

NABL 139



National Accreditation Board for Testing and Calibration Laboratories (NABL)

Criteria for NABL Recognition for Government Drinking Water Testing Laboratory at Block Level / Sub-Divisional Level

ISSUE NO.: 01
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AMENDMENT SHEET

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1. INTRODUCTION

NABL has launched scheme to sensitize the Government Drinking Water Testing Laboratories at Block / Sub Divisional Level performing basic water quality testing to ensure the availability of standard water quality testing laboratories for people living in rural, urban & peri urban areas.

This scheme is an independent quality assurance scheme, which is not covered under APAC & ILAC MRA.

This scheme is based on satisfactory proficiency testing (PT) performance and valid for a cycle of three years and is applicable only for the test(s) as detailed in Annexure A, which will further be continued on renewal basis after every three years.

Laboratory application will be reviewed by NABL and decision on recognition will be taken based on performance in proficiency testing (PT). During the recognition period (within three years), on-site assessment (surveillance) may be conducted.

2. CRITERIA

- i. The laboratory shall be legally identified as block level / sub divisional lab under Ministry of Jal Shakti, Government of India. The laboratory has to submit a certificate from head of Department that it is a government water testing laboratory operating at sub-district/block level only as an evidence for legal identity.
- ii. Laboratory shall have facility/ resources for the testing of all mandatory parameters. Along with mandatory parameters, laboratory may apply for other parameters (Refer Annexure A for mandatory and optional parameters applicable in the scheme).
- iii. The applicant laboratory shall have satisfactorily participated in Proficiency Testing (PT) program for all applied parameters conducted by accredited PT provider as per ISO/IEC 17043 before submission of application.
- iv. The laboratory shall submit appropriate corrective actions based on root cause analysis in case of non-satisfactory performance in PT program along with the application.
- v. 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.
- vi. Date of issue of PT result / report shall be considered as date for PT participation.
- vii. The laboratory shall continue participation for its scope in PT programs during recognition period (minimum 1 PT program per year covering the entire scope).

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- viii. NABL may conduct On-site assessment (surveillance) in three years cycle at any point of time.
- ix. The laboratory shall have valid Calibration / AMC of the equipment required to test the parameters under the applied scope. For achieving traceability to the International System of Units (SI), NABL recognizes calibration of equipment from NABL accredited calibration laboratory. When the same is not possible for a particular calibration, calibration laboratory whose service is suitable for the intended need is also accepted. List of equipment applicable for water testing wrt to scope is detailed in Annexure B (information purpose).
- x. The laboratory shall have necessary Reference materials as per the applied scope along with their certificate.

3. RECOGNITION PROCESS

- i. Laboratory shall apply through web-portal only. Laboratory may register through NABL website www.nabl-india.org in the link provided under “Government Drinking Water Testing Laboratory Accreditation Program (G-LAP)”. The laboratory to apply under Block / Sub-Divisional level category for recognition under this scheme.
- ii. Laboratory shall submit the application from laboratory premises – for geo tagging of laboratory premises and equipment with the help of mobile App.
- iii. Laboratory application shall be reviewed along with PT results.
- iv. Decision on recognition shall be taken on the basis of satisfactory PT performance in last six months and communicated to the laboratory.
- v. Recognition certificate along with scope shall be issued to the laboratory.

4. ON-SITE ASSESSMENT (SURVEILLANCE)

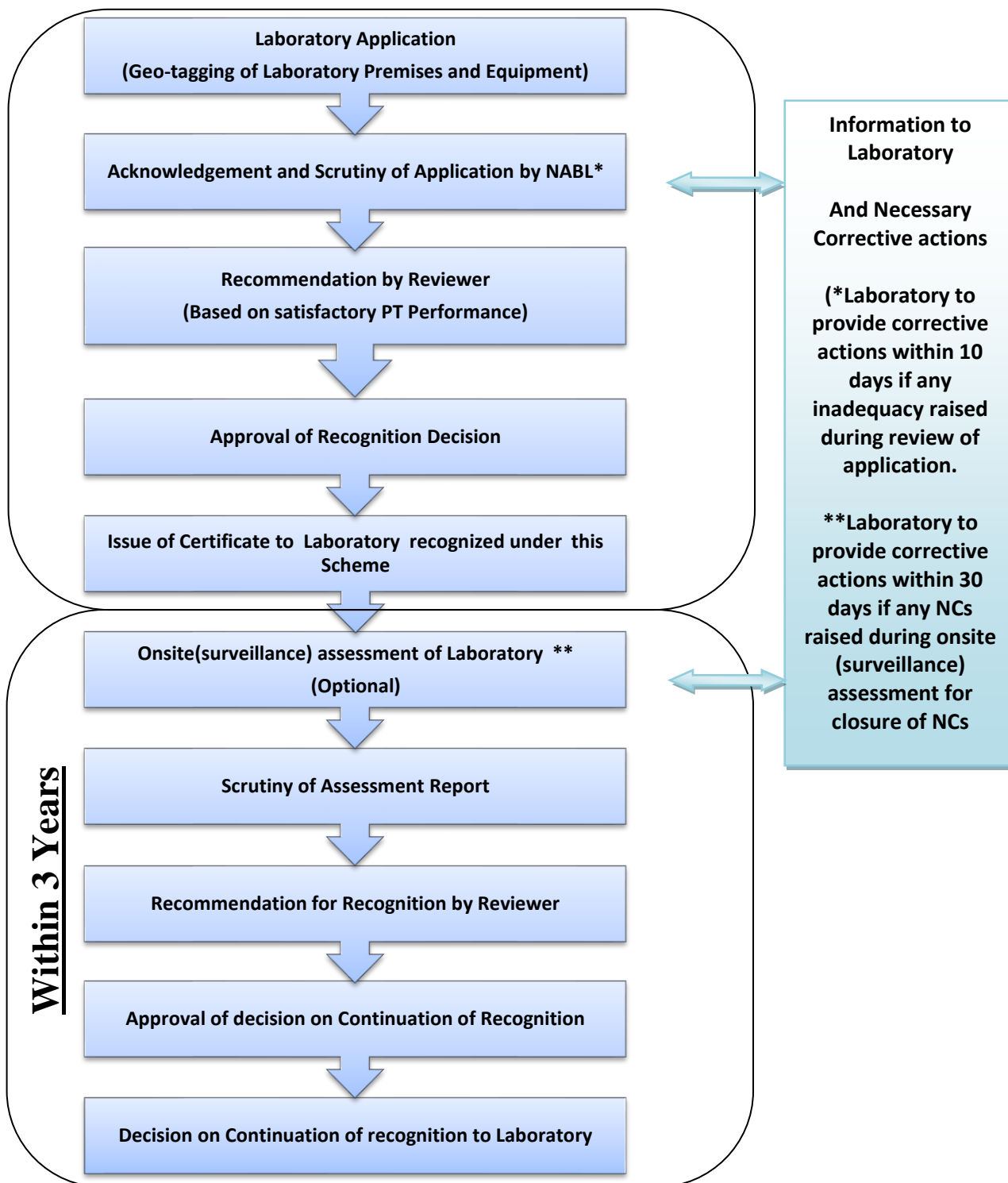
During recognition period (at any point of time), on-site assessment (Surveillance) may be conducted to assess laboratory operations.

5. RENEWAL OF RECOGNITION

NABL recognition certificate under this scheme is valid for a period of 3 years. The recognized laboratory is subjected to renewal of recognition every 3 years. The laboratory has to apply one month before the expiry of recognition to maintain the continuity of the recognition status. Laboratory may request extension to the scope of recognition at the time of renewal, which should explicitly be mentioned in the application form. However, Premises Change and/ or Name change will not be considered during Renewal Application. Laboratory needs to apply afresh for Premises Change and/ or Name change and the existing recognition needs to be withdrawn before applying afresh.

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6. PROCESS FLOW DIAGRAM



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7. TERMS AND CONDITIONS

The applicant and recognized laboratories under the scheme shall require to fulfill the following terms & conditions:

- i. The laboratory shall meet the requirements of regulators (local/regional/state/national regulations).
- ii. The laboratory shall meet the criteria as defined in clause no. 2 of this document.
- iii. The laboratory shall offer cooperation to NABL or its representative in undergoing assessments and on the following whenever NABL considers it as necessary:
 - a) Access to all laboratory areas of operations
 - b) Undertaking any assessment to verify the capability of the laboratory for the applied scope.
 - c) Witnessing the activities being performed relevant to this scheme.
 - d) Assessing the competence of the staff during assessment.
 - e) Access to all relevant information, documentation and records.
 - f) Access to those documents that provide insight into the level of independence and impartiality to the laboratory from its related bodies, if applicable.
 - g) Access to all records pertaining to relevant personnel.
 - h) Providing names of all personnel(s) who are responsible for authenticity for review, evaluation & release of results as applicable.
 - i) Investigating any complaints against the laboratory.
- iv. The laboratory shall pay the stipulated fee to NABL.
- v. If performance in two successive PT samples (for same parameter) is not satisfactory, the laboratory shall be de-recognized for that particular parameter(s).
- vi. The laboratory shall not involve in any kind of activity(ies) which may bring NABL to disrepute.
- vii. The recognized laboratories can relinquish recognition through a written notice to NABL by clearing any outstanding payment and surrendering the certificates along with scope.
- viii. The laboratory shall respond promptly to the changes initiated by NABL in its criteria and procedure (i.e. NABL 139). The lab shall inform NABL when such alterations under the agreed time frame have been completed.
- ix. NABL absolves itself of any legal or financial liability arising out of activities of any of its lab covered under this scheme involving any accidental or consequential damages to personnel / equipment / products at any time.
- x. The Laboratory shall inform NABL within 15 days of significant changes affecting the Lab's activities and operations relevant to recognition, such as:
 - a) change in physical location of laboratory

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- b) change in name of the laboratory
 - c) resources (equipment&personnel)
- xi. Laboratory shall offer co-operation to NABL assessment team in carrying out unannounced visit as a part of continuous monitoring activity by NABL for its recognized laboratories.

Any violation of above terms and conditions shall result in denial of recognition in case of applicant laboratories or derecognition in case of recognized laboratories.

All disputes, arising out of NABL decisions that remain unresolved through mechanism provided by NABL are subject to the exclusive jurisdiction of the Courts at New Delhi and none other.

8. MONITORING OF PROFICIENCY TESTING (PT) PARTICIPATION AND PERFORMANCE

The recognized laboratories shall submit the reports of Proficiency Testing (PT) participation annually from date of issue of recognition certificate and the same shall be reviewed by NABL.

9. ADVERSE DECISION

9.1 Closure of Application

Conditions:

- a) Not addressing the inadequacies within stipulated time communicated during review of application.
- b) When the laboratory voluntarily withdraws application.

Actions by NABL

- a) The application will be closed.
- b) The decision will be formally communicated to the laboratory by NABL.

Procedure for re-enrollment

The laboratory can apply afresh with relevant application form and fees applicable at that time along with outstanding charges (if any). The application will be treated as new application.

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9.2 Denial of Recognition

Conditions:

- a) When the laboratory has not successfully participated in any test/ parameter of applied scope.
- b) Any Violation of terms and conditions.

Actions by NABL

- a) The recognition will be denied.
- b) The decision will be formally communicated to the laboratory by NABL.

Procedure for re-enrollment

The laboratory can apply afresh with valid responses for the reason(s) on earlier denial, using relevant application form and pay applicable fees at that time along with outstanding charges (if any). The application will be treated as new application.

9.3 De-recognition of Laboratory

Conditions:

- a) When laboratory does not participate in PT programs conducted by accredited PT providers after its recognition decision.
- b) PT performance is not satisfactory in two consecutive PT samples.
- c) When laboratory does not undergo on-site assessment (Surveillance) beyond two months of the intimation from NABL.
- d) When laboratory has not taken adequate corrective action against NCs observed during on-site assessment (surveillance) within the stipulated time period of 30 days.
- e) When laboratory has not paid the requisite charges within three months.
- f) Any violation of terms and conditions.
- g) When the laboratory relinquishes/withdraws recognition by giving notice in writing to NABL after decision on recognition by surrendering the recognition certificate and scope. Outstanding is to be cleared before making request for withdrawal of recognition.

Actions by NABL

- a) The recognition will be derecognized.
- b) The decision will be formally communicated to the laboratory by NABL.

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Procedure for re-enrollment

Laboratory once derecognized, can apply afresh with valid responses for the reason(s) on earlier decision of de recognition, using relevant application form and pay applicable fees at that time along with outstanding charges (if any). The application will be treated as new application.

10. PRIVILEGES EXTENDED TO THE LABORATORY UPON APPROVAL

Certificate of Compliance will be issued to the laboratories upon approval by NABL. The same will carry Certificate No. along with validity period. Below is the representation of NABL claim to be made by the approved laboratory on its test reports:

“NABL Recognized <<Block Level or Sub-Divisional Level>> Government Drinking Water Testing Laboratory”

11. Fee Structure

Fee Structure applicable for this scheme is as follows:

Components	Fee / Charges
Recognition Fee (For Three Years, to be submitted along with application)	₹15,000/-
Surveillance Charges (Payable at the time of surveillance visit)	On actual basis
Renewal Charges (For Three Years, to be submitted along with application)	₹15,000/-

Note:

1. In addition to the above-mentioned fee, GST (as applicable) is to be paid along with said charges/ fees.
2. Payment to be made through the payment gateway available on the portal. Fees once submitted will be non-refundable and non-adjustable.

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Annexure A
Scope for Recognition

1. Mandatory Parameters

S. No	Discipline – Group – Sub Group	Test Parameter	Range	Measurement Technique	CRM / RM
1	Chemical – Water – Drinking Water	pH	2 to 12	pH Meter	Buffer pH 4,7 and 10
2	Chemical – Water – Drinking Water	Turbidity	0.5 NTU to 100 NTU	Turbidity Meter	Turbidity Standard
3	Chemical – Water – Drinking Water	Total Dissolved Solids	10 mg/L to 10000 mg/L	TDS Meter	KCL
4	Chemical – Water – Drinking Water	Chloride (as Cl)	10 mg/L to 5000 mg/L	Titration	Sodium Chloride
5	Chemical – Water – Drinking Water	Total Hardness (as CaCO ₃)	10 mg/L to 5000 mg/L	Titration	Calcium standard
6	Chemical – Water – Drinking Water	Total Alkalinity (as CaCO ₃)	5 mg/L to 2000 mg/L	Titration	Sodium Carbonate
7	Chemical – Water – Drinking Water	Calcium (as Ca)	5 mg/L to 2000 mg/L	Titration	Calcium Standard
8	Chemical – Water – Drinking Water	Magnesium (as Mg)	5 mg/L to 1000 mg/L	Calculation	-
9	Chemical – Water – Drinking Water	Colour	1 HU to 100 HU	Visual comparison	Potassium chloroplatinate
10	Chemical – Water – Drinking Water	Odour	Qualitative	Observation	-
11	Chemical – Water – Drinking Water	Taste	Qualitative	Observation	-

2. Optional Parameters

S. No	Discipline – Group – Sub Group	Test Parameter	Range	Measurement Technique	CRM / RM
1	Chemical – Water – Drinking Water	Iron	0.1 mg/L to 50 mg/L	Colorimeter/Spectrophotometer	Iron standard
2	Chemical – Water – Drinking Water	Fluoride	0.1 mg/L to 50 mg/L	Colorimeter/Spectrophotometer/Ion meter	Fluoride standard
3	Chemical – Water – Drinking Water	Arsenic	0.009 mg/L to 50 mg/L	Colorimeter/Spectrophotometer	Arsenic standard
4	Chemical – Water – Drinking Water	Sulphate (SO ₄)	1 mg/L to 1000 mg/L	Colorimeter/Spectrophotometer	Sulphate standard
5	Chemical – Water – Drinking Water	Nitrate (as NO ₃)	1 mg/L to 50 mg/L	Colorimeter/Spectrophotometer	Nitrate standard
6	Biological – Water – Drinking Water	Total Coliform	Qualitative (Absent/Present)	Membrane Filtration technique	Standard culture from ATCC/IMTEC/NCIM
7	Biological – Water – Drinking Water	E-coli	Qualitative (Absent/Present)	Membrane Filtration technique	Standard culture from ATCC/IMTEC/NCIM

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Annexure-B

List of key equipment as per scope (detailed in Annexure A)

S No	Discipline	Equipment Name	Traceability	Source of Calibration Agency	Linked Parameter
1	Chemical	pH Meter	Traceable to SI units using CRM	NA	Mandatory
2	Chemical	Balance	NA	NABL Accredited Calibration Lab	Mandatory
3	Chemical	Colour Comparator	Traceable to SI units using CRM	NA	Mandatory
4	Chemical	TDS Meter	Traceable to SI units using CRM	NA	Mandatory
5	Chemical	Turbidity Meter	NA	NABL Accredited Calibration Lab	Mandatory
6	Chemical	Refrigerator	NA	NABL Accredited Calibration Lab	Mandatory
7	Chemical	Wet & Dry Thermometer	NA	NABL Accredited Calibration Lab	Mandatory
8	Chemical	Thermometer (1 °C -100 °C)	NA	NABL Accredited Calibration Lab	Mandatory
9	Chemical	Spectrophotometer	Traceable to SI units using CRM	NA	Optional 1,2,3,4,5
10	Chemical	Ion Meter	Traceable to SI units using CRM	NA	Optional 2,5
11	Biological	Biosafety cabinet	Manufacturer Certificate	Manufacturer Certificate	Optional 6,7
12	Biological	Incubator (35 °C to 37 °C)	NA	NABL Accredited Calibration Lab	Optional 6,7
13	Biological	Incubator (44 °C to 45 °C)	NA	NABL Accredited Calibration Lab	Optional 6,7
14	Biological	Water Bath (44 °C to 45 °C)	NA	NABL Accredited Calibration Lab	Optional 6,7
15	Biological	Autoclave for sterilization	NA	NABL Accredited Calibration Lab	Optional 6,7
16	Biological	Autoclave for disposal	NA	NABL Accredited Calibration Lab	Optional 6,7
17	Biological	Colony Counter	NA	NABL Accredited Calibration Lab	Optional 6,7
18	Biological	Membrane filtration Assembly with vacuum pump	NA	NA	Optional 6,7
19	Biological	Balance (Separate from Chemical division Balance)	NA	NABL Accredited Calibration Lab	Optional 6,7
20	Biological	Refrigerator (Separate from Chemical division Refrigerator)	NA	NABL Accredited Calibration Lab	Optional 6,7

Note: Advance equipment may also be used. However, lab is required to ensure the traceability.

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