## **Introduction**

## This form is intended for Reference Material Producers (RMPs) to use in the creation, maintenance and expansion of RMP Scopes of Accreditation. The Scope of Accreditation is a significant document in the accreditation process, as it is the Accreditation Bodies official publication attesting to an organization’s technical competence in producing specific types of reference materials.

## As part of our international recognition arrangement obligations, A2LA is required to comply with Asia Pacific Accreditation Cooperation (APAC) TEC1-008 in addition to ISO/IEC 17011. Specific requirements for content on scopes of accreditation are as follows:

* Types of reference materials (certified reference materials (CRMs), reference materials (RMs) or both);
* the reference material matrix or artifact;
* the property(ies) characterized;
* the approach used to assign property values.

**Instructions**

Because of the wide breadth of reference materials available, the range in the types of reference materials does not always lend itself to have a consistent scope formatting. The table below should be filled out with all of the relevant information needed in order for A2LA to draft the Scope of Accreditation. Each category/subcategory of reference material on the scope of accreditation will need to have an individual table completed to collect the required information.

To help understand the output of the information, three examples have been included following the tables showing how the information will be used on a Scope of Accreditation.

* Example 1 is an example of a RMP scope that included specifics down to the analyte and that elected to display uncertainty.
* Example 2 is a RMP scope that is itemized to groups of chemicals.
* Example 3 is an example of a qualitative RMP that produces reference materials with no quantitative values.

Please note that you may also visit <https://portal.a2la.org/search/> to review currently accredited RMPs and see how information is presented on published Scopes of Accreditation.

**Please complete the relevant table(s) for which accreditation is being sought. Not all fields on the table may be applicable so only fill in what is relevant to the specific RM being produced. For additional RMs, please feel free to copy/paste additional tables as needed. If you wish to include specifics down to the analyte, please list that information within the “Product Name/Description” area. Please also note at the end of this document is an optional embedded draft scope if your organization wishes to submit a draft scope of accreditation in addition to the table below.**

|  |  |
| --- | --- |
| **Reference Material Type:** | **RM**  **CRM** |
| **Product Name/Description:**  *Note: this should align with items listed on the scope of accreditation.* |  |
| **Property(ies) Characterized:** |  |
| **Matrix or Artifact:** |  |
| **Approach Used to Assign Property Values:** |  |

|  |  |
| --- | --- |
| **Reference Material Type:** | **RM**  **CRM** |
| **Product Name/Description:**  *Note: this should align with items listed on the scope of accreditation.* |  |
| **Property(ies) Characterized:** |  |
| **Matrix or Artifact:** |  |
| **Approach Used to Assign Property Values:** |  |

**Example 1**

SCOPE OF ACCREDITATION TO ISO 17034:2016

REFERENCE MATERIALS PRODUCER

Valid To: Month 31, 202- Certificate Number: ####.##

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this Reference Material Producer for the production of certified reference materials of the following categories:

| **Certified Reference Material/ Matrix or Artifact** | **Properties Characterized** | **Approach Used to Assign Property Values** | **Test, Analysis, Measurement, Methods** |
| --- | --- | --- | --- |
| Trace Metals Standard in Aqueous Solution | Aluminum (Al) –  10, 100, 1000, and 10,000 μg /mL stock CRMs  Customs and Stock Blends Containing This Element –  Concentration Range: (2 to 60 000) μg/mL  Uncertainty: (0.004 to 0.01) μg/mL | EPA Method 200.7  WI-QC-21 | ICP-OES  ICP-MS |

|  |  |
| --- | --- |
| **Reference Material Type:** | **RM**  **CRM** |
| **Product Name/Description:**  *Note: this should align with items listed on the scope of accreditation.* | Trace Metals Standard |
| **Property(ies) Characterized:** | Trace Metals 10, 100, 1000, and 10,000 μg /mL stock CRMs  Range: (2 to 60 000) μg/mL  Uncertainty: (0.004 to 0.01) μg/mL |
| **Matrix or Artifact:** | Aqueous Solution |
| **Approach Used to Assign Property Values:** | EPA Method 200.7 , WI-QC-21 |

**Example 2**

SCOPE OF ACCREDITATION TO ISO 17034:2016

REFERENCE MATERIALS PRODUCER

Valid To: Month 31, 202- Certificate Number: ####.##

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this Reference Material Producer for the production of Certified Reference Materials of the following categories:

|  |  |  |
| --- | --- | --- |
| **Certified Reference Material/ Matrix or Artifact** | **Properties Characterized** | **Approach Used to Assign Property Values** |
| Inorganic Reference Materials – Stock Single Standards, Stock Multi Standards, Custom Single Standards, Custom Multi Standards, Speciation Standards | Trace Metal Standards:  Concentration Range:  (0.0001 to 100 000) µg/ml  (0.0001 to 100 000) µg/g  Uncertainty:  0.1 % to 10.0 %  Cations Standards:  Concentration Range:  (0.0001 to 100 000) µg/ml  (0.0001 to 100 000) µg/g  Uncertainty:  0.1 % to 10.0 %  Stoichiometry Standards:  Concentration Range:  0.1 M to 10 M  Uncertainty:  0.1 % to 5.0 % | ICP-OES  ICP-MS  Titrimetry  Gravimetric  Ion Chromatography  LC-ICP/MS |

**Example 3**

SCOPE OF ACCREDITATION TO ISO 17034:2016

REFERENCE MATERIALS PRODUCER

Valid To: Month 31, 202- Certificate Number: ####.##

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this Reference Material Producer for the production of Certified Reference Materials in the following categories:

|  |  |  |
| --- | --- | --- |
| **Certified Reference Material/ Matrix or Artifact** | **Properties Characterized** | **Approach Used to Assign Property Values** |
| Microorganisms in Reference Cultures –  Quantitative CRMs for the Identity and Quantitation of Bacteria, Fungi and Yeast (Lyophilized Format) | Identity | Phenotyping:  Manual and automated  biochemical, serological;  staining, microscopy,  selective media |

**DOCUMENT REVISION HISTORY**

|  |  |
| --- | --- |
| **Date** | **Description** |
| 11/08/18 | * Complete Rewrite |
| 04/29/20 | * Correctly referenced Annex 2 of IAAC MD 028 2013 under introduction |
| 11/17/20 | * Complete rewrite to align with new scope requirements in ISO/IEC 17011: 2017, the withdrawal of IAAC MD 028 and the revision of APAC TEC1-008 |