

PJLA Update Notification

Update Notification # 90

Update Notification Release Date: 7/10/2025

Form/Procedure/Policy: PJLA Accreditation Policy for Gas Standards & ISO 17034 Transitions

Attention All Applicant and Accredited Organizations:

Purpose

This update notification is intended to clarify PJLA's accreditation policy related to calibration activities involving gas standards (e.g., calibration gas mixtures) under ISO/IEC 17025. It also outlines the appropriate categorization of gas preparation activities and provides guidance on transitioning, when applicable, to ISO 17034 accreditation for Reference Material Producers (RMPs).

Observed Categories of Calibration Scopes for Gas Laboratories

Laboratories currently accredited under ISO/IEC 17025 may fall into one of the following three categories regarding their gas-related calibration activities.

PJLA offers the following guidance to assist in determining the most appropriate path forward:

Category 1: Internal Instrument Calibrations Only

Internal calibrations performed to support the laboratory's testing activities are considered metrologically traceable results based on the **ISO/IEC 17025 testing scope**, without the need for a separate calibration scope.

These internal calibration activities must:

- Be clearly documented in the laboratory's test methods identified on the scope or in supporting procedures.
- Demonstrate traceability in accordance with PJLA Policy PL-2.
- Include appropriate uncertainty estimation following PJLA Policy PL-3

Category 1 Option 1

Laboratories failing under this category may choose to **withdraw their standalone calibration scope**. PJLA will continue to evaluate these internal calibration activities during testing assessments.

Category 1 Option 2

Alternatively, laboratories may opt to retain their calibration scope. In this case, calibration activities must meet all applicable ISO/IEC 17025 and PJLA requirements, including:

- Demonstrated traceability to national or international standards
- Issuance of calibration certificates (independent of test reports) with relevant traceability and calibration uncertainty data.
- Demonstrated appropriate uncertainty estimation following the principles outlined in the JCGM 100:2008 (GUM) Guide to the Expression of Uncertainty in Measurement.
- Participation in proficiency testing (PT) or approved alternatives relevant to calibration activities.
- Having Documented Expanded Measurement Uncertainty (formerly CMC) for the calibration of the instrument.

If retaining this option upon the next scheduled assessment, PJLA will assign a qualified calibration assessor to evaluate these activities during assessments. This assessor will focus specifically on calibration functions, while a separate assessor will review testing-related activities.

Category 2: Calibration Services for External Clients

Laboratories offering calibration services for external customer instruments must retain **an ISO/IEC 17025 calibration scope**, if the intent is providing accredited calibration services.

As identified in Category 1 Option 2, full conformance with calibration requirements is required. Upon the next scheduled assessment, PJLA will assign a qualified calibration assessor to evaluate these activities during assessments. This assessor will focus specifically on calibration functions, while a separate assessor will review testing-related activities.

Category 3: Preparation of Calibration Gas Standards

Laboratories involved in the preparation of calibration gas mixtures—whether for internal or external use—are engaging in **reference material production**.

These activities do not fall within the definition of calibration (or testing) under ISO/IEC 17025.

Category 3 Option 1

Upon the next scheduled assessment, **references to production activities** will be removed in the accredited scopes under ISO/IEC 17025 for testing or calibration.

PJLA will no longer renew calibration scopes that are limited to gas standard preparation and testing activities beyond **July 2027**.

If a laboratory performs analytical testing to support gas certification and does not wish to pursue ISO 17034 accreditation, a footnote may be added to the ISO/IEC 17025 testing scope to reflect the activity, for example:

“Testing of gas cylinders is in support of certification of gaseous calibration standards per “relevant protocol”. (e.g., EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards)

Category 3 Option 2

Transition to ISO 17034 Accreditation:

As stated above, PJLA will no longer renew calibration scopes that are limited to gas standard preparation activities beyond **July 2027**.

Laboratories preparing and characterizing gas standards may transition to ISO 17034 accreditation.

PJLA is committed to supporting a smooth and effective transition for the laboratories wishing to do so. Our team will provide:

- Guidance and clarification on requirements.
- Assistance with scope adjustments and appropriate language.

Next Steps

We ask that each laboratory review its current scope and activities to determine the most appropriate path:

- **For laboratories conducting only internal calibrations:** Please notify your PJLA scheduler if you wish to withdraw or maintain your calibration scope.
- **For laboratories performing external calibrations:** Continue to maintain your ISO/IEC 17025 calibration scope and prepare for full evaluation of calibration practices.
- **For laboratories preparing gas mixtures:** PJLA will reach out with additional guidance regarding the transition to ISO 17034.

For questions or assistance, please contact us at PJLA.