

National Laboratory Association – South Africa NPC

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Proficiency Testing Scheme Brochure

Dustfall

2026

Approved by:


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Background

The NLA – SA is a representative body that evolved from the previous National Laboratory Accreditation service. Following the assumption of overall responsibility for accreditation (including laboratory accreditation) by the South African National Accreditation System (SANAS) during 1998, it was decided that a new independent body should be created. This body, the National Laboratory Association – South Africa (NLA – SA), now looks after the interests of the large number of laboratories in South Africa. The acronym, NLA, which was linked to the previous National Laboratory Accreditation service was retained, both for the purpose of continuity and because it was well-recognised and respected. During 2019/20 the NLA – SA, a Not-for-Profit organisation, restructured Board representation and formed a Board committee which is now named the “Council”. This was done in order to provide for wider input into its strategic intent. The formation of the Council has meant that interests from the government Technical Infrastructure organisations such as NMISA, SANAS, SABS – Standards and the NRCS, are accommodated; as well as various other interests without having to be co-opted on to the board which was previously required. The NLA – SA’s focus is primarily on the representation of the activities, interests and opinions of all members’ laboratories. NLA – SA membership is voluntary and open to all companies that have laboratories. In 2015 the NLA – SA was accredited as a proficiency testing provider according to ISO/IEC 17043. The proficiency testing (PT) schemes included under the current scope of accreditation are Water Microbiology, Food Microbiology, Hygiene Swabs, Pesticide Formulations and Calibration. The Dustfall PT scheme is not accredited but is operated under the same principles as the accredited PT schemes.

What is proficiency testing?

- Proficiency testing is a powerful quality assurance tool for analytical measurement laboratories.
- Samples are distributed to laboratories for analysis, the results evaluated and a report generated.
- Laboratories should use their routine, validated test methods.
- Proficiency should be used as an educational tool to identify and address measurement problems.

Benefits of proficiency testing

- Provides a regular independent check on the quality of analytical measurements
- Enables participants to compare their performance with peer laboratories.
- Facilitates the demonstration of competence to accreditation bodies, regulators and customers.
- Enables monitoring of trends, over time, in the quality of measurements.
- Assists in the evaluation of methods and instrumentation.
- Helps educate laboratory staff and their customers.

Why participate in proficiency testing?

Many international and national standards emphasise the importance of maintaining environmental quality. To ensure a safe environment, analytical results are frequently used as a measuring tool and have to be accurate and reliable. Participation in a PT scheme provides the opportunity to measure the quality of tests performed. It also helps laboratories to meet the requirements of accreditation organisations and assists laboratories to optimise their quality control and analytical performance for the benefit of their customers. It provides independent evidence of laboratory performance for both laboratory management and customers.

The Dustfall PT scheme complies with the requirements of ISO/IEC 17043:2023, Conformity assessment – General requirements for the competence of proficiency testing providers.

Scope

This PT scheme is designed to evaluate the participating laboratory's competency in determining dust deposition for soluble and insoluble matter. The scheme involves the distribution of prepared material to each participating laboratory and will consist of two rounds, with two samples (sample A and B) per round. The supplied samples will be as close as possible to the materials being regularly analysed, so that the results of the scheme represent the capability of the participants working under routine conditions. The sample will be a composite from various dustfall samples, acid treated and washed to ensure it is water insoluble. Sodium chloride will be used to represent soluble matter. Additional samples may be purchased if more sample is needed to enable more personnel to participate.

Programme

The programme for the 2026 PT scheme and the costs involved are as follows:

Round	Return date for results	Price (Excluding VAT) [#]	
		NLA – SA members	Non-members
Round 1	08 June	R 1 360	R 1 545
Round 2	26 October	R 1 360	R 1 545
Round 1 and 2	Dates as above	R 2 568	R 2 938

[#] Courier costs for participants within South Africa are included in the price. Courier costs for other countries are not included in the cost and will be additional. Participants from outside South Africa will be responsible for payment of any VAT and duty charges.

Additional samples can be purchased at a cost of R 500 per sample set. This needs to be arranged at least one month prior to the start of the round.

Distribution of samples

The samples will be shipped as per the events calendar. The package will reach participants via a courier service. A protocol on how to prepare the sample will be e-mailed to participants at the start of each round. Participants who prefer to arrange collection of their samples using their own courier company are allowed to do this. This needs to be communicated to the scheme coordinator when registering to participate.

Submission of results

Results are submitted online. The submitted results will be downloaded from the database after the due date for results submission. Late submissions will not be accepted, unless the laboratory experienced technical difficulties. Prior approval for the late submission must be obtained from the scheme coordinator before the due date to submit results.

Evaluation of results

The scheme coordinator will tabulate the results and distribute it as a preliminary report. Performance will be evaluated by calculating z scores, using robust statistical analysis where the consensus value will serve as the assigned value. Z scores represent the performance of the participant relative to all the other participants. Z scores of $< |2|$ indicate acceptable performance of the laboratory. Values outside of these ranges indicate that there is a potential problem with the measurements in the participant laboratory, and that a root cause analysis and corrective action are called for. The z scores will be tabulated and distributed as a final report.

Reporting of results

A preliminary report will be issued within 5 working days after the due date for results submission. The final report will be issued 3 - 4 weeks after the preliminary report. **No changes/corrections will be made to the database after the preliminary report was distributed.**

Recognition for participation

Certificates of participation will be issued annually to indicate participation in the PT scheme.

Confidentiality

Participating laboratories will be identified by a unique code to ensure confidentiality. Results may be presented on relevant occasions but not to harm any individual or to identify a laboratory.

General

The NLA – SA will review the principles of the PT scheme annually. Any changes will be adopted during the following year where possible.

How to join the PT scheme

Participation in the PT scheme is open to all testing laboratories, regardless of location (nationally or internationally) and whether accredited or not.

Laboratories wishing to join the scheme should complete form NLA-PT-F-01 (PT Scheme Participation Application Form for Testing) as well as form NLA-PT-F-08 (Declaration to prevent Collusion between participants and/or Falsification of Proficiency Testing Scheme results). Note that the persons indicated as the contact and the alternate on form NLA-PT-F-01 will receive all communications, and the reports. Both completed forms should be sent by e-mail (esnap@nla.org.za) to the scheme coordinator.

Please return the completed forms on or before 27 February 2026 after which you will be invoiced. Terms of payment are strictly 30 days unless arrangements have been made with the NLA – SA finance section (accounts@nla.org.za).

If you do not want to participate in the proposed scheme but wish to be informed about future exercises, send an e-mail to the scheme coordinator to remain on the e-mail distribution list.

Customer participation

Comments and suggestions for improvements are always welcome on all aspects of the PT scheme.

Dustfall PT scheme Events Calendar 2026

Event	Date	Responsibility
Returning of completed registration forms	27 February	Lab managers
Despatching Round 1 samples	18 May	NLA – SA
Return data for Round 1	08 June	Participants
Distribute prelim report Round 1	15 June	NLA – SA
Distribute final report Round 1	6 July	NLA – SA
Despatching of Round 2 samples	05 October	NLA – SA
Return data for Round 2	26 October	Participants
Distribute prelim report Round 2	02 November	NLA – SA
Distribute final report Round 2	23 November	NLA – SA

Please incorporate these dates into your annual planning to ensure a successful programme. If any of these dates have to be changed due to unforeseen circumstances, you will be notified in advance.