Technical Specifications

TS2.1 - Country Note Dioxin monitoring for poultry feed

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GMP+ International

gmpplus.org

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1. Introduction

This Country Note contains requirements for the dioxin monitoring and active reporting to the poultry farmer in the event of exceeding the action limit and rejection limit.

This document is referred to as TS 2.1 *Country Note Dioxin monitoring for poultry feed* and is part of the GMP+ FSA module.

2. Scope, Application and Certification

2.1. Scope of this Country Note

This Country Note contains requirements for the dioxin monitoring of laying hens (rearing) feed including analysis frequency, sampling and analyzing.

2.2. Application

This Country Note can additionally be used alongside a GMP+ certificate with the scope of production of compound feed. GMP+ certified companies are not required to be additionally certified for this Country Note. If the GMP+ certified company decides to be additionally certified, then the GMP+ certified company must comply with the requirements specified in this Country Note.

2.3. Certification for companies

Certification takes place per business location (like certification for other GMP+ standards). Certification in accordance with this Country Note is registered in the company database of GMP+ International and is confirmed on a GMP+ certificate.

The applicable additional scope would be:
Dioxin-monitoring in feed for laying hens

3. Terms and Definitions

See F 0.2 *Definition list*.

4. Dioxin monitoring in laying hens (rearing) feed

4.1. General

The GMP+ certified company must draw up a monitoring programme for the monitoring of dioxin and dioxin-like PCBs in laying hens (rearing) feed. This monitoring programme must at least comply with the requirements in this Country Note.

4.2. Analysis frequency

The frequency of analysis (on a yearly basis) is calculated using the following formula

$$\text{Frequency} = \frac{\sqrt{\text{Volume}}}{100} * \text{'chance'} * \text{'seriousness'}$$

Variable	Explanation
Frequency	The number of samples to be examined (on a yearly basis) in which tests are done for dioxin and dioxin-like PCBs.
Volume	Volume in tons of laying hens (rearing) feed per year. The number of samples to be analysed is based on the quantity of laying hens (rearing) food which is produced. As the quantity of laying hens (rearing) feed increases, the number of samples to be analysed per ton is lower. To calculate the frequency of analysis it is permitted to add together the volume of laying hens feed and the laying hens rearing feed.
Chance	The standard value for chance is 1. The chance value will be periodically reviewed on the basis of analysis results. For now it is rated at 0.5.
Seriousness	This factor expresses the degree of harmfulness of an undesirable substance. The value of for seriousness is linked to that which is recorded in the FSD. The standard value for seriousness for dioxin is 5.

The certified company must:

- always round off the calculated frequency upwards;
- use a minimum frequency of 6;
- take the number of samples (where possible) scattered throughout the year.

It is permitted for GMP+ certified companies with less than 50,000 tons of laying hens (rearing) feed per year, to meet their sampling and analysis obligations jointly in a collective monitoring plan. This plan must be approved by GMP+ International.

The following requirements apply with respect to this option:

a. There must be a record of which companies participate.

b. The collective plan must comply with the requirements of this Country Note and other relevant GMP+ requirements.
c. Individual participants must use a minimum frequency of 2 (as opposed to the minimum frequency of 6 for participants who do not participate in a collective monitoring plan).
d. All the participating companies will be given all the relevant sampling and analysis results.
e. Approval of this plan (by GMP+ International) requires that participating companies no longer in theory need to be audited for this item. Naturally, the auditor will check what the participant has done with the analysis results provided.

Helpful tip:
Example at a production of 75,000 tons per year:
Analysis frequency = $\frac{\sqrt{75{,}000}}{100} * 0.5 * 5 = 7$ analysis per year

4.3. Sampling

The samples must be taken by the GMP+ certified company (or commissioned by the certified company) in accordance with the requirements of TS 1.6 *Sampling*.

4.4. Analysis

The samples taken must be analyzed for dioxins and dioxin-like PCBs.

The analyses are carried out at a laboratory that is approved for this under the GMP+ FSA module. See TS 1.2 *Purchase*.

The certified company must enter into demonstrable agreements with the laboratory with respect to the analysis time.

4.5. Analysis results

Once the analysis results have been received, the GMP+ certified company must assess these analysis results using the product norms from TS 1.5 *Specific feed safety limits*. Unlike the action limit in TS 1.5 *Specific feed safety limits*, the action limit for this Country Note for dioxins of 0.4 ng WHO PCDD / F-TEQ / kg laying hens (rearing) feed must be used. The rejection limit that must be used in this Country Note is similar to the rejection limit in TS 1.5 *Specific feed safety limits*.

In interpreting the analysis results, the certified company must not take into account the measurement uncertainty. The reported analytical result is therefore normative.
If the action limit or rejection limit is exceeded, the certified company must act in accordance with § 4.6 or § 4.7 respectively of this Country Note.

All analysis results must be sent to the GMP+ Monitoring database. GMP+ International will use these results for periodically evaluating the requirements in this Country Note.

4.6. Exceeding the Action limit

If the action limit is exceeded, the GMP+ certified company must:

a. Inform the poultry farmer(s) within 24 hours about the fact that the action limit has been exceeded in the batch in question. In addition, the certified company must state which delivery is concerned.
b. Perform a reanalysis of the laying hens (rearing) feed to confirm the first results.
c. Determine on the basis of a HACCP analysis what raw materials may have caused the increased level of dioxin and carry out an analysis on these raw materials.
d. Inform GMP+ International of the infringement of the action limit. This must be done through the form available for this.

Helpful tip:

- The poultry farmer will then inform his customer (egg packing station) about the fact that it has received laying hens (rearing) feed with an increased level of dioxin. The egg packing station will then (risk based) take additional samples of the eggs from the poultry farm in question and will feed back these findings to the GMP+ certified company.

4.7. Exceeding the Rejection limits

If the rejection limit is exceeded, the GMP+ certified company must:

a. Comply with the requirements of the GMP+ FSA module with respect to nonconforming products.
b. Inform the poultry farmer(s) within 24 hours about the fact that the rejection limit was exceeded in the batch in question. In addition, the certified company must state how long the period during in which the farmer may have received feed with an increased level of dioxin.
c. Inform GMP+ International (in accordance with R 1.0 *Feed Safety Management Systems Requirements*).
d. Inform the national authorities (if there is a legal obligation).

In addition, the certified company must:

a. Perform a reanalysis of the laying hens (rearing) feed to confirm the first results.
b. Determine on the basis of a HACCP analysis what raw materials may have caused the increased level of dioxin and carry out an analysis on these raw materials.

Helpful tip:

The poultry farmer will then inform his customer (egg packing station) about the fact that it has received laying hens (rearing) feed with an increased level of dioxin. The egg packing station will then (risk based) take additional samples of the eggs from the poultry farm in question and will feed back these findings to the GMP+ certified company.

Feed Support Products

That was a lot of information to digest and one might ask, what is the next step? Luckily we can offer support for the GMP+ Community when doing this. We provide support by means of various tools and guidances but as each company has a shared responsibility to feed safety, and therefor tailor-made solutions cannot be offered. However, we do help by explaining requirements and provide background information about the requirements.

We have developed various supporting materials for the GMP+ Community. These include various tools, ranging from Frequently Asked Questions (FAQ) lists to webinars and events.

Supporting materials related to this document (Guidelines and FAQ's)
We have made documents available which give guidance to the GMP+ requirements as laid down in the module GMP+ FSA and GMP+ FRA. These documents give examples, answers to frequently asked questions or background information.

GMP+ Monitoring database
The GMP+ Monitoring database contains analysis results from you and other users. It is possible to generate reports based on this data. We have a manual and a frequently asked questions document available.

Where to find more about the GMP+ International Risk Management tools
Fact sheets
More information: GMP+ Platform
GMP+ Monitoring database
More information: GMP+ Monitoring database

We enable every company in the feed chain to take responsibility for safe and sustainable feed.

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