Uniform Operating Procedures

Task Force Report & Proposed Revisions

Field Service Advisory Committee Meeting

March 3, 2020

Elizabeth Straw

Executive Secretary, Indiana State Dairy Association
National DHIA Uniform Operating Procedures Task Force

Scope of the UOP Task Force

- **The National DHIA *Uniform Operating Procedures* was last reviewed in full in 2014 with a specific update requested by the DRPC sector in 2017**

- **Review definitions of 'dairy herd' and 'test day' in context of multi-site herds, testing of partial herds and multi-day testing**
- **Review of 'producer-owned equipment' to reflect additional sources of dairy data such as on-farm sensors**
- **Review of 'identification' requirements**
- **Review of 'voluntary milking systems' guidelines**

UOP Task Force Members

- Mark Witherspoon, Mid-South Dairy Records, Chair
- George Cudoc, Dairy One Cooperative, Ex-Officio
- Erin Berger, AgSource Cooperative Services
- Brian Winters, DHI Cooperative Inc.
- Alfred Duran, DHIA West
- Skip Vierra, Central Counties DHIA
- Bruce Dokkebakken, Minnesota DHIA
- Doug Moyer, CentralStar Cooperative
- Elizabeth Straw, Indiana State Dairy Association
- Glenn Schmahl, Eastern Wisconsin DHIC
- Darvin Stoner, Lancaster DHIA
- John Tauzel, Dairy One Cooperative
- Bill verBoort, AgriTech Analytics
- Greg Palas, Dairy Records Management Systems
- Jay Mattison, National DHIA
- Steven Sievert, National DHIA, Convener

- **Additional input from multiple field service and DRPC personnel was solicited by task force members for specific topics**

UOP Task Force Actions

- **The UOP Task Force held seven video conference calls from October 2019 through January 2020**
- **Review of the current UOP in detail including *Code of Ethics* and *Uniform Data Collection Procedures***
- **Task Force report to National DHIA Board of Directors on January 7, 2020 including proposed revisions**

Definitions – Dairy Herd

Current UOP

- DAIRY HERD is defined according to the following principles that are generally appropriate for herds enrolled in the DHI program:
- All cows of one breed, housed or managed under a single management system, regardless of individual cow ownership
- Farms with two or more distinct breeds may calculate and report either a composite herd average or a separate herd average for each breed

Proposed UOP

- DAIRY HERD is defined according to the following principles that are generally appropriate for herds enrolled in the DHI program:
- All cows of one breed, housed or managed under a single management system, regardless of individual cow ownership or location
- Farms with two or more locations with all dairy data recorded and held in one farm management system
- Farms with two or more distinct breeds may calculate and report either a composite herd average or a separate herd average for each breed

Definitions – Test Date

Current UOP

- TEST DAY is defined as the 24-hour period during which data is recorded and milk sampled. Herds recording daily milk yield on the dairy are permitted to use longer intervals (most commonly 5, 7, or 10 days) to estimate 24-hour test-day production if accurately labeled.

Proposed UOP

- TEST DATE is defined as the 24-hour period during which data is recorded and milk sampled. Herds recording daily milk yield on the dairy are permitted to use longer intervals (most commonly 5, 7, or 10 days) to estimate 24-hour test-day production if accurately labeled. In situations where it is not feasible to record data or sample in one 24 hour-period, the test date shall be the date of the completion of the data collection for the designated strings, pens or lots of the herd or for the whole herd.

DHI Field Service Affiliate Equipment

Current UOP

- Fixed (in-place) electronic meters/devices must have a record of accuracy verification on file at the dairy and in the office of the DHI Field Service Provider. Checks of device performance and accuracy produced by the milking system software and/or by DHI software may be used to verify the accuracy of these devices as an alternative to device calibration.
- Recording devices (portable and fixed) that are out of tolerance must be removed from DHI service and be repaired and checked for accuracy before returning to DHI service.

Proposed UOP

- Fixed (in-place) electronic meters/devices must have a record of accuracy verification on file at the dairy and in the office of the DHI Field Service Affiliate. Checks of device performance and accuracy produced by the milking system software and/or by DHI software may be used to verify the accuracy of these devices as an alternative to device calibration.
- Voluntary milking systems must be checked for accuracy at least once every 365 days using an approved method. New and returned-to-service voluntary milking systems must be checked for accuracy before being used in the DHI program.
- Measuring or recording devices (portable, fixed, or voluntary milking systems) that are out of tolerance must be removed from DHI service and be repaired and checked for accuracy before returning to DHI service.

Producer Owned Equipment

Current UOP

- The accuracy of all producer owned recording devices and samplers used in the collection of milk weights and/or samples is the joint responsibility of the DHI Field Service Provider and the dairy producer. It is required that DHI dairy producers owning their own equipment follow the same guidelines for verifying meter accuracy as DHI Field Service Providers. The DHI Field Service Provider is responsible for appropriately labeling records from herds using equipment that is not in compliance with the guidelines for DHI owned equipment.

Proposed UOP

- The accuracy of all producer owned measuring or recording devices and samplers used in the collection of milk weights and/or milk samples or other data is the joint responsibility of the DHI Field Service Affiliate and the dairy producer. It is required that DHI dairy producers owning their own equipment follow the same guidelines for verifying device accuracy as DHI Field Service Affiliates. The DHI Field Service Affiliate is responsible for appropriately labeling records from herds using devices that do not comply with the guidelines for DHI-owned equipment.

Cows to be Tested

Current UOP

A. All dairy cows in the herd with the same herd code, which have ever calved, will be enrolled in DHI. Dairy cows may be removed from DHI only when they leave the herd permanently. Dairy cows used as embryo recipients are to be included.

B. Cows classified as Dry Donor Dams may be permanently assigned to a separate Dry Donor String in the herd or to a separate Dry Donor Herd. No data on the Dry Donor Dam will be included in herd average or management information. Dry Donor Dams that later calve will be returned to the milking herd and a 365-day dry period with zero production data will be applied against the herd average in the current test interval. For Dry Donor Dams that were out of the milking herd for less than 365 days, the dry period will be the actual number of days the Dry Donor Dam was out of the herd with zero production data applied for that period.

Proposed UOP

A. All dairy cows in the herd with the same herd code, which have ever calved, will be enrolled in DHI. Dairy cows may be removed from DHI only when they leave the herd permanently. Dairy cows used as embryo recipients and those bred to beef bulls are to be included.

B. Dairy cows in designated strings, pens or lots of a herd with one or more locations, all enrolled under a single herd code, may be tested with differing frequencies and/or differing supervision levels, provided all cows within the designated strings, pens or lots are recorded and/or sampled on the test date.

C. Cows classified as Dry Donor Dams may be permanently assigned …. [remains the same but becomes item C.]

Identification

Current UOP

A. All cows must be identified with a permanent number for genetic evaluation. Permanent identification consists of an official USDA Animal Identification Number (AIN) ear tag, National Uniform Eartagging System (NUES) tag, or breed association registration number. If the ear tag is not in the ear, the number must be cross-referenced to a picture, sketch, or a brand or tattoo that is unique within that herd.

B. For a supervised test, the DHI technician must be able to visibly identify the cow quickly and accurately during the milking process. All visible identification must be in place on the cow prior to the beginning of the milking and be visible from several feet or accurately scanned and displayed by an electronic identification reader. Visible identification must be cross-referenced to permanent identification if the data are to be used in genetic evaluations.

Proposed UOP

A. All cows must be identified with a unique number for genetic evaluations. Unique identification consists of an official USDA Animal Identification Number (AIN) ear tag, National Uniform Eartagging System (NUES) tag, or breed association registration number.

B. For a supervised test, the DHI technician must be able to visibly identify the cow quickly and accurately during the milking process. All visible identification must be in place on the cow prior to the beginning of the milking and be visible from several feet or accurately scanned and displayed by an electronic identification reader. Visible identification must be cross-referenced to permanent identification if the data are to be used in genetic evaluations.

C. For systems relying on simultaneous automatic recording of animal identification and measured data, a validation or verification of animal identification system performance is required on an ongoing basis.

Procedures Specific to Voluntary Milking Systems

Current UOP

A. Test day milk weights will be obtained as 24-hour yield obtained from the automatic (robotic) milking system software. The average 24-hour milk yield reported should represent a minimum of three consecutive days and not to exceed ten consecutive days. There will be no application of AM/PM factors on milk yields.

B. Milk samples shall be obtained using National DHIA accepted sampling devices for one of the milkings during the test day. There will be no application of AM/PM factors on milk component results.

C. Data obtained from automatic (robotic) milking system software may not be used in genetic evaluations unless the system meets National DHIA/Quality Certification Services standards for on-farm, in-line analyzers.

Proposed UOP

A. Test day milk weights are obtained as 24-hour yields obtained from the voluntary milking system software. The average 24-hour milk yield reported should represent a minimum of three consecutive days and not to exceed ten consecutive days. There will be no application of AM/PM factors on milk yields.

B. Lactation milk yield totals and lactation-to-date milk yield totals may be calculated using test day milk weights using either the Test Interval Method or Best Prediction Method or by using summation of the 24-hour milk yields obtained from the voluntary milking system software.

C. The milking frequency of lactation records from cows milked with voluntary milking systems for all or part of the lactation will be labeled as 3 unless documentation can be provided that the cow is not milked more than twice daily.

Procedures Specific to Voluntary Milking Systems

Current UOP

A. Test day milk weights will be obtained as 24-hour yield obtained from the automatic (robotic) milking system software. The average 24-hour milk yield reported should represent a minimum of three consecutive days and not to exceed ten consecutive days. There will be no application of AM/PM factors on milk yields.

B. Milk samples shall be obtained using National DHIA accepted sampling devices for one of the milkings during the test day. There will be no application of AM/PM factors on milk component results.

C. Data obtained from automatic (robotic) milking system software may not be used in genetic evaluations unless the system meets National DHIA/Quality Certification Services standards for on-farm, in-line analyzers.

Proposed UOP

D. Milk samples shall be obtained using ICAR-certified and National DHIA accepted voluntary milking system-sampling device combinations for at least one of the milkings during the test day. There will be no application of AM/PM factors on milk component results unless milking times for individual cows are obtained from the voluntary milking system software and milking intervals are computed.

E. Data obtained from voluntary milking system software may not be used in genetic evaluations unless the system meets ICAR and National DHIA/Quality Certification Services standards for on-farm, in-line analyzers or sensor device systems as applicable.

Proposed Timeline & Actions Requested

- ✓ **Presentation to and adoption of the proposed revisions to the National DHIA *Uniform Operating Procedures* by the National DHIA Board of Directors on January 7, 2020.**
- ✓ **Distribution of revised UOPs, as adopted by the National DHIA Board, to all DHI Service Providers in February 2020.**
- ❑ **Presentation of revised UOPs at FSAC Meeting on March 3, 2020 and Managers & Delegates Breakfast on March 4, 2020.**
- ❑ **Endorsement of revised UOPs for *Code of Ethics* and *Uniform Data Collection Procedures* by the delegate body at the 55th Annual Meeting of National DHIA on March 5, 2020.**