Council on Dairy Cattle Breeding

Auditing Procedures for Field Services

Effective January 1, 2012
Version 12.1

The purpose of this manual is to ensure the accuracy and uniformity of all records included in the national *Genetic Evaluation Program*.

Field Service Audits and Certification

Initial Certification Audits

Before achieving initial certification, field service providers must submit to an on-site audit and demonstrate compliance with all aspects of this manual and with the *Code of Ethics* and *Uniform Data Collection Procedures*.

Audits

Once certification has been established, field service providers will be subject to an annual audit in order to renew their certification. The auditor will conduct the audit on-site at least every other year. *At any time, additional audits may be called by the auditor at the auditor's discretion, or may be requested by the cooperating organization.*

Scheduling of Audits

Each field service provider will be assigned a centering period month for audits. Audits must be performed within 60 days of the centering period month.

Auditing Period

The auditing period will begin on the first day of the previous centering period month and end on the last day of the month prior to the current centering period month. Only data and events occurring between these dates will be used as auditing criteria.

Certification Period

The certification period will extend through the last day of the 14th month following the centering period month. Field service providers failing to achieve certification renewal by the end of the 14th month will be classified as non-certified.

If failure to maintain standards is determined to have occurred by the auditor during the certification period, the service provider can be decertified prior to the end of the current certification period.

Decertification Procedures

Decertification will only be considered when the performance of a field service provider has fallen below the minimum standards established by the CDCB and the organization does not take prompt action to return to compliance within the time period specified by the auditor.

Decertification Appeals

For policies and procedures on decertification appeals, please refer to page 7 of the 'General Auditing Guidelines' for a detailed protocol.

Centering Period Months for Field Services

Field service providers are subject to annual audits. Below is a schedule of target months for the audits. Please note the projected on-site audit year listed as even or odd number years. If you have an "Even" next to your affiliate, you would have an on-site audit in 2012, 2014, etc. Like wise for those with "Odd"- 2013, 2015, etc. would be your on-site audit year. Your off-site audit would be held the following year unless notified differently by the auditor.

January ..... (Odd) Minnesota DHIA

February ..... (Odd) Arizona DHIA
..... (Odd) Southern DHIA Affiliates - Southeast DHIA and Tennessee DHIA
..... (Even) Puerto Rico DHIA

March ..... (Even) Texas DHIA
..... (Odd) Integrated Dairy Herd Improvement

April ..... (Odd) DHI Cooperative Inc.

May ..... (Even) California DHIA
..... (Even) San Joaquin DHIA
..... (Even) Jim Sousa Testing

June ..... (Odd) NorthStar Cooperative DHI Services
..... (Odd) Indiana State Dairy Association

July ..... (Even) Idaho DHIA

August ..... (Odd) Lancaster DHIA
..... (Odd) Tulare DHIA
..... (Odd) Dairy Lab Services

September ..... (Even) Dairy One Cooperative Inc.
..... (Even) Gallenberger Dairy Records

October ..... (Odd) AgSource Cooperative Services/CRI

November ..... (Even) Washington State DHIA
..... (Even) Heart of America DHIA
..... (Even) Mid-South Dairy Records
..... (Even) Rocky Mountain DHIA

December ..... (Odd) United Federation of DHIAs

Initial Training Responsibility

Field service providers must furnish initial and follow up training to all new field technicians authorized to test without supervision. Assistant field technicians, helpers, and sample takers are exempt from this requirement.

Training Personnel

A qualified trainer must provide all initial and follow up training.

Training Format

Field service providers should furnish initial and follow up training in the format that best utilizes the resources at hand and meets the job requirements of the new field technicians.

Minimum Training Requirements

The minimum requirements for new field technicians to test without immediate supervision include:

- milk meter and sampling device operation,
- barn and parlor techniques at a minimum of three herds,
- data entry, and
- the *Code of Ethics* and *Uniform Data Collection Procedures.*

Suggested Topics for Follow-Up Training

Topics suggested for in-depth training include:

- the *Code of Ethics* and *Uniform Data Collection Procedures,*
- due process procedures,
- meter care and operation,
- electronic meter and sampler operation where applicable,
- sample analysis procedures, and
- a tour of the laboratory, if feasible.

Documentation

Documentation of the initial training provided to each new field technician must be furnished during an audit. This documentation must include:

- the name and date of hire of the new field technician,
- the name and credentials of the trainer,
- a list of the herds visited during training,
- a list of the topics covered during the training, and
- a time or condition at which the new field technician became authorized to test without supervision.

Verification of Documentation

Individual training records may be reviewed or interviews held with new field technicians to audit the initial training program in place.

Auditing of the Continuing Education of Field Technicians

Continuing Education Responsibility

Field service providers must furnish additional training to experienced field technicians authorized to test without supervision on an annual basis. Assistant field technicians, helpers, and sample takers are exempt from this requirement.

Continuing Education Personnel

A qualified trainer must provide all continuing education.

Training Format

Field service providers should furnish continuing education in the format that best utilizes the resources at hand and meets the job requirements of the field technicians. Examples include large group meetings, small group meetings, and meetings with individual field technicians.

Suggested Topics

Topics suggested for continuing education include:

- upcoming data entry methods and procedures,
- new sample analysis tests and results,
- future meter models and milk weighing technology,
- changes in dairymen reports or summaries,
- revisions to field service provider policies, and
- national trends in the dairy industry.

Documentation

Documentation of the continuing education provided to each field technician must be furnished during an audit. This documentation must include:

- the name of each field technician,
- the name and credentials of the trainer, and
- a list of the topics covered during the training.

Verification of Documentation

Individual training records may be reviewed or interviews held with field technicians to audit the continuing education program in place.

Auditing of Portable Meter Calibration Checks

Use of Approved Types

All portable weighing and sampling devices being used for the generation of certified data must be of a National DHIA approved type. A comprehensive list of these devices can be found at the National DHIA web site or can be provided by National DHIA upon request.

Use of Certified Meter Centers

A certified meter center must be used when performing all portable meter calibration checks. A comprehensive list of these locations can be found at the web site designated by the CDCB, or can be requested from the auditor.

Use of Certified Meter Technicians

A certified meter technician must perform all portable meter calibration checks. A comprehensive list of these persons can be found at the web site designated by the CDCB, or can be requested from the auditor.

Inventory Requirements

The field service provider must verify the inventory of portable meters by unique identification number and identify any meters added or removed since the previous audit.

Calibration Intervals

All portable weighing and sampling devices must be checked for calibration on an annual basis (once every 12 months or 365 days). In special cases, intervals up to 14 months are allowed. Records generated using portable meters exceeding 14 months between calibration checks must be noted as non-certified prior to submission into the *Genetic Evaluation Program.*

Calibration of Repaired Meters

All portable meters receiving repairs that may have affected accuracy must be checked for calibration by a certified meter technician using a certified meter center before returning to active service.

Calibration of New Meters

All new portable meters that have not been checked for calibration by the manufacturer within the last 12 months must be checked for calibration by a certified meter technician prior to being placed in active service.

Calibration Check Tags or Markings

Each portable meter must be identified with a tag, sticker, engraving, or other marking indicating the last calibration year and meter center used.

Calibration Check Documentation

Documentation that every portable meter in service has been checked for calibration must be provided during an audit. This documentation must be in an electronic format and must include the following information:

1. The manufacturer and meter model designation,
2. A unique identification number of the meter,
3. The meter technician name and meter center used for the calibration checks,
4. The dates for the previous and current calibration checks,
5. The first calibration check reading,
6. If required by the CDCB guidelines, the second calibration check reading, and
7. If more than two calibration checks are necessary, the final calibration check reading.

Auditing of Scale Calibration Checks

Use of Approved Types

All scales being used for the generation of milk weights to be included in the *Genetic Evaluation Program* must meet the weight tolerance ranges established by the CDCB.

Use of Certified Meter Technicians

A certified meter technician must perform all scale calibration checks. A comprehensive list of these persons can be found at the web site designated by the CDCB, or can be requested from the auditor.

Inventory Requirements

The field service provider must verify the inventory of scales by unique identification number and identify any scales added or removed since the previous audit.

Calibration Intervals

All scales must be submitted to a certified meter center for routine calibration checks on an annual basis (once every 12 months or 365 days). In special cases, intervals up to 14 months are allowed. Records generated using scales exceeding 14 months between calibration checks must be noted as non-certified prior to submission into the *Genetic Evaluation Program.*

Calibration of Repaired Scales

All scales receiving repairs that may have affected accuracy must be checked for calibration by a certified meter technician before returning to active service.

Calibration of New Scales

All new scales must be checked for calibration by a certified meter technician prior to being placed in active service.

Calibration Check Tags or Markings

Each scale must be identified with a tag, sticker, engraving, or other marking indicating the last calibration year and meter center used.

Calibration Check Documentation

Documentation that every scale in service has been checked for calibration must be provided during an audit. This documentation must be in an electronic format and must include the following information:

1. The manufacturer and scale model designation,
2. A unique identification number of the scale,
3. The meter technician name and meter center used for the calibration checks,
4. The dates for the previous and current calibration checks, and
5. The calibration check readings for each weight specified in the CDCB guidelines.

Auditing of Electronic Meter Calibration Checks

Use of Approved Types

All electronic weighing and sampling devices being used for the generation of certified milk weights must be of a National DHIA or ICAR approved type. A comprehensive list of these devices can be found at the National DHIA web site or can be provided by National DHIA upon request.

Use of Certified Meter Technicians

If an electronic method is not used to check calibration, a meter manufacturer's representative, equipment dealer, or certified meter technician must perform the calibration checks.

Inventory Requirements

The field service provider must submit a complete list of herd names, meter manufacturer and model names, and quantity of electronic meters in use during an audit.

Calibration Intervals

All electronic weighing and sampling devices must be subjected to a routine calibration check on an annual basis (once every 12 months or 365 days). In special cases, intervals up to 14 months are allowed. Records generated using electronic meters exceeding 14 months between calibration checks must be noted as non-certified prior to submission into the *Genetic Evaluation Program.*

Calibration of Repaired Meters

All electronic meters receiving repairs that may have affected accuracy must be checked for accuracy before returning to service.

Calibration of New Meters

All new electronic meters must be checked for calibration by a certified meter technician or a meter manufacturer representative prior to being placed in service.

Calibration Check Documentation

Documentation that every electronic meter in service has been checked for calibration must be provided during an audit.

For electronic meters checked via the standard water test method, this documentation may be in the form of a signed statement indicating that each electronic meter has been checked and is operating within tolerance.

For electronic meters checked via the statistical analysis method, this documentation may be in the form of a computerized spreadsheet, manual listing, or other organized system that demonstrates that the meters are operating within the ICAR approved 5% tolerance. An approved procedure for electronic meter testing is a software analysis report that lists all stalls in the parlor with an indication of each meter's performance comparing actual milk measured to milk expected. The report must indicate the number of observations in each comparison and the deviation for each meter. A copy of this report must be on file with the service affiliate for at least one day during the Audit Period.

Manufacturer approved procedures may also be used to verify meter accuracy, but are subject to review and approval by the auditor.

Statistical Analysis Procedure for Metatron Performance Analysis

In order to evaluate the performance of the meters statistically, a spreadsheet must be set up with 13 columns and enough rows to accommodate the total number of electronic meters plus a header and two summary rows. It should be set up as follows:

1. Column A should be used to identify the individual meters.

2. Columns B-K should be used to identify the 10 milkings included in the *Metatron Performance Analysis* reports.

3. Column L should be used to calculate the average of the 10 milkings for each meter.

4. Column M should be used to calculate the deviation of each individual meter from average of all of the meters listed in Column L.

5. Row 1 should be used for the column headers.

6. Rows 2 and higher should be used to identify the meters and record the data collected from the *Metatron Performance Analysis* reports.

7. The next to last row should be used for averaging the data collected from the *Metatron Performance Analysis* reports.

8. The last row should be used to enter the milk weight totals collected by the electronic meters during the milking.

9. The results of the calculations performed in Column M should be checked.

    A. If the deviation of an individual meter from the average of all meters is within the range of 5%, it should be considered in tolerance.

    B. If the deviation of an individual meter from the average of all meters is outside the range of 5%, it should be considered out of tolerance and must be repaired.

10. A comparison should be made of bulk tank weights or milk shipped to the sum of the daily milk weights gathered by the electronic meters.

    A. If the average of all daily bulk tank comparisons for the analysis period is within the established range of 96-110%, the results should to be considered reliable and the calibration of the meters confirmed.

    B. If the average of all daily bulk tank comparisons for the analysis period is outside of that range, the results should be considered questionable and the calibration of the meters unconfirmed.

Calibration Check Alternatives

In cases where electronic meters are not checked for calibration, fail to pass the calibration checks, or are not of an approved type, portable meters may be used for the collection of milk weights and samples.

Auditing of the Bulk Tank or Milk Sold Comparisons

Comparison Procedure

Field service providers must have a procedure in place to compare the daily milk weights (DHI or Test Day Weight) taken during the test with the amount of milk shipped (Bulk Tank or Milk Sold Weight) from the dairy.

Acceptable Deviation

This system should detail the analysis system being used to follow up on problems in herds with annual differences outside of the 96-110% range of comparison.

> *Note: AIPL studies have shown that the average DHI milk is 3 percent higher than milk shipped and the standard deviation is 7 percent. The 96-110% range was established to give a 7 percent range from normal DHI milk vs. milk shipped.*

Reporting Requirements

Because the 96-110% range is designed to adjust for normal milk usage by family and calves, it is required that actual milk shipped values be reported for bulk tank or milk sold comparisons.

When entering milk shipped values, the normal procedure is for at least three bulk tank shipments to be reported. However, understanding that there are situations where this is not feasible, alternative procedures may be developed at the field service provider level and submitted as a part of the audit.

Documentation

Documentation that a bulk tank or milk sold comparison program is in place must be provided during an audit. The documentation must include:

- A list of herds (DRPC exception report) with an annual difference outside of the established range of 96-110%, and
- Reasonable explanations for herds with missing bulk tank weights.

Alternative Procedures

If the field service provider can demonstrate that the accuracy of an alternative procedure meets or exceeds that of the recommended procedure, the use of an alternative procedure is allowed. Before implementation however, the auditor must review a copy of the alternative procedure and the field service provider must receive written authorization of the alternative's suitability.

Auditing of the Signed Statements

Signed Statement Requirement

Each herd being tested by a field service provider with the intent of submitting records to the *Genetic Evaluation Program* must have a statement signed by the producer agreeing to comply with the *Code of Ethics*, *Uniform Data Collection Procedures*, and CDCB standards. These statements must be on file at the field service provider office.

Documentation

Copies of all signed statements must be provided during the on-site audit. Copies of all new signed statements from the audit period must be submitted during the off-site audit, with copies of all signed statements available for review upon the request of the auditor.

Alternative Procedures

If the field service provider can demonstrate that the accuracy of an alternative procedure meets or exceeds that of the recommended procedure, the use of an alternative procedure is allowed. Examples include:

1. *Membership or Service Agreements* with statements that acknowledge continued adherence to association policy when changes or revisions are adopted in the future, or

2. Statements or letters from dairy producers acknowledging that religious beliefs prevent them from signing agreements of this nature.

Before implementation however, the auditor must review a copy of the alternative procedure and the field service provider must receive written authorization from the auditor as to the suitability of the procedure.