

FEED MATERIALS
ASSURANCE SCHEME

BREWERY BY-PRODUCTS SECTOR NOTES

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NOTE: Although these Sector Notes may be translated into various languages for the convenience of users, the English version remains the definitive reference document in the event of any dispute.

NOTES ON THE IMPLEMENTATION OF FEMAS FOR BUSINESSES PRODUCING BREWERY BY-PRODUCTS

Sector Notes are provided to assist FEMAS participants and assessors in establishing some background knowledge of specific feed industry supply sectors where issues may exist that are uncommon, or of less relevance, in other sectors. These Notes are not necessarily exhaustive.

These Sector Notes are relevant to businesses involved in the production and supply of Brewery By-Products for use in animal feed, including: spent brewers grains, (killed) surplus yeast and surplus beer.

These Notes are laid out in the same format as the FEMAS International Core Standard. Where additional comment is necessary, the clause reference is to the appropriate section of the FEMAS International Core Standard. It is emphasised that the comments included in this document are intended to assist in the application of the corresponding requirements of the FEMAS International Core Standard and are not to be considered in isolation. For clauses where no additional comments are provided in this document, the original requirements of the FEMAS International Core Standard continue to apply without any additions or exclusions.

In subsequent issues, additions and amendments to these Notes will be shown in *blue italics*, for ease of reference.

The assistance of Brewery Research International (BRI) in preparing these Notes is gratefully acknowledged.

1.10 Definitions

Brewery By-Products: *Brewery Products 'downgraded' from human food status and offered as animal feed and brewery by-products derived from the production of brewery products for human consumption, offered as animal feed. Typically these will include spent brewers grains, (killed) surplus yeast and surplus beer.*

By-product (Co-product): *Product produced as the result of a process primarily intended to produce a different product.*

For additional definitions refer to FEMAS International Core Standard

SECTION 1 INTRODUCTION

1.1 Scope

The scope should define the By-Products to be supplied as feed ingredients. For example:

- Spent Grains (including, as required, addition of trub and malt dust)
- Surplus Yeast
- Killed Surplus Yeast (where a kill step is carried out at the brewery)
- Surplus Beer
- Malt Dust

1.3 Additional Requirements for 'Non-GM' Feed Ingredients

Participants who do not declare their feed ingredients as GM must produce a written risk assessment confirming how the assessment has been reached that all raw materials (including, for example, brewing syrups that may be produced from GM maize) are Non-GM. Written confirmations from suppliers will be crucial in supporting the assessment, but validated test data confirming the Non-GM status of raw materials (whether undertaken by the supplier, the participant or both) must also support any claims. Risk assessments must be reviewed if circumstances change.

SECTION 4 TRANSPORT REQUIREMENTS

4.2.3 Inspection Of Land Transport Prior To Loading

Breweries may traditionally specify as part of their written sales contracts that it is the responsibility of the collecting merchant / purchaser to ensure that any transport presented is clean. Although the function of inspecting transport may be delegated, the responsibility for ensuring effective inspections are undertaken and for maintaining records, remain with the participant.

Where the health and safety of quality personnel would be put at risk by climbing onto road tankers to carry out internal inspections, participants must comply with one of the following:

- Allow safe access by provision of safety platforms from which inspections may be done
- Nominate and train drivers to undertake inspections (in which case records of training must be held)
- Utilise risk assessment methodology to put in place alternative controls that will ensure issues of cross-contamination can be avoided (e.g. by use of dedicated tankers). In any such assessment, consideration must be given to the potential effects of inadvertently mixing different grades of the same product.

SECTION 5 PRODUCT SAFETY MANAGEMENT

5.1.3 Feed Ingredient Specification

Where surplus beer is supplied the participant must advise the purchaser if the beer has a higher than normal alcohol content.

5.1.5 Hazard Analysis / Identification (CODEX Principle 1)

Risk assessment studies in breweries may traditionally have been concerned exclusively with the production of beer; consequently the presence of physical contaminants early in the process may not be considered a high risk as the beer stream is subsequently filtered. The HACCP plan must be extended to consider the production, processing (e.g. kill step for yeast) and storage of feed ingredients. Physical contamination (e.g. from glass, metal and plastic) will necessarily be part of the risk assessment for feed ingredients.

Where breweries are supplying surplus beer that has been returned from customers (e.g. unbroached casks or broached / unbroached kegs), risk assessments must consider the potential hazards involved in this practice and any necessary controls be implemented.

Participants may have specifications in place for maximum levels of NDMA (N-nitrosodimethylamine), pesticide residues, mycotoxins and other undesirable substances that may be present in raw materials. Feed ingredient risk assessment studies must consider these potential hazards and ensure they are not concentrated into By-Products. Any necessary controls and testing regimes must be established on the basis of these findings.

5.2 Raw Materials

Non-GM

Participants who do not declare their feed ingredients as containing GM products must produce evidence either from their own testing or by utilising supplier data, to show that raw materials (including, for example, brewing syrups that may be produced from GM maize) are Non-GM. Participants need not necessarily hold all records, but they must be able to access such records if required to do so.

5.5 Sales Contracts

Where the participant pays a third party to remove feed ingredients from his site, it is still a requirement that the terms and conditions for this are documented and agreed between both parties in accordance with the requirements of FEMAS.

5.13.2.3 Sampling

The objective is that samples are retained for the period between production and consumption. Where it can be demonstrated that material is consumed fresh, shorter periods of retention than the *six* months prescribed in FEMAS

may be appropriate. Where material is either pitted or ensiled then the samples will need to be retained for at least the six month period unless a risk assessment shows that it is all consumed earlier than this. The fact that material may lose its identity when pitted or ensiled does not affect this requirement.

5.13.7 Testing Laboratories

Where reliance is placed upon supplier data, participants must provide evidence to demonstrate the validity of these data and competence of any testing laboratories involved.

Applicable Regulations

There are no specific regulations applicable to Brewery By-Products over and above those regulations that apply to all feed ingredients.