



National Accreditation Board for Testing and Calibration Laboratories (NABL)

Specific Criteria to Recognise Government Soil Testing Laboratory

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AMENDMENT SHEET

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INTRODUCTION

Soil testing is a critical component in agricultural productivity and environmental management. It helps determine the nutrient content, composition, and other characteristics such as the pH level and contamination levels of the soil. This information is essential for farmers, agronomists, and environmental scientists to make informed decisions about soil management, crop production, and land use planning.

Government soil testing laboratories play a pivotal role in providing accurate and reliable soil analysis to the public and issuing the Soil Health Card. These laboratories support agricultural development by offering essential services to farmers and agribusinesses. They also contribute to environmental monitoring and regulatory compliance by testing for pollutants and ensuring that land use practices do not harm the ecosystem.

To ensure the quality and competency of soil testing laboratories, NABL launched a recognition scheme for such laboratories. This recognition scheme will instill confidence in the test results and reports issued by soil testing laboratories, which is crucial for ensuring the quality of soil data used for Soil Health Cards. The scheme is applicable exclusively to government soil testing laboratories.

This scheme is:

- i. an independent quality assurance scheme not covered under APAC & ILAC MRA.
- ii. valid for a cycle of three years and is applicable only for the test(s) as detailed in Scope of Recognition, which will further be continued on a renewal basis after every three years.
- iii. applicable only to test parameters mentioned in the Scope of Recognition.
- iv. based on satisfactory performance in proficiency testing (PT) programs.

The introduction of this recognition scheme by NABL aims to uphold the standards of soil testing laboratories, thereby supporting agricultural and environmental management with high-quality and reliable soil analysis.

While filling the application form by the laboratory to obtain recognition, the laboratory needs to capture the photograph and upload it as evidence of the details regarding Organisation, Accommodation & environmental conditions, Record maintenance & reporting, Equipment, and Reference materials through the mobile App "NABL STLP". The uploaded photograph will have geotagging with the location from which the photographs are captured.

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1. PREREQUISITE FOR RECOGNITION

- 1.1 The laboratory shall be legally identified as a Government Soil testing laboratory under the Department of Agriculture & Co-operation under the Ministry of Agriculture and Farmers' Welfare. The laboratory has to submit a self-declaration from the Head of the Department as evidence of its status as a Soil testing laboratory operating under the Department of Agriculture, Government of India.

Type of Legal entity	Document(s) to be submitted
Government	Gazette or Government Notification or self-Declaration on Letter head by Head of the organization

- 1.2 The applicant laboratory shall have satisfactorily participated in Proficiency Testing (PT) program conducted by accredited PT provider as per ISO/IEC 17043 before submission of application.
- 1.3 Test parameters covered in last six months in PT programs shall be considered for recognition. Six months shall be calculated from date of application submission.
- 1.4 Date of issue of PT result / report shall be considered as date for PT participation.
- 1.5 The laboratory shall continue participation for its scope in PT programs during recognition period (minimum 1 PT program per year covering the entire scope).
- 1.6 NABL may conduct On-site assessment (surveillance) at any point of time during three year cycle.
- 1.7 Valid Calibration / AMC of the equipment required to test the parameters under the applied scope. To achieve traceability to the International System of Units (SI), NABL recognizes calibration of equipment from NABL accredited calibration laboratories.
- 1.8 Scope once recognised cannot be changed during recognition period. There is no provision for extension in scope in this scheme.
- 1.9 The laboratory shall have necessary Reference materials/ Certified Reference materials as per the applied scope along with their certificate.

2. SCOPE OF RECOGNITION

The Soil Testing Laboratory shall apply for the test parameters under the scope of recognition as given below:

S. No.	Materials/Product	Test Parameter	Test Method
1.	Agriculture Soil	pH	IS 2720 (Part 26) Manual of Soil Testing, Ministry of Agriculture, Govt. of India
2.	Agriculture Soil	Electrical Conductivity	IS 14767 Manual of Soil Testing, Ministry of Agriculture, Govt. of India
3.	Agriculture Soil	Organic Carbon	Manual of Soil Testing, Ministry of Agriculture, Govt. of India
4.	Agriculture Soil	Available Phosphorus	
5.	Agriculture Soil	Available Nitrogen	
6.	Agriculture Soil	Available Potassium	
7.	Agriculture Soil	Available Sulphur	
8.	Agriculture Soil	Available Boron	
9.	Agriculture Soil	Zinc	
10.	Agriculture Soil	Iron	
11.	Agriculture Soil	Copper	
12.	Agriculture Soil	Manganese	