

# Council on Dairy Cattle Breeding Genomic nominator guideline updates

---

---

Ezequiel L. Nicolazzi, CDCB Technical Director



# Genomic nominator guideline

- Previous version written in 2014.
- Reasons to update:
  - Did not contain most of the recent changes in policy and practices.
  - Review the policies.
  - Old format – different from Genotyping Laboratories guidelines format.
  - Include standardized information and full documentation online, with help from Redmine system.

# Genomic nominator guideline updates

- Effective May 2017, but latest review **09/19/2017**
  - CDCB B.o.D. approval
  - All documentation is available @Redmine

## GENOMIC NOMINATOR APPLICATION AND CERTIFICATION INFORMATION

- [CDCB Genomic Nominators - Quality Certification Guidelines \(pdf\)](#)
- [CDCB Genomic Nominators - Application Form \(docx\)](#)
- [CDCB Genomic Nominators - SOP template \(docx\)](#)
- [CDCB Genomic Nominators - MLA \(docx\)](#)
- [QC Metrics for Genomic Nominators](#)
- [Approved CDCB Genomic Nominators](#)
- [Genomic Nominator Certification Procedure](#)

- As said before, effort to standardize documentation and naming conventions

# Guideline updates (specific)

- Format standardized to genotyping laboratory guidelines  
(not only the first page! 😊)



**Council on Dairy Cattle Breeding**  
Quality Certification Requirements  
for Genomic Nominators

Latest review: 09/19/2017  
Effective: 12/05/2017



**Council on Dairy Cattle Breeding**  
Quality Certification Requirements  
for Genotyping Laboratories

Latest review: 09/27/2017  
Effective: 09/01/2017

# Guideline updates (specific)

- Change in “Background section”
  - Some wording and reflecting the “news” of the Report card and the monitoring by CDCB.

*Animal identification and pedigree errors can occur on the farm. Although genomic testing is a powerful tool for resolving pedigree errors, it may also introduce additional errors (for example, sampling the wrong animal, mislabeling samples, swapping samples within the laboratory, etc.). Core requirements and performance metrics that are supported by **available monitoring and quality reporting systems such as the CDCB Genomic Nominator Report Card** are needed to help minimize the introduction of such errors into the national genetic evaluation program. Adherence to Quality Certification Requirements will be monitored by the CDCB staff, who will conduct reviews and monitor performance to determine certification status as defined below.*

# Core requirements update (IMPORTANT)

- 1. Provide the CDCB Quality Certification for Genomic Nominators **application form** (<https://redmine.uscdcb.com/documents/7>).
- 2. Pay the CDCB Genomic Nominator **annual fee** (\$1000).
- 3. Sign a Material License Agreement (**MLA**) proposed by the CDCB which describes the respective rights and obligations regarding how data are provided to CDCB and how CDCB is allowed to use the data.
- 4. Provide CDCB Genomic Nominator Standard Operating Procedures (**SOPs**) following the template available in Redmine.

# Core requirements update (IMPORTANT)

- 5. During the approval process, **successfully submit test format 1/1G files** for verification by the CDCB staff.
- 6. Provide a **unique animal identification (ID) for each DNA sample using Format1, including sire and dam if available**. A Format1 for the dam and/or sire should be provided if available and her/his pedigree is not in the CDCB database. Genomic nominators are required to establish a data collection protocol for requesters submitting pedigree, and dam and sire information to be transcribed in the Format1.

# Core requirements update (IMPORTANT)

- 7. Have a **unique animal ID** associated with each tissue sample sent to the laboratory. To reduce the potential of an animal with more than one **unique animal ID**:
  - a. Genomic nominators shall use an existing unique animal ID such as AIN, registration number or another approved form of unique ID rather than assigning an additional official ID number to the animal.
  - b. If an animal does not have a unique permanent ID or registration certificate yet, the genomic nominator will advise the customer/animal owner on how to obtain a unique permanent ID for use in sample collection.

# Core requirements update (IMPORTANT)

- 8. Report pedigree and genomic conflicts to customer/animal owner in a timely manner. For a pedigree originating from a **breed association**, direct customer/animal owner to submit pedigree corrections to the appropriate breed association for transmission to the CDCB. For herds on a **DHI testing program**, direct the customer/animal owner to make the corrections in their DHI data.
- 9. Provide the **DNA laboratory with samples that are reliably identified**

# Core requirements update (IMPORTANT)

- 10. Provide DNA sample collectors that display the **unique animal ID** or that are linked to a **unique animal ID to permit validation of the animal being sampled at the time of sample collection**. For some collection devices, it may be necessary to add a prefix to the sample ID to make it unique within nominator.
- 11. **Send** (or direct customers to send) **DNA samples to CDCB-certified laboratories**. For a list of CDCB-certified laboratories check the CDCB website.
- 12. **Genotypes from noncertified laboratories that were originally submitted and accepted by another national genomic evaluation system may be acceptable** pending review and will be submitted as specified by the CDCB Staff.

# Core requirements update (IMPORTANT)

- 13. **Nominate animals before genotypes are received by CDCB.**
- 14. **Deliver genomic evaluations to customers.**
- 15. Identify the **appropriate fee class**, collect fees on behalf of CDCB according to the fee structure and herd class supplied by CDCB, and remit fees to CDCB by the due date. **Fees, once charged, are non-refundable unless they were wrongly charged due to an error caused CDCB/CDCB Staff.**

# Core requirements update (IMPORTANT)

- **16. Notify CDCB staff of changes** in ownership, location address, billing address, and any issue that could affect quality of service within 30 days of occurrence.
- **17. Comply with the Performance Metrics for Genomic Nominators** defined in these guidelines. During monthly reviews of the Quality Metrics **resolve any non-compliance identified by CDCB Staff.**

**THANK YOU FOR YOUR ATTENTION**