



## **Milk SA - Dairy Standard Agency Programme, 2023**

(PRJ-0351-2023)

### **Dairy Standard Agency**

**Quarter 4 2023/2023** (October 2023 till December 2023)

#### **Project goals**

##### **Goal 1 - National monitoring of milk and other dairy products in collaboration with Health Authorities**

##### **Achievements**

The sample run activities (cycle 86) were completed as per schedule and the number of samples per product is indicated in Table 1 below. The product scope for cycle 86 was milk (raw and pasteurised), and all types of cheese.

**Table 1**      **Number of samples per product collected**

	<b>Fresh Milk (A-D)</b>	<b>179</b>
	<b>Products total (E - K)</b>	<b>208</b>
A	Milk (Packed Pasteurised)	92
B	Milk Packed Unpasteurised	2
C	Milk Bulk Pasteurised	24
D	Milk Bulk Unpasteurised	61
E	UHT Milk	66
F	Sterilised Milk	0
G	Flavoured Milk	39
H	Sweetened Condensed Milk	24
I	Evaporated Milk	7
J	Dairy powder	7
K	Dairy Dessert	61
L	Other	4
	<b>TOTAL</b>	<b>387</b>

During Cycle 86, samples were collected from a total of 8 metropolitan municipal areas, 5 district municipal areas, and 44 local municipal areas.

The samples obtained during this cycle were submitted to the DSA Laboratory Services, following established standard procedures. The test results pertaining to milk and various other dairy products were subjected benchmarking against legal standards in the domains of food safety, compositional analysis, and trade metrology. These standards respectively fall under the Foodstuffs, Cosmetics, and

Disinfectants Act of 1972 (Act 54 of 1972), the Agricultural Product Standards Act of 1990 (Act 119 of 1990), and the Legal Metrology Act of 2014 (Act 9 of 2014).

Of notable significance is the integration of criteria indicating possible food fraud testing into the standard suite of the analyses for milk. This strategic enhancement significantly broadened the scope of risk identification, specifically directed toward the detection and management within fresh milk products.

Food safety non-conforming results obtained, were assessed, and communicated to the participating municipal health authorities for further action. Contact details of participating authorities as well as processors were updated as per standard procedure.

The DSA, in terms of its project protocol and relationships with the relevant authorities (see project 6), continued to liaise with the relevant law enforcement bodies, providing support through dairy technical information and guideline documents to limit the sale of non-conforming products.

## ***No Non-achievements / underperformance has been reported***

### **Goal 2 - Handling of quality problems in respect of product compliance with legal standards**

#### ***Achievements***

##### **Matters dealt with under Project 2 included:**

Complaint regarding the quality of fresh milk sold in KwaZulu-Natal. Analyses completed and no non-conformance recorded.

Complaint regarding the quality of fresh milk sold in Gauteng. Analyses completed and non-conformance recorded communicated to processor for correction of butterfat %

Complaint regarding the possible adulteration of fresh milk sold in Gauteng. Analyses completed and non-conformance recorded communicated to processor for correction of butterfat %. No added water was found.

One distinct investigation was conducted to assess compliance with labelling requirements for fermented products, specifically kefir. Investigations have been successfully concluded.

## ***No Non-achievements / underperformance has been reported***

### **Goal 3 - Special investigations**

#### ***Achievements***

##### **3.1 Aflatoxin M1 Analysis - 2023/Q4 - cycle 86**

During the fourth quarter of 2023, designated as cycle 86, a comprehensive analysis of Aflatoxin M1 in various samples was conducted. A total of 179 samples were examined to ascertain their compliance with the legal limits outlined in the regulations governing tolerances for fungus-produced toxins, as stipulated in the Foodstuffs, Cosmetics and Disinfectants Act of 1972 (Act No. 54 of 1972).

##### **Sample Analysis:**

During this analysis, each of the 179 samples was examined for the presence of Aflatoxin M1. Four of these samples exhibited Aflatoxin M1 levels that exceeded the permitted maximum residue limit (MRL) value of 50 parts per trillion (ppt), as defined in the regulations. Three samples were from the North West, one from Eastern Cape.

In conclusion, the analysis conducted during cycle 86 revealed that 4 out of 179 samples exceeded the

established permissible limit of 50 ppt for Aflatoxin M1. This finding necessitates further scrutiny and appropriate action in alignment with regulatory standards to ensure food safety and compliance within the realm of fungus-produced toxin tolerances. The report serves as a critical reference for maintaining the safety and quality of food products in accordance with established regulatory standards. Further investigations and remedial measures through the various municipalities are required to address the national non-compliant samples and mitigate potential health risks associated with Aflatoxin M1. The DSA remedial actions at noncomplying facilities were done through project 5.

### 3.2 Labelling and advertising on dairy product packaging

In the fourth quarter of 2024, a comprehensive assessment was conducted on 24 product labels. Detailed reports for each evaluation were compiled and shared with the relevant stakeholders.

## No Non-achievements / underperformance has been reported

## Goal 4 - Milk and other dairy product risk identification

### Achievements

The national dairy monitoring program by the DSA facilitates the sampling of various milk categories, including packed pasteurised and unpasteurised milk, as well as retail bulk pasteurised and unpasteurised milk, along with other dairy products. Sample results as well as interpretation material regarding food safety and compositional standards for milk and other dairy items were promptly conveyed to the appropriate government authorities and members of the dairy industry upon completion of tests. Code Red critical non-compliance results lists were assembled and disseminated to each province.

### 4.1 Reporting of results to health authorities

Reports on non-conforming results were forwarded to the respective government departments at the end of each cycle. Each participating municipality received a quarterly report on the analysis of all samples submitted. Non-conforming processors as well as processors whose contact details were verified and who requested to receive test results were provided with individual test reports. The total cycle reports forwarded to health authorities for cycle 86 are indicated in Table 2.

**Table 2 Total cycle reports**

Province	Health authority offices	NC Micro Reported (Coliform, E.coli, TPC, Antibiotics)	NC Composition Reported (Butterfat, Protein, SNF)	NC Food Fraud Reported (Added water, Underfilling)	NC Food Safety Reported (Antibiotics, Phosphatase, CA)	# Samples	# Tests
Eastern Cape	5	9	1	0	0	8	80
Free State	9	23	12	2	1	18	180
Gauteng	5	42	18	3	3	39	390
KwaZulu-Natal	6	30	12	0	1	27	270
Limpopo	10	23	9	1	1	26	260
Mpumalanga	7	25	5	0	6	18	180
North West	7	21	7	3	5	19	190
Northern Cape	0	0	0	0	0	0	0
Western Cape	8	8	7	0	0	27	270
<b>TOTAL</b>	<b>57</b>	<b>181</b>	<b>71</b>	<b>9</b>	<b>17</b>	<b>182</b>	<b>1820</b>

## 4.2 Software development

Recent developments and ongoing projects in the realm of information technology and software development within the DSA:

### a. Upgrades to the current Management Information System (MIS):

Significant progress has been made in upgrading the DSA's existing Management Information System (MIS). These upgrades aim to enhance the functionality, efficiency, and overall performance of the system, ensuring that it continues to meet our evolving operational needs.

### b. Updates to the Laboratory program:

The DSA Laboratory program has undergone important updates to improve its effectiveness and reliability. These updates are designed to streamline laboratory processes, facilitate data management, and optimise overall laboratory operations.

### c. Upgrades to the Audit app:

A project to upgrade the DSA Audit application, which plays a critical role in quality assurance and compliance efforts was initiated. These upgrades are intended to enhance the app's user interface, reporting capabilities, and overall usability.

### d. New version of the MIS in progress:

Currently, developing a new version of our Management Information System (MIS) is underway. This project represents a forward-looking approach to ensure that the MIS remains technologically up-to-date and capable of meeting the evolving demands of our organisation.

Ongoing initiatives in IT and software development underscore the DSA's commitment to continuously improve its technological infrastructure and systems. These upgrades and developments are essential for maintaining efficiency, data accuracy, and compliance across various aspects of the operations. The DSA will continue to monitor and report on the progress of these projects in future updates.

## 4.3 National and international food safety and recall monitoring

National and international food safety alerts during the fourth quarter of 2023 were monitored. Approximately 20 national and international websites were monitored on a weekly basis for possible food safety risks relating to dairy during this year, that could have a public health impact on South African consumers. Three national and sixteen international food safety-related alerts were received. No further actions were required based on the scope of products involved.

FOOD SAFETY ALERTS - 2023 - FOURTH QUARTER		
Total # of Reported Cases	Undeclared Allergen	Sal
16		3

***No Non-achievements / underperformance has been reported***

## Goal 5 - Remedial programs with producers, processors and distributors

### ***Achievements***

Due to the limited shelf life of most dairy products the follow-up of non-conforming products, as to ensure appropriate action by the parties involved, required prompt action. Following the activities of project 1.1,

project 1.5 provides for an opportunity whereby information regarding non-conforming test results as well as recommendations for corrective actions is effectively communicated to the suppliers either by means of a telephone call, e-mail report, posted report or a visit to the facility. Environmental health practitioners (EHPs) were also requested to communicate all test results to relevant parties.

During cycle eighty-six visits were paid to processors, PD's and milk shops in Gauteng (1), Mpumalanga (1), North West (9), Western Cape (3), Eastern Cape (3), Limpopo (7) and KwaZulu-Natal (16). The DSA Lab Services Pamphlet was distributed.

The DSA technical personnel also visited the associated EHPs from the respective government departments of the processors, producers/distributors and retailers (milk shops) render support and guidance in the execution of project 1.

**Table 3 Visits were paid to processors, PD's and milk shops**

Province	Areas visited	Companies visited	E-mails	DSA further assistance provided
Gauteng	1	1	46	9
Mpumalanga	1	1	14	0
Free State	0	0	11	1
North West	3	9	5	3
Northern Cape	0	0	0	0
Western Cape	3	3	46	4
Eastern Cape	3	3	29	3
Limpopo	2	7	13	4
KwaZulu-Natal	7	16	13	0

## ***No Non-achievements / underperformance has been reported***

### **Goal 6 - Communication with the authorities and other organisations**

#### ***Achievements***

##### **6.1 Department of Health: Directorate Food Control**

The DSA in a supportive role to industry, liaised with the directorate regarding queries relating to food labelling, food safety and food additive requirements, as well as dairy technical matters. Technical matters such as the amendment of standards relating to amongst others the draft R3337 of 21 April 2023 as well as Codex standards.

##### **6.2 Municipal Health Authorities**

Communication with the municipal health authorities focussing on the interpretation of food safety legislation and implementation of R638 and R328 on law enforcement as per the health regulations under the Foodstuffs, Cosmetics and Disinfectants Act, with specific reference to retail unpasteurised and pasteurised milk as well the sale of raw milk and cheese took place. These engagements were followed up by means of radio talks about the health risks of substandard dairy products as per Project 8.

##### **6.3 Department of Agriculture, Land Reform and Rural Development (DALRRD)**

###### **i) Directorate: Inspection Services (IS)**

Cycle results of the DSA monitoring programs regarding infringements in terms of the regulations relating to dairy and imitation dairy products were limited by the Directorate: Inspection Services. DARRD officials of the Directorate Food Safety and Quality Assurance were invited to the DSA before quarter four to strengthen the standing relationships and introduce the DSA Laboratory Services as well as the DSA management information system from which data is populated.

###### **ii) Directorate: Food Safety and Quality Assurance (FSQA policy making)**

Formal communication with the FSQA continued regarding the revision of R1510 of 2019 - Regulations relating to dairy and imitation dairy products. A final industry proposal was submitted to FSQA for

consideration and consultation.

#### **6.4 National Regulator for Compulsory Specifications (NRCS): Legal Metrology**

Standard procedure provides for a quarterly report regarding metrology infringements to the Senior Manager, Inspections: Legal Metrology of NRCS. No formal complaints were lodged with NRCS during the third quarter of 2023.

#### **6.5 South African Bureau of Standards (SABS)**

Correspondence from the SABS in respect of South African National Standards as well as information from the International Standards Organisation were appropriately dealt with and ballot papers on standards were attended to.

#### **6.6 Communication with other organisations**

##### **6.6.1 Milk SA, MPO and SAMPRO**

The DSA interacted on a regular basis with the project managers of Milk SA's Consumer Education Project, SAMPRO, MPO as well as the Project Coordinating Committee of Milk SA whose scheduled meeting took place on 15 November 2023. The SAMPRO meeting on 23 November and Milk SA GM on 29 November 2023 were attended. A scheduled meeting was also held with the Chair and HUB of the MPO to discuss the DSA lab functions and planning for 2024. DSA managing director serves as a member of the DRDC and its management committee and meetings were attended in October 2023.

##### **6.6.2 Consumer Goods Council of South Africa: Food Safety Initiative (CGCSA: FSI)**

The DSA as a member of the Food Safety Initiative (FSI) interacted on a regular basis with the management of FSI regarding matters relating to:

Regulations under the Foodstuffs, Cosmetics and Disinfectants Act – Front of Pack Labelling;

Agricultural Product Standards (APS) Act and bill;

Food loss and waste;

Follow-up discussions regarding assignees appointed under the APS Act.

Collaboration on the front-of-pack labelling initiative continued in 2023 together with the Milk SA Consumer Education Project and industry members in respect of the proposed use of warning signs on dairy products regarding milk fat, sugar and salt on front-of-pack labelling regulations. Further actions to follow during the fourth quarter by means of scheduled meetings.

##### **6.6.3 European Hygienic Engineering & Design Group (EHEDG)**

The DSA is a member of the South African steering committee. Following the successful webinar on hygienic design of equipment held on 28 June 2023 under project 8, no actions were planned for the fourth quarter.

##### **6.6.4 South African Society of Dairy Technology (SASDT)**

The DSA managing director as a member of the management committee of the Northern region participated in the SASDT management activity meetings. The Western Cape final meeting for 2023 was attended by three DSA staff members.

##### **6.6.5 Tertiary institutions**

The DSA serves as a member of the advisory boards of the Departments of Environmental Health of the Tshwane University of Technology (TUT) as well as Nelson Mandela Metropolitan University. The purpose of the advisory boards is to give industry inputs and assist the universities with the development of course material for environmental health practitioners (EHPs). One meeting was attended by Mrs J Odendaal, project manager of the DSA.

## ***No Non-achievements / underperformance has been reported***

## **Goal 7 - Liaison on legislation with authorities**

### ***Achievements***

The DSA continued liaison with the authorities regarding the following legislation and standards:

#### **7.1 Department of Health: Directorate: Food Control**

##### **Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act 54 of 1972)**

Since the industry submission regarding the draft R3337: The draft regulations relating to the labelling and advertising of foodstuffs on 31 January 2023 were finalised during the third quarter no further actions were taken in this regard. DSA continued to liaise with the directorate in respect of the formal use of the Lactoperoxidase system (LPS) by the organised dairy industry under controlled conditions with no formal



response by end December 2023.

## **7.2 Department of Agriculture Land Reform and Rural Development (DALRRD)**

### **Agricultural Product Standards Act, 1990 (Act 119 of 1990)**

Regulations relating to the classification, packing and marking of dairy products and imitation dairy products intended for sale in the Republic of South Africa (R1510/2019).

The work on the proposed draft regulation relating to dairy and imitation dairy products was completed and submitted to DALRRD. DALRRD was requested to comment and response only during the first quarter of 2024.

Upon an invitation EU and DALRRD representatives paid a visit to the DSA Offices and Laboratory on 8 December during which the National Chemical Residue Programme was discussed as well further actions such Veterinary Procedural Notices relevant to exports to the EU and other countries.

### **7.3 South African National Standards (SABS)**

Regular correspondence between DSA and the SABS occurred with formal comments addressed under the Regulations and Standards Project of Milk SA. The SANS 1694 and 1488 relating to the welfare of dairy cattle and the transport of livestock received priority attention in the preparation of comments to SABS and final submission to the standards writer is expect during the second quarter of 2024.

Interactions with SABS related to the administration and role of South African members and conveners in the African Organisation for Standardisation (ARSO) TC 04. ARSO's monthly and planetary meetings were well attended during the fourth quarter of 2023. Several dairy compositional standards have been drafted relating to various species of milk.

### **7.4 International Dairy Federation (IDF), Codex Alimentarius and International Organization for Standardization (ISO)**

As a representative of the SANCIDF, the managing director of the DSA participated in the respective IDF SC and action team meetings and attended the IDF dairy Summit in Chicago in October 2023. Extensive work programmes were developed during the standing committee meetings attended for 2024.

Comments on IDF and Codex draft documents were also shared with the South African Codex contact point. Coordination and consultation between DSA and the Milk SA Consumer Education as well as Research and Development Project of Milk SA were very useful.

## ***No Non-achievements / underperformance has been reported***

## **Goal 8 - Information and education**

### ***Achievements***

The DSA presents information sessions based on the DSA Codes of Practice and related guideline materials to professional environmental health practitioners (EHPs) as well as student EHPs, and other professions such as veterinary and B.Sc. Agric students.

A dairy information session for student EHPs was presented on the **25<sup>th</sup> of October 2023 at NMU** with **41 students** attending.

The DSA also took part in a workshop with professional EHPs at NMU on the **25<sup>th</sup> of October 2023** where the Current Environmental Health challenges in the Eastern Cape were discussed.

Regarding the DSA webinars the scope of the audiences was widened to cover other interest parties and due to the positive rating of the webinars and on popular demand another 10 webinars were lined up for 2023, which started in April 2023.

The **8<sup>th</sup> webinar**, on 25 October 2023 was attended by 50 people and the topic was "The prudent use of agricultural chemicals on dairy farms".

The **9<sup>th</sup> webinar**, on 22 November 2023 with topic "Managing flies on dairy farms" was attended by 57 people.

"Increase your profits with dairy farm animal welfare" was the topic of the **10<sup>th</sup> and final webinar for 2023** on 4 December 2023 and attended by 39 people.

Recordings of all the webinars on the Dairy Standard Agency's website is useful to re-cap or for interested parties not able to attend the webinars.

## ***No Non-achievements / underperformance has been reported***

## Goal 9 - Media communication

### Achievements

The DSA media communication provided for the following during the fourth quarter:

3 Oct 2023	Radio	Interview: Volhoubare melkproduksie en SSA-dienste	Landbouradio	R1 092
4 Oct 2023	Radio	Interview: Produkgehalte en veiligheid (J Burger)	RSG Landbou	R0
Oct 2023	Print magazine	Article: Volhoubaarheid in die suiwelbedryf	Veeplaas	R0
Oct 2023	Print magazine	Banner ad: Code of Practice	Veeplaas	R4 288
Oct 2023	Print magazine	Article: 'n Blik op volhoubaarheid (1)	The Dairy Mail	R0
Oct 2023	Print magazine	Banner ad: Code of Practice	The Dairy Mail	R3 200
10 Oct 2023	YouTube	Interview: Volhoubaarheid (J Burger)	Plaas / Farm TV	
12 Oct 2023	YouTube	Interview: Volhoubaarheid (H Meissner)	Plaas / Farm TV	R0
28 Nov 2023	Radio	Interview: Christine Leighton, Milk SA (Rol van melk in beendigheid)	RSG Landbou	R0
5 Dec 2023	Radio	Interview: Maretha Vermaak, Milk SA (Waarde van melk)	Landbouradio	R1 092
7 Dec 2023	YouTube	Interview: Christine Leighton, Milk SA: Rol van suiwel in beengesondheid	Plaas / Farm TV	R0
12 Dec 2023	Radio	Interview: Maretha Vermaak, Milk SA (Verbruikersopvoeding – Nutriënte in melk)	Landbouradio	R0
Dec 2023	Print magazine	Article: Die roumelk-dilemma (gesondheidsrisiko's)	Veeplaas	R0
Dec 2023	Print magazine	Banner ad: DSA Quality Club	Stockfarm	R3 491
Dec 2023	Print magazine	Banner ad: DSA Quality Club	Veeplaas	R4 288
Dec 2023	Print magazine	Article: The raw milk dilemma	The Dairy Mail	R0
Dec 2023	Print magazine	Banner ad: DSA Quality Club	The Dairy Mail	R3 200
Dec 2023	Print magazine	Article: 'n Blik op volhoubaarheid (2)	The Dairy Mail	R0

**No Non-achievements / underperformance has been reported**

## Goal 10 - Development of guideline documentation

### Achievements

The initial project work on a desktop study, collecting and compiling legal standards and listing active chemical substances for the purpose of drafting an industry guideline continued during the third quarter. This guideline document coincides with the planned work of establishing a national chemical residue monitoring program in collaboration with DALRRD. The work continued until the fourth quarter of 2023 but is incomplete and to continue in 2024.

**No Non-achievements / underperformance has been reported**

## Income and expenditure statement

Income and expenditure statement	<a href="#">PRJ-0351-2023.pdf</a>
Unnecessary spending during period	No

## Popular Report



# Additional documentation

No file has been uploaded

## Statement

Levy funds were applied only for the purposes stated in the contract	Yes
Levy funds were applied in an appropriate and accountable manner	Yes
Sufficient management and internal control systems were in place to adequately control the project and accurately account for the project expenditure	Yes
The information provided in the report is correct	Yes