}/\text{kg}$).
- Low risk:
When the respective batch is analysed, the analysis result has to be forwarded to the customer on his request.

Recognition of other protocols/additional control plans

QS recognizes the protocols/additional control plans of the following standard owners:

- GMP+ International
- OVOCOM
- AIC
- EFISC-GTP

Recognizing the protocols/additional control plans means that the QS company receiving products (from the above-mentioned standards) falling under this additional control plan does not

have to apply this additional control plan additionally. However, in case of a high or medium risk classification the QS company needs the analysis result(s) of its supplier.

Reclassification for countries of cultivation

QS reviews the risk classification for countries of cultivation together with the other standard owners on a regular base. A reclassification of the countries in the different categories will be made as soon as a certain number of analyses is deposited in the QS-database and can be evaluated by the scheme owner. Data, which are not inserted in the QS-database cannot be used for evaluation and reclassification. Other information like RASFF notifications, information about weather/harvest conditions can also be used for reclassification.

The reclassification is done by the standard owner and in addition to that in cooperation with the standard owners recognized by QS. It is based on the following criteria:

Table 3: Criteria for Reclassification of a country of cultivation

Risk level by country of cultivation	Criteria defining the risk level
High	<ul style="list-style-type: none"> • > 1 % of the available analysis results within the previous evaluation period > 20 ppb or • > 10 % of the available analysis results between > 10 ppb and ≤ 20 ppb
Medium	<ul style="list-style-type: none"> • Percentages of analysis results that are not mentioned under the risk levels 'High' or 'Low' fall under the risk level 'Medium'
Low	<ul style="list-style-type: none"> • < 1 % of the available analysis results between > 5 ppb and ≤ 10 ppb and • > 90 % of available analysis results < 2 ppb and • other available analysis results ≤ 5 ppb

Up- and downgrading

- For upgrading a country of cultivation to a higher risk level, the number of samples to be tested is at least 1.
- For downgrading a country of cultivation to a lower risk level, the number of samples to be tested is at least 50 (new results). A country of origin is downgraded to a lower risk at the earliest 3 months after the current version comes into force.

The reclassification will result in a revised additional control plan. The scheme participants will be informed by QS about the revised document.

Revision Information Version 01.07.2024

Criteria/requirement	Change	Date of change
Exceeding of limits or guidance values	<p>Change: Adaptation of the procedure to the new QM-Milk maximum level and QM milk action limit.</p> <p>Change: Addition of a reference to Chapter 5.1 Incident and crisis management in the Guideline Feed Monitoring.</p>	01.07.2024
Handling of analysis results and forwarding to the customer	<p>Change: Adaptation of the obligation to forward analysis results for direct deliveries to dairy farms participating in QM-Milk to the new QM-Milk maximum level (2.5 µg/kg).</p>	01.07.2024
Risk classification for countries of cultivation	<p>New risk classifications of the following countries of cultivation:</p> <ul style="list-style-type: none"> • Hungary from High to Medium 	07.06.2024
Risk classification for countries of cultivation	<p>New risk classifications of the following countries of cultivation:</p> <ul style="list-style-type: none"> • Czech Republic from Medium to Low • Romania from High to Medium • Serbia from Medium to High 	11.04.2024
Risk classification for countries of cultivation	<p>New risk classifications of the following countries of cultivation:</p> <ul style="list-style-type: none"> • Ukraine from Low to Medium 	14.03.2024
Risk classification for countries of cultivation	<p>New risk classifications of the following countries of cultivation:</p> <ul style="list-style-type: none"> • Ukraine from Medium to Low • South-France from Medium to Low 	01.02.2024
Risk classification for countries of cultivation	<p>New risk classifications of the following countries of cultivation:</p> <ul style="list-style-type: none"> • Ukraine from Low to Medium • South-France from Low to Medium • Czech Republic from Low to Medium 	18.09.2023