

POSTER SUMMARY

THE SMRI FACTORY LABORATORY CERTIFICATION SCHEME: ENSURING CREDIBLE AND RELIABLE LABORATORY RESULTS

Ngema M, Naidoo Y, Mbuyazi M and Pillay V

Sugar Milling Research Institute NPC, University of KwaZulu-Natal, Durban, 4041, South Africa

mngema@smri.org, lnaidoo@smri.org, mmbuyazi@smri.org, vpillay@smri.org

Abstract

The Board of the Sugar Milling Research Institute NPC (SMRI) highlighted an urgent need for the SMRI to consider how it could best extend its influence to help improve the performance of factory-based laboratories. The SMRI Factory Laboratory Certification Scheme (Scheme) was developed to address this need. The primary objective of the Scheme is to ensure confidence in the analytical results generated by its laboratories, and to produce valid and credible results to support the factory control operations.

The laboratories will achieve certification by demonstrating their competence in various areas. These will be assessed by the SMRI by means of the following:

- audits of the laboratory and factory figure procedures.
- training; and
- ongoing competency assessments.

This poster describes the process of the cyclic three-year Scheme, which consists of a full laboratory and factory figure audit during the first year, as well as two surveillance audits during the two subsequent years. Parallel to the audits, the laboratory analysts and managers undergo two training programmes, and the ongoing competence of the mill laboratory staff is assessed. The poster highlights the benefits, the major findings and the challenges experienced during the first year of the Scheme's inception in 2024.

Keywords: Audit, training, laboratory certification, factory control, ongoing competency assessment