



CSIR-National Physical Laboratory Dr. K. S. Krishnan Marg New Delhi-110012

Notification

This is to be informed that the CSIR-NPL is starting its services related to the issuance of "Provisional Letter of Confirmation", "Product Conformity Certification" and "Verification Certificate" under CSIR-NPL India Certification Scheme (NPLI CS) from September 01, 2025.

The following details are enclosed for adherence and information:

- 1. General information
- 2. Process flow table
- 3. Instructions for manufacturers
- 4. Timeline
- 5. Application format
- 6. Qualification criteria

In-Charge, National Facility for Environmental Metrology:

Chairman, Certification Committee (NPLI CS):

Director, CSIR-NPL

& Member, NPL India Certification Body:

29/08/2025

1. General Information:

CSIR-National Physical laboratory (the National Metrology Institute of India by the act of parliament of India) is now also designated as the National verification agency for certifying instruments & equipment for monitoring emission and ambient air through a gazette notification dated 22 August 2019, issued by the Ministry of Environment, Forest & Climate Change, Govt. of India.

The CSIR-NPL has developed a national level certification scheme named as 'CSIR-NPL-India Certification Scheme (NPLI CS)' as per the guidelines of ISO 17060 and complies the requirements of ISO 17065.

The NPLI CS will provide "Product Conformity Certificate" to the instruments/equipment related to monitoring of emission and ambient air as per the Indian regulatory guidelines/European Norms to ensure monitoring data is of high standard.

The CSIR-NPL is the Indian Certification Body and authorizes NPL India Certificate Board (NICB) to perform/execute the certification activities on behalf of CSIR-NPL.

The NICB issues "Product Conformity Certificate", and "Provisional Letter of Confirmation" based on laboratory tests performed by the National Facility for Environmental Metrology (NFEM) of CSIR-NPL & Field test performed by manufacturer as per the instructions of NFEM. The "Product Conformity Certificate" also require manufacturing site audit report performed by audit committee of NPLI CS. However, the "Verification Certificate" is issued after verification of certificates and test reports already issued by other international certification agencies. If NICB found any ambiguity or dependency on operational environmental condition, verification certificate may be issued only after a short-term test performed at NFEM.

The issued certificates have a defined validity period which may extend based on positive reports of manufacturer's site audit, annual surveillance test, calibration trails and design consistency.

2. Process Flow table:

Sr. No.	Responsible Entity	Action items	Reference link
1.	Client	Email request sends to Centre for Calibration & Testing (CFCT) to get budgetary Quotation & CBTD form	
2.	CFCT	Budgetary quotation and CBDT form will be provided to client	
3.	Client	Submit the filled CBDT form along with the proof of submission of Application processing fee (non-refundable) & initial testing charges	
4.	NFEM	Application form (technical details of equipment) will be provided to the client	
5.	Client	Submit filled application form (enclosed all relevant documents) along with one instrument to NFEM	
6.	Client	Instrument shall be connected with the test facility as per direction of NFEM technical team	
7.	NFEM	Short term testing will be performed	
8.	NFEM	Issuance of "Letter of Confirmation"	
9.	Certification Committee of NICB	Identification of performance parameters and development of Test program	
10.	Certification Committee of NICB	Communicate test program to client	
11.	Client	Provided consent to the test program & submit charges for Phase II	
12.	Audit Committee	Perform the Manufacturer's site audit and identify two instruments from the batch for testing	

Sr. No.	Responsible Entity	Action items	Reference link
13.	Client	Submit identified Instruments to NFEM (CSIR-NPL) and provide the connection to be made made with test facility under the guidance of NFEM technical team	
2.	NEFM	Two months laboratory Testing (for both the instruments)	
3.	NEFM	Generate the laboratory test report	
4.	NFEM	Instruments Handed over to the client for field test	
5.	Client	Installation of both the instruments for field test under the guidance of NEFM team	
6.	Audit Committee	Surprise on-site instrument checks during field test	
7.	Client	After field test, Submit both the instrument to NFEM (CSIR-NPL) for short term verification test	
8.	NFEM	Performed Verification test for minimum 15 days	š
9.	NFEM	All the test reports submitted to Certification Committee	
10.	Certification Committee	Recommendations submitted to NICB after Evaluation of test and audit reports	
11.	NICB	Issuance or decline to issue the Certificate	
12.	CFCT	Close the File	

3. Instructions for Manufacturers

- 3.1 All the certification services are only for manufacturers and not for vendors/dealers/suppliers/agents
- 3.2 Vendors/dealers/suppliers/agents may apply for NPLI CS certification, if the OEM authorize them for the same
- 3.3 The instruments based on the methods of measurements listed in the CPCB guideline are acceptable for "Certification".
- 3.4 Manufacturers must comply the requirements of EN 15267-2 before approaching to CSIR-NPL for "Product Conformity Certification".
- 3.5 Manufacturers not fulfilling the requirements of EN 15267-2 may approach CSIR-NPL for "Provisional Letter of Confirmation" for their products. But enforce to implements the requirements of EN 15267-2 within three month from the date of issuance of "Provisional Letter of Confirmation".
- 3.6 The "Letter of Confirmation" is valid only for 12 months from the date of issue
- 3.7 Manufactures must have at least five units of instruments ready (from the same batch) at their manufacturing site before approaching CSIR-NPL for "Product Conformity Certification".
- 3.8 Manufacturer willing to get "Letter of Confirmation" from CSIR-NPL needs to submit one unit of instrument.
- 3.9 The application processing fee and charges for issuance of "Letter of Confirmation" are non-refundable.
- 3.10 Manufacturer must depute one technical person from their firm to CSIR-NPL during the test period to resolve technical glitches on their instrument.
- 3.11 Manufacturer needs to supply all the fittings & fixtures with the instruments.
- 3.12 The transport charges and offloading of instrument at CSIR-NPL will be taken care of by the manufacturer
- 3.13 CSIR-NPL will not be not responsible for any damage caused due to transportation of instruments.
- 3.14 The instrument test will be operated by the technical person appointed by the manufacturer

4. Timeline

Complete Process and Timeline for issuance of Product Conformity Certificate

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				Submission of Application & Applicable Charges by client	Submission of one instrument to CSIR-NPL for short term verification test to the client's claimed specifications such as	Response Time, Repeatability at Zero Point, Repeatability at Span Point, Linearity (Lack-of-Fit) and accuracy, Cross-Sensitivity etc	Short term test conducted at CSIR-NPL	Based on test results a "Provisional Letter of Confirmation" to the claimed measurement specifications will be issued (if the	observed deviation is within the tolerance level of claimed values)	ldentification of suitability parameters for Full & Final Certification	Communication to the Cli	After receiving the Client's acceptance, manufacturing site audit will be performed	Client will be asked to submit the identified two instruments to CSIR-NPL for performance test	Two months performance test will be done at CSIR-NPL's test facility	Client will be asked to install both the instruments in a single stack and provide the data access to identified system in CSIR-NPL for field performance check	Intermediate Field audit will be performed twice	After field test, the instruments will again be sent back to CSIR- NPL for conducting post field test verification	Manufacturing site audit	If performance of the instruments found no deviation from the initial test, Final certificate will be issued
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5. Application format



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आवेदन पत्र

Application Form

for

Air Pollution Monitoring Equipment Product Certification
Under

सीएसआईआर- एनपीएल भारत प्रमाणीकरण योजना CSIR-NPL India Certification Scheme (NPLI CS)



सीएसआईआर-राष्ट्रीय भौतिक प्रयोगशाला CSIR-National Physical Laboratory

डॉ. के.एस. कृष्णन मार्ग -110012, भारत Dr. K. S. Krishnan Road-110012, India

Application Format

1.	App	olicant (To whom certification will	be provided)
	i.	Company Name	
	ii.	Full Address	-
	iii.	State	-
	iv.	Country	
	v.	PIN Code	
	vi.	Contact No.	
	vii.	GST No.	2
-	viii.	Category (Type) (Govt Dept/ Agency/ voluntary/ cooperative Agency/ Research organization/foreign Firm/ agency/ public /private sector)	
	ix.	Size (Micro/large/medium/small/cottage unit)	
		If Govt (Please specify central/state)	
		If PSU/PSE (Please specify central/state)	-
		If Private (Please specify Large/ Medium/ Small/ Cottage/Research Org./ NGO/ University/others)	
	х.	Status (New/Repeat)	
	xi.	If it is repeat (Please enclosed the previous test report and certificate)	

2. Details of Technica i. Name	I In-charge (if any)
i. Name	
1 1	· · · · · · · · · · · · · · · · · · ·
ii. Designation	
iii. Full Address	
,	
iv. State	
v. Country	
vi. PIN Code	
vii. Contact No. (office	
viii. Mobile No.	
ix. E-mail ID	
3. Details of Commer	cial In-charge (if any)
i. Name	
	*
" 5 ' ' '	
ii. Designation	
iii. Full Address	
iv. State	
v. Country	
vi. PIN Code	
vii. Contact No. (office	
viii. Mobile No.	
ix. E-mail ID	

4.	Certification Category (Indicate the category for which certification required)	a.	Online Continuous Emission Monitoring System (OCEMS)
		b.	Continuous Ambient Air Quality Monitoring System (CAAQMS)
		c.	Portable System for Emission Monitoring (PSEM)
		d.	Transportable System for Emission Monitoring (TSEM)
		e.	Open Path Ambient Air Monitoring System (OPAM)
		f.	Automatic Iso-kinetic System (AIS)
		g.	Particulate Monitors (PM2.5, PM10, PMCEMS)
	·	h.	Variation/Re-certification (Mention the certification no.)
		g.	Other type of Air Pollution Monitoring System
5.	Model Number		
6.	Description of the system (include general arrangement drawing of the system along with the sales literature and technical specification)	Enc	lose the required details
7.	List of gases/species measured and proposed range	G	ases/Species Range of Certification
	(More than one range for each gases/species can be tested if requested. State if any gases/species		
	is to be excluded from the certification.)		
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8.	Produ	ct Application Details	Enclose the required details
0.		de the types of process for which	Lifeiose the required details
		ct is to be certified)	
9.		uring Principle(s)	
10.		m Schematic diagram (P&ID or	
10.	equiva		
11.		nical Specifications	
	11.1	Resolution & Detection limits	
	11.2	Warm-up Time	
	11.3	Operating Temperature Range	
	11.4	Power Supply & Consumption	
	11.5	Sample Flow Rate & Inlet	
		Conditions (Pressure &	
		Temperature)	a de la companya de
12.	Insta	lation, Operation &	W
		enance Documentation	i.
	12.1	Sample system diagram	
		(showing sampling probe,	
		filters, conditioning system)	
	12.2	Recommended installation	
		layout	
	12.3	Start-up and shut-down	,
		procedures	
	12.4	Troubleshooting guide	
13.	Com	munication parameters	2
	13.1	Baud rate	
	13.2	Parity	
	13.3	Bits	
	13.4	Stop Bit	
	13.5	Address	
	13.6	Complete list registers &	
		functions	
	13.7	If concentrations are	
	1	exchanged with current or	
		voltage signals, provide	
		start/end values	
14.	Fiel	d Test Location	
	(Geo	graphic Latitude & Longitude and i	regions e.g. coastal, hills etc.)
	i. 1	Types of Process:	
		Process operator:	The state of the s
		Troubb operator.	*
	iii.	Site:	<u> </u>
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Date

6. Qualification criteria

- 1. **Selection of Method of measurement:** As per table 5 of CPCB guideline (please refer CPCB guideline for OCEMS)
- 2. Qualification:

2.1 For CEMS (Lab. Test):

Performance characteristic	Performance criteria			
	Gases except O₂	O ₂		
Response time	≤ 200 s ≤ 400 s for NH ₃ , HCl and HF	≤ 200 s		
Repeatability standard deviation at zero point	≤ 2,0 % ^a	≤ 0,20 % ^b		
Repeatability standard deviation at span point	≤ 2,0 % ^a	≤ 0,20 % ^b		
Lack of fit	≤ 2,0 % ^a	≤ 0,20 % ^b		
Influence of ambient temperature change from nominal value at 20 °C within specified range at zero point	≤ 5,0 % ^a	≤ 0,50 % ^b		
Influence of ambient temperature change from nominal value at 20 °C within specified range at span point	≤ 5,0 % ^a	≤ 0,50 % ^b		
Influence of sample gas pressure at span point, for a pressure change Δp of 3 kPa	≤ 2,0 % ^a	≤ 0,20 % ^b		
Influence of sample gas flow on extractive AMS for a given specification by the manufacturer	≤ 2,0 % ^a	≤ 0,20 % ^b		
Influence of voltage, at -15 % below and at +10 % above nominal supply voltage	≤ 2,0 % ^a	≤ 0,20 % ^b		
Influence of vibration	≤ 2,0 % ^a	≤ 0,20 % ^b		
Cross-sensitivity	≤ 4,0 % ^a	≤ 0,40 % ^b		
Excursion of the measurement beam of in-situ AMS	≤ 2,0 % ^a	_		
Converter efficiency for AMS measuring NO _x	≥ 95,0 %	_		

- **a.** Percentage value as percentage of the upper limit of the certification range
- **b.** Percentage value as oxygen volume concentration (volume fraction)

2.2 For CEMS (Field test)

Performance characteristic	Performan	Performance criteria			
	Gases except O₂	O ₂			
Determination coefficient of calibration function, ${\it R}^2$	≥ 0,90	≥ 0,90			
Response time	≤ 200 s ≤ 400 s for NH ₃ , HCl and HF	≤ 200 s			
Lack of fit	≤ 2,0 % ^a	≤ 0,20 % ^b			
Minimum maintenance interval	8 days	8 days			
Zero drift within maintenance interval	≤ 3,0 % ^a	≤ 0,20 % ^b			
Span drift within maintenance interval	≤ 3,0 % ^a	≤ 0,20 % ^b			
Availability	≥ 95,0 %	≥ 98,0 %			
Reproducibility, Rf	≤ 3,3 % ^a	≤ 0,20 % ^b			

- a. Percentage value as percentage of the upper limit of the certification range
- b. Percentage value as oxygen volume concentration (volume fraction)

2.3 For CEMS (ToC)

Performance characteristic	Performance criteria
Effect of oxygen	≤ 2,0 % ^a
Range of response factors:	
methane	0,90 to 1,20
aliphatic hydrocarbons	0,90 to 1,10
aromatic hydrocarbons	0,80 to 1,10
dichloromethane	0,75 to 1,15
aliphatic alcohols	0,7 to 1,0
esters and ketones	0,7 to 1,0
organic acids	0,5 to 1,0

a. Percentage value as percentage of the upper limit of the certification range

2.4 For PM CEMS (Lab test)

Performance characteristic	Performance criteria
Response time	≤ 200 s
Repeatability standard deviation at zero	≤ 2,0 % ^a
Repeatability standard deviation at zero	≤ 5,0 % ^b
Lack of fit	≤ 3,0 % ^a
Zero shift due to ambient temperature change from 20 °C within specified range	≤ 5,0 % ^a
Span shift due to ambient temperature change from 20 °C within specified range	≤ 5,0% ^a
Influence of voltage at -15 % and at +10 % from nominal supply voltage	≤ 2,0 % ^a

- **a.** Percentage value as percentage of the upper limit of the certification range.
- b. Percentage value as percentage of the emission limit value

2.5 For PM CEMS (Field test)

Performance characteristic	Performance criteria
Determination coefficient of calibration function, R ²	≥ 0,90
Response time	≤ 200 s
Lack of fit	≤ 3,0 %
Minimum maintenance interval	8 days
Zero drift within maintenance interval	≤ 3,0 %
Span drift within maintenance interval	≤ 3,0 %
Availability	≥ 95,0 %
Reproducibility, R _{field}	
— for concentrations > 20 mg/m ³	≤ 2,0 %
— for concentrations ≤ 20 mg/m³	≤ 3,3 %