Gafta
APPROVED
REGISTER

The Gafta Standard for

Analysis & Testing

Contents

A Introduction

Gafta (the Grain and Feed Trade Association) is the international association representing the trade and supply of agricultural commodities, animal feed materials, pulses, rice, spices and general produce worldwide.

The Gafta Standard is an independently audited scheme designed to maintain and improve the level of competence of activities related to the trade of agricultural commodities, animal feed materials, pulses, rice, spices and general produce worldwide. It comprises three Codes of Practice:

- The Gafta Standard for Analysis and Testing
- The Gafta Standard for Fumigation
- The Gafta Standard for Supervision, Sampling and Weighing.

Certification to the Gafta Standard for Analysis and Testing is conditional on a successful audit assessment by the Certification Body/Bodies approved and appointed by Gafta. Continued certification is conditional on successful annual audits of the Gafta Standard for Analysis and Testing no later than 14 months of the anniversary of the initial audit.

The initial audit will be completed by a site visit by the auditor. The following two annual audits will be carried out remotely via electronic sharing of documents and telephone or video conferencing. The fourth audit, and every third audit thereafter, will be completed by a site visit by the auditor. Gafta and the Certification Body reserve the right to complete a site visit at any annual audit or any other time (e.g. unannounced 'spot checks') where it considers it to be necessary.

If a site visit audit is cancelled or postponed by the Member within two weeks/days of the audit date, 100% cancellation fee applies.

Audits will be conducted in English and it is the responsibility of the Member to arrange suitable translation of documents and/or a suitable interpreter as required at their cost. Failure to comply with this requirement may result in the rearrangement of the audit when suitable interpreters are available. The costs associated with the rearranged audit shall be borne by the Member.

The Member must permit access to the auditor to the premises, information, documentation and facilities required to undertake the audit. The auditor reserves the right to refuse to carry out an audit where they deem conditions are inappropriate, dangerous or unsafe, the cost of a cancellation due to any of these factors will be borne by the Member. Any certification already in place may be suspended if an audit is cancelled and full reinstatement of a certificate may require a full on site audit.

Non-conformances raised at audit of the Gafta Standard must be closed by providing documentary evidence or a revisit. Non-conformances must be closed within three months of an initial audit and within 28 days of any subsequent audit. Failure to provide satisfactory evidence will result in suspension from the Gafta Approved Register of Analysts and may lead to inquiry under the terms of the Gafta Membership Complaints and Disciplinary Regulations.

A 'suspended' Member will be removed from the Gafta Approved Register of Analysts and cannot be appointed contractually under Gafta contract terms. A 'suspended' Member may not issue certificates of analysis for Gafta contracts. (See also Analysts Scheme – Code of Practice for Gafta Approved Register Analysts).

Failure to reinstate from 'suspended' status within 28 days of notification of the suspension will result in the Member being withdrawn from the scheme. After withdrawal, reinstatement will only be possible after a full initial audit at the cost of the Member.

Gafta and the appointed Certification Body reserves the right to suspend or withdraw membership of the Gafta Approved Register of Analysts when it considers it necessary to do so to prevent the Register or the Association being brought into disrepute.

Successful third party audit to the Gafta Standard is one of the requirements of entry onto the Gafta Approved Registers which provide authorisation for companies to provide its services under Gafta Contract Terms & Conditions. This Standard should be read in conjunction with the requirements for the Approved Registers and the relevant Gafta Codes of Conduct.

B Scope

An Analyst is a laboratory facility whose primary business is the testing of agricultural commodities and animal feeding stuffs.

The Gafta Standard for Analysis and Testing is for analytical facilities engaged in the profession of sample analysis and the subsequent provision of certificates of analysis. Reporting and certification is based solely on the analysis of samples provided to them as representing consignments of goods from loading ports and discharge ports in countries exporting and importing grain, pulses, rice and animal feeding stuffs.

Analysts certified to the Gafta Standard for Analysis and Testing carry out analysis in accordance with the Gafta No.130 Register of Analysis Methods, or where no such method is listed in accordance with internationally accepted standards. Analysts operate in accordance with this Standard for the analysis of commodities traded on Gafta contract terms.

The drawing of samples ("sampling") is not part of this Standard. Sampling should be carried out by a Gafta Approved Superintendent in accordance with the Gafta No.124 Sampling Rules. Please see the Gafta Standard for Supervision, Sampling and Weighing for more information.

This Standard does not replace any legislative or health and safety requirements applicable in the country the activity is carried out.

C General Terms and Definitions

In this document the following words are used and defined as:

Must – This is a requirement of the Standard which has to be met.

Should – This is a strong recommendation of the Standard, but not mandatory.

Key Requirement – Requirements marked with a K in the left hand margin indicate a "key" requirement. If during an audit an assessor finds a major non-conformance against a key requirement this shall result in suspension until rectified.

Major Non-conformance – Substantial failure to meet a requirement of the Standard.

Minor Non-conformance – A requirement of the Standard has not been fully met.

Non-conformances raised at audits must be rectified within three months of an initial audit or 28 days of any subsequent audit. Non-conformances will be closed by the provision of objective evidence to the Certification Body. Such evidence must be provided in English.

The level of non-conformance against a requirement of the Standard is based upon evidence and observations made during the audit.

Evidence – Objective evidence must be available to demonstrate compliance with each requirement. Evidence can include, but is not limited to: records, documented processes, reports, manuals, correspondence, certificates, and photographs. Evidence can be hard copy or electronic.

Internally produced records must be signed by the person carrying out the task/activity.

Records must be legible and kept in suitable conditions that allow ready retrieval and prevent deterioration.

Records must be kept for a minimum of seven years unless there are additional requirements.

Confidentiality – The auditor requires access to all documentation relevant to the Gafta Standard assessment. All information will remain in confidence with the Certification Body and will not be disclosed to any third party.

1 General Obligations and Requirements

1.1 Management Structure

1.1.1 K The laboratory facility must be a legal entity, or a defined part of a legal entity, which is legally responsible for its analysis and testing activities.

1.1.2 Where laboratories operate on multiple sites, each site must be part of the same legal entity, follow the same procedures and issue the same certificates of analysis, with a management system having overall responsibility for the analysis and testing activities.

1.1.3 K However, for the purposes of the Gafta Ring Testing Scheme, each site must participate individually and independently.

1.1.4 K Where multi-site laboratories do not operate to the same procedures, have a separate management system or are separate legal entities they must be audited to the Gafta Standard for Analysis and Testing individually.

1.1.5 K The laboratory must have documented operating and management procedures.

1.1.6 K Analysts must regularly (at least annually) review their management system to ensure continued conformance with procedures and policies, fulfilment of objectives, and identify opportunities for improvement. In particular management review must consider (but not be limited to):

- Internal or external changes relevant to the scope of this Standard
- Suitability of operating and management procedures (see 1.1.5)
- Outcomes of internal audits (see 8.7), audits against this Standard and any other external/third party audits
- Proficiency testing results (see 8)
- Complaints (see 2), customer and personnel feedback
- Risk Assessments (see 1.2.6)
- Corrective actions, and effectiveness of preventative actions/improvements.

1.2 Impartiality

1.2.1 K Analysts must carry out their activities impartially. Risks to impartiality must be identified and controlled so as not to influence the results of any analyses carried out. Risks to impartiality include, but are not limited to, management, commercial relationships, ownership, marketing, sales commission/incentives. Procedures must be implemented by Analysts to ensure that persons or organisations external to the Analyst cannot influence the results of any analyses carried out.

1.2.2 K Analysts must be independent of the contracting parties involved, and staff responsible for carrying out the analyses must not be from the manufacturer, supplier or user of the item which they analyse, nor the authorised representative of any of the contracting parties.

1.2.3 K Analysts must not engage in any activities that may compromise their impartiality, independence of judgement and integrity in relation to its analytical activities. In particular they must not become directly involved in the marketing, use, handling, operation or maintenance of the items analysed.

1.2.4 The Analyst must report to Gafta any attempts by interested parties to influence the outcome of its analyses.

1.2.5 K The Analyst must be responsible for any breach of this Standard by its employees or other agent instructed by it to carry out its operations on its behalf.

1.3 Risk Assessment Analysis

1.3.1 Risk Assessment – Analysts must have a risk assessment/plan in place covering their activities. Risks to be considered must include, but are not limited to: fire, equipment failure, external influences, contamination, and access by non-employees.

1.4 Confidentiality

1.4.1 The Analyst is responsible for the management of all information received or created during its operation, and must abide by local and/or international legislation relating to data management.

1.4.2 Where an Analyst is required by contractual arrangements to release test results to another party, the customer must be notified of the information provided.

1.5 Receipt of work

1.5.1 In order for Analysts to perform their activities, precise instructions are needed from their principals at the time of receiving the order.

1.5.2 (K) Analysts must nominate a suitably experienced person as a Technical/File Manager who must be the responsible person for receiving instructions from a principal and who must be responsible for forwarding the appropriate instructions to laboratory staff. The Technical/File Manager must be a permanent employee of the company and must be responsible for ensuring that sufficient information has been received.

1.6 Sub-contracting

1.6.1 All contractual analyses must be carried out by employees of the named approved analyst laboratory.

1.6.2 (K) Where there is a need to sub-contract any test listed on the Gafta No.130 Register of Analysis Methods this must be limited to another analyst laboratory on the Gafta Approved Register of Analysts.

1.6.3 (K) Where this applies to a test not listed on the Gafta No.130 Register of Analytical Methods this must be limited to any analyst laboratory accredited to ISO 17025 for the test in question.

1.6.4 (K) If, despite reasonable efforts, an analyst laboratory accredited for the test in question is not available then the analyst laboratory may sub-contract to any appropriate analyst laboratory accredited to ISO 17025 for related analysis. In this event laboratories must be able to demonstrate that reasonable efforts were made to locate the appropriate analyst laboratory with the specific test in their scope of accreditation but that none were found.

1.6.5 (K) Analysis of the Gafta ring test samples must be undertaken by the named Analyst. Under no circumstances may the analysis of ring test samples be sub-contracted.

2 Complaints Procedure

2.1 The Analyst must have a documented procedure for handling complaints. This procedure must include systems for:

- The prompt documentation and investigation of complaints
- The prompt feedback to the complainant with findings
- Deciding on internal actions required to prevent re-occurrence
- Identifying trends and feeding into management review.

3 Insurance

3.1 (K) Analysts must demonstrate that they have adequate and appropriate insurance in place to cover any claims which may arise as a result of liability in respect of their operations.

4 Personnel and Training

4.1 The Analyst company must define and document (for example in a job description) the responsibilities and competency requirements for each employee, including (but not limited to) education, training, experience, technical knowledge and skills.

4.2 (K) There must be an ongoing, regular training programme for all employees including permanent, temporary and occasional staff members, which is updated as appropriate.

4.3 (K) Employees must be trained and competent to perform the analyses for which they are responsible.

4.4 K Written training programmes must be implemented and include the following stages:

- Induction period
- Supervised/mentored working period with experienced employees
- Regular self-assessment using proficiency test samples or by use of internal Quality Control samples, certified reference materials or through other acceptable means.
- Continued training to remain up to date with changing technology, equipment, methods etc.

4.5 K Written records of training must be kept for all employees and should also include self-assessment reports, performance reviews and certificates/ qualifications where appropriate.

4.6 K Regular performance reviews must be completed for all employees. This must be performed at least annually but more frequently as required. Performance reviews must include a combination of observation, report reviews, interviews, and other techniques to assess performance, and will depend on the nature of analytical activities. Performance reviews must be used to identify training needs.

4.7 The requirement to attend or receive training must take into account the ability, experience and other qualifications held by each employee and must be appropriate to their activities. Performance monitoring must be used as a means of identifying training needs.

4.8 Training also should include, but not be limited to, the following:

- Sample handling and preparation (Gafta No.130 Register of Analysis Methods – Method 1.0 Preparation of Sample for Analysis)
- Sample disposal procedures
- Awareness of safety in the laboratory (for example the use of appropriate Personal Protective Equipment (PPE), correct use of equipment, use of chemicals/reagents)
- An awareness of this Standard.

4.9 K Personnel trained and authorised to alter equipment calibrations and adjust records must be listed within the operational manual for the facility.

4.10 Personnel who carry out internal audits must be trained to do so.

4.11 K Analysts must wear the appropriate PPE. The items provided must be appropriate to the activities being performed, must be in good order and within any applicable validity period or expiry date. Records must be retained for the issuance and receipt of such equipment to/by employees.

5 Facilities and Equipment

5.1 K Laboratory facilities must be fit for the purpose, i.e. have sufficient working spaces, the appropriate equipment and supplies, be clean, ventilated and heated to the extent that will allow the safe and effective operation of the facility. Laboratory spaces must be well lit and lighting must be fit for purpose. Any external influences (such as electromagnetic interference, voltage fluctuations, water pressure, temperature and vibration, dust and humidity) which may affect the satisfactory operation of the facility must be identified, recorded, controlled and measured where necessary.

5.2 Visitors to the facility must sign in and out and must be accompanied by an employee.

5.3 Procedures must be in place to control laboratory facilities which must be monitored and periodically reviewed and shall include, but not be limited to:

- Restricted access to laboratory areas and areas affecting laboratory activities
- Prevention of contamination, interference or adverse influences on laboratory activities
- Effective separation between areas not related to laboratory activities.

5.4 K Equipment must be fit for the purpose for which it is used, and maintained and serviced to manufacturers' specifications or tolerances. Equipment includes, but is not limited to: measuring instruments, software, measurement standards, reference materials, reference data, reagents, consumables or auxiliary apparatus.

5.5 K Equipment must be used/operated in accordance with the manufacturer's instructions. In-house procedures/instructions must be traceable back to the manufacturer's instructions.

5.6 K Analysts must have a procedure for identifying and approving requirements for third party suppliers and services (for example equipment, laboratory consumables, and calibration and maintenance services). Records must be kept defining, reviewing and approving laboratory requirements, criteria for selection of suppliers and monitoring performance of suppliers.

5.7 K Each piece of laboratory equipment requires a unique identification and must have a record of operations, maintenance, servicing and calibration.

5.8 K Equipment must be checked before use on a regular basis to maintain confidence in the performance of the equipment. Equipment checks must be done to a written procedure, which include performance criteria, and must be recorded.

5.9 Any equipment not in use must be marked accordingly to prevent mistaken use. If the equipment is re-introduced then evidence must be available of the re-calibration prior to use. Equipment taken out of use permanently must be recorded in the record book for that machine.

5.10 K The laboratory must establish a calibration programme, which must be reviewed and adjusted as necessary in order to maintain confidence in the status of calibration. Calibration frequencies and methods must be according to manufacturer's instructions, or in-house procedures.

6 Analytical Methods

6.1 K Analysts must be able to demonstrate access to the latest version of the Gafta No.130 Register of Analysis Methods. Gafta No.130 sets down the methodology for the analysis of contractual samples. Analysts must be able to demonstrate access to the applicable ISO Methods referenced within the Gafta No.130.

6.2 K Methods of analysis used must be traceable to the appropriate contractual requirements or where no specific contractual requirements apply, to the latest ISO method (or equivalent).

6.3 The laboratory must verify the application of all standardized methods.

6.4 The laboratory must validate all non-standard methods, laboratory-developed methods and standard methods used outside their intended scope or otherwise modified. The validation must be as extensive as is necessary to meet the needs of the given application or field of application.

Validation can include procedures for sample handling and transportation of test items.

6.5 K The laboratory must retain records of verification and validation.

7 Sample Handling

7.1 A written procedure for the handling and storage of samples covering all stages from entry to the laboratory to disposal must be available.

7.2 K A written procedure must be put in place to identify samples by a unique reference system, to allow full traceability of samples from date and time of receipt, through analysis to final reporting.

7.3 A written procedure for the disposal of contaminated samples or waste goods must be in place.

7.4 Hazardous admixture detected in samples must be reported to the Prinicpal and recorded. Examples include ergot, glass, dressed seed, rodenticide and faeces. NB: this is not a comprehensive list.

7.5 Where a request is received to estimate the overall concentration of hazardous admixture found, to enable a decision to be made concerning the correct remedial action to be taken, the request received and report made must be recorded.

7.6 Representative portions of the samples as received for analysis and representative portions of the prepared samples must be kept in appropriate storage conditions to maintain the integrity of the samples for a minimum period of one month unless otherwise specified by the customer or statutory requirements.

8 Quality Control and Proficiency Testing

8.1 K The laboratory must have a procedure for monitoring the validity of results. The resulting data must be recorded in such a way that trends are detectable and, where practicable, statistical techniques must be applied to review the results. This monitoring must be planned and reviewed.

8.2 K It is a requirement of the Gafta Approved Register of Analysts that laboratories must participate in the Gafta Ring Test Scheme. The laboratory must also participate in any of the optional tests offered by Gafta if those tests are carried out by the laboratory.

8.3 K The laboratory must regularly monitor its performance by participation in additional proficiency testing or inter-laboratory comparisons for all the tests they perform most frequently from the Gafta No.130 Register of Analysis Methods.

8.4 Results of proficiency testing must be recorded in such a way that trends are detectable and evaluated (see also 1.1.6).

8.5 Check test samples can be prepared in house as per the laboratory's quality system procedures or certified reference materials (CRM's) can be purchased for use as check samples. The check samples will be used to enable warning and action lines to be established on control charts in accordance with established statistical process controls for laboratory analysis.

8.6 Corrective and preventative action procedures must be in place where any quality control results are outside the required criteria.

8.7 **Internal Audit**

8.7.1 K A documented internal auditing procedure must be in place. Internal audits must be carried out at least annually, at each location, against the laboratory procedures (see 1.1.5) and this Standard as a minimum.

8.7.2 The audit programme must include the frequency, methods, responsibilities, planning requirements and reporting, and must take into consideration the importance of the laboratory activities concerned, changes affecting the laboratory, and the results of previous audits.

8.7.3 Internal audits must be undertaken in such a way that the person undertaking the internal audit is not auditing their own work.

8.7.4 Internal audit reports should include objective evidence to show compliance with the audit criteria.

8.7.5 K The person responsible for overall control of the laboratory must ensure non-conformances raised through internal audit and any third party audits (such as audits to this Standard) are rectified within specified timescales and implement suitable preventative action to avoid recurrence.

9 Reporting and Record Keeping

9.1 Reports must include (but are not limited to):

- Identification of the sample including seals and labels
- Condition of the sample received e.g. integrity of packaging
- Reference to the Gafta method used
- Result expression basis where applicable
- Dates of receipt, sampling and testing where this is critical to the results
- Date of issue of the report and version number.

9.2 K Internally produced records must be signed by the person carrying out the task/activity. Where records are kept electronically the records will carry the name of the person carrying out the task/activity.

9.3 Records must be legible and kept in suitable conditions that allow ready retrieval and prevent deterioration.

9.4 Records must be kept for a minimum of seven years unless there are additional requirements.

Contact

The Grain and Feed Trade Association

London (Head Office)
9 Lincoln's Inn Fields
London WC2A 3BP
UK

T: +44 20 7814 9666
F: +44 20 7814 8383
E: post@gafta.com

www.gafta.com

Geneva
Route de Meyrin 123
c/o BDO SA
1219 Chatelaine
Switzerland

T: +41 79 43 43 528
E: geneva@gafta.com

www.gafta.com

Beijing
1-1-1607
Leading International Center
No.1 Guang Qu Men Nan
Xiao Jie, ChongWen District
100061
Beijing
China

T: +86 10 6712 1741
F: +86 10 6712 1742
E: beijing@gafta.com

www.gafta.com.cn

Kiev
Business Center "Saksaganskiy"
70A Saksaganskogo Str.
Kyiv
Ukraine
01032

T: +38 044 290 82 90
F: +38 044 290 82 94
E: kiev@gafta.com

www.gaftakyiv.com

Singapore
152 Beach Road #28-00
Gateway East
Singapore
189721

T: +65 9017 4205
F: +44 (0) 20 7814 8383
E: post@gafta.com

www.gafta.com