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Excellence in Science

# Overview of Standard Methods Activities

**William Lipps**

**Standard Methods Joint Editorial Board**

**August 2025**

# Why do we need Standard Methods and Other Consensus Standards?

- Test methods, specifications, and terms by CONSENSUS
- Adopted in a process OPEN to all interested parties
- Each participant has an EQUAL input
- Committees established by BALANCE
  - Producers
  - Users
  - Others (EPA, States, Trade Associations, Consultants)
- All input and viewpoints are considered and treated fairly.
- Generally non-profit organizations of VOLUNTEERS

# What is the Standard Methods Organization?

Sponsored by APHA, AWWA, and WEF

Voluntary Consensus Standards Body (VCSB)

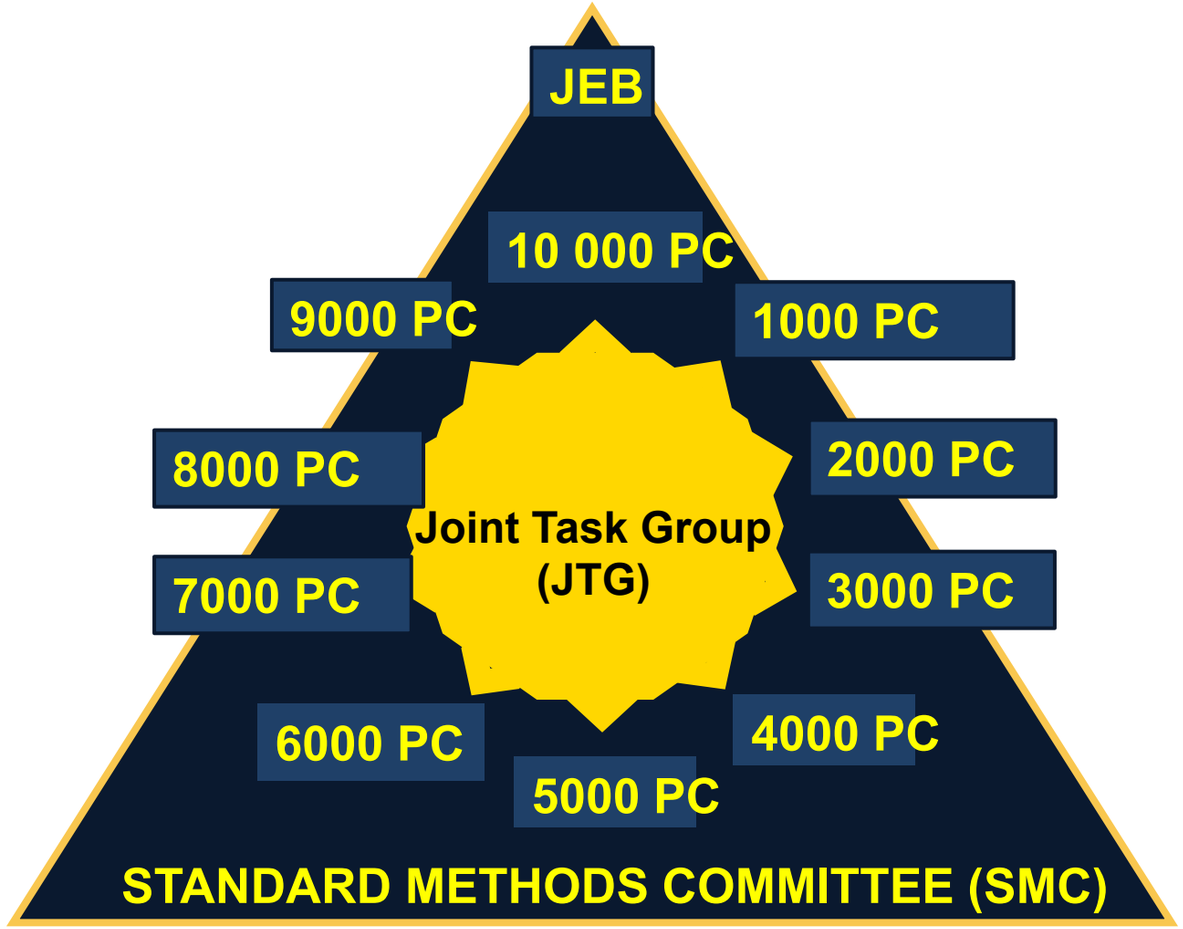
"***Organizations which plan, develop, establish, or coordinate voluntary consensus standards using agreed-upon procedures.***"
OMB Circular A -119-Revised (1998)

Two "Employees" + a bunch of Volunteers

Employees have no input (say) in the technical content of methods, the web site, or books; all technical content is by the volunteers.

# Standard Methods Organization Structure

- SMC = All who joined
  - Review and ballot methods
  - Participate in JTGs
  - Remain active
- JTG = groups who write or revise methods
  - Author the methods
  - Perform validations
  - Review according to expertise
  - Ballot the JTG draft
- PC = “oversee” JTGs in Part
  - Draft charge
  - Maintain schedules
  - Field questions
- JEB = guides direction of SM
  - Works with PCs
  - Ensures process followed
  - Web and “book” content
  - Spokespersons to stakeholders



# Who are the SMC members? That's You!

**Where do all the SMC members come from?**

## A Global Body of Experts

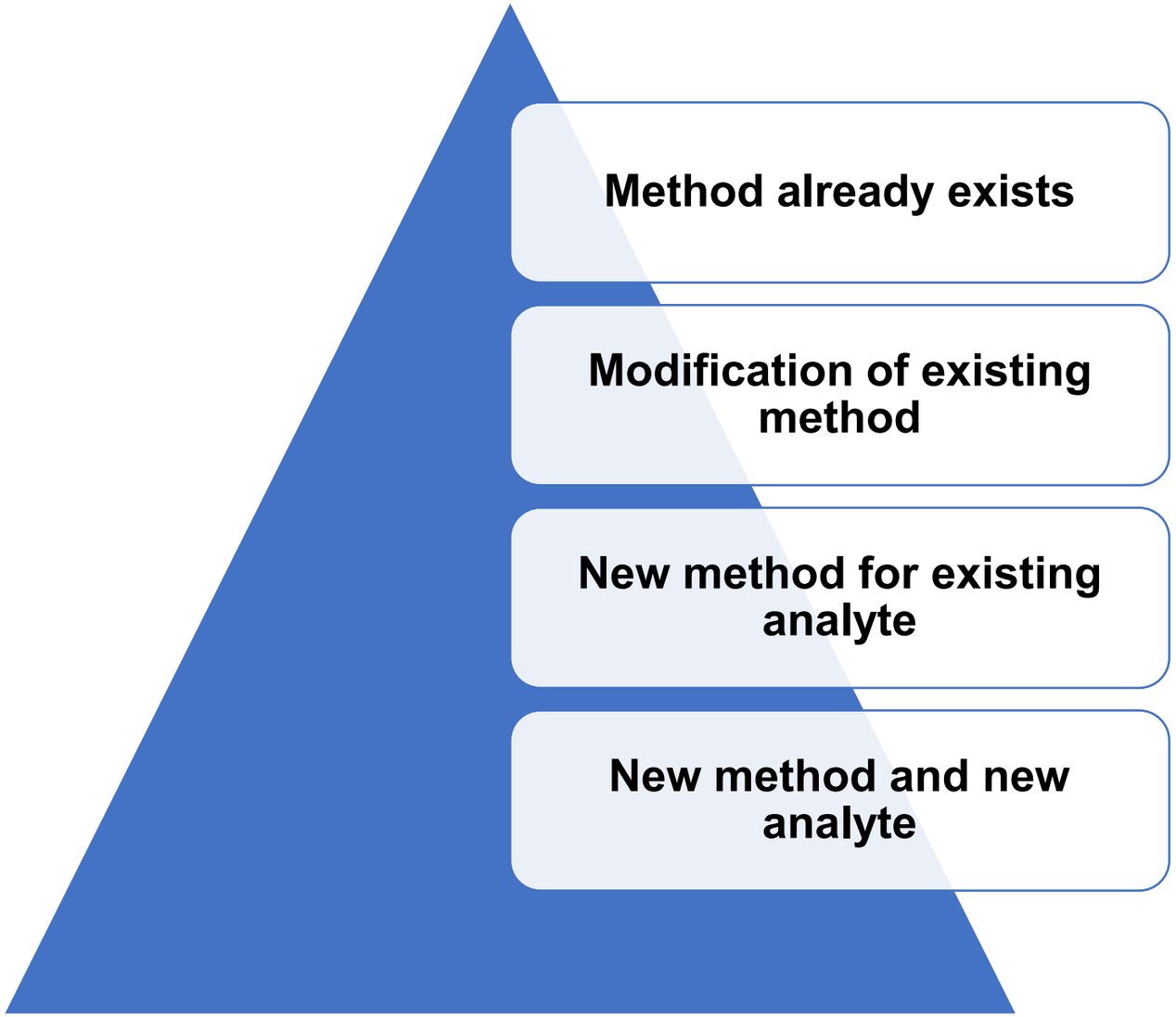
**Public Sector**

- Municipal Laboratories
- Government Accreditation Programs
- Government Agencies & Laboratories
- Public Academia

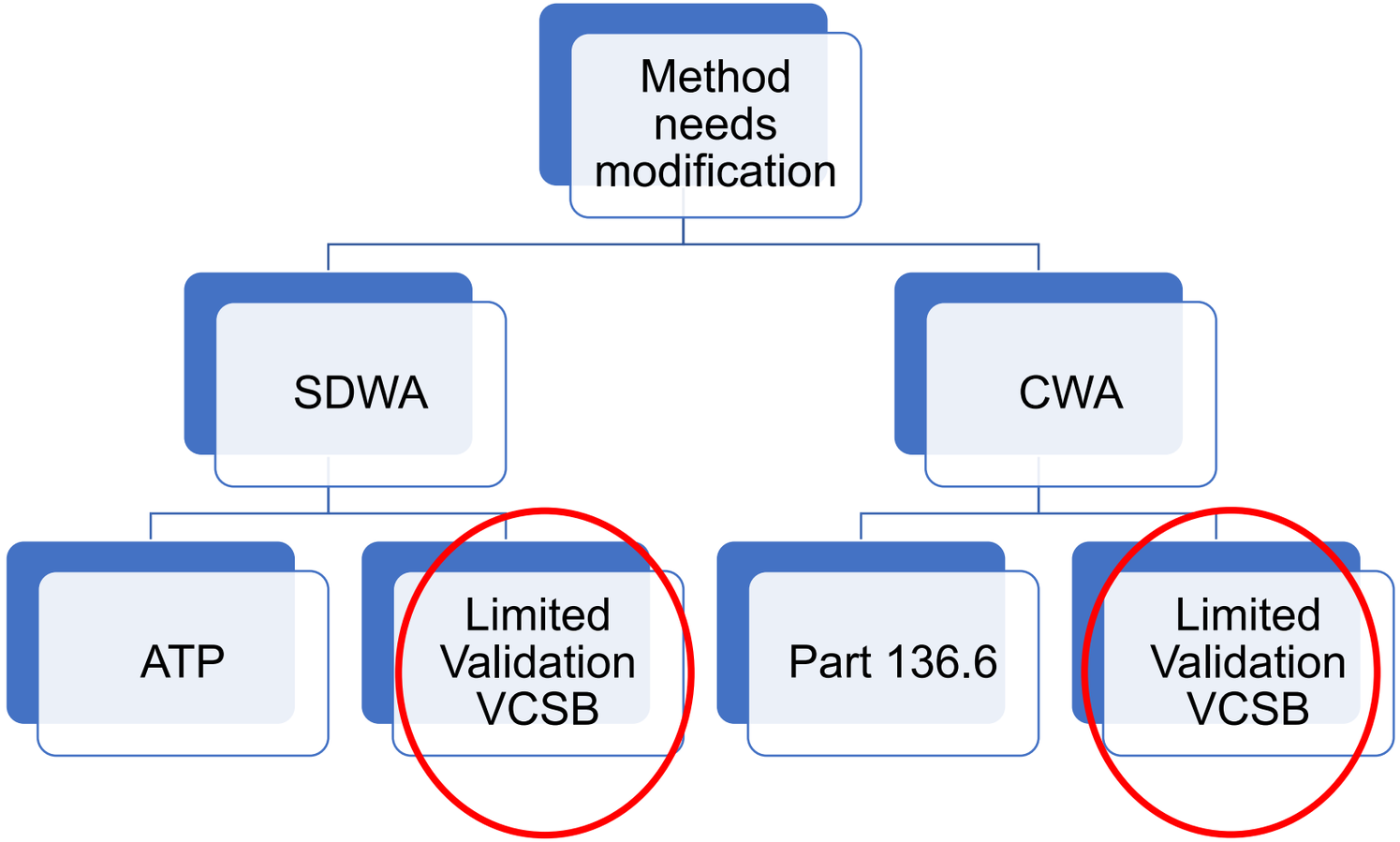
**Private Sector**

- Commercial Laboratories
- Industry Laboratories
- Consultants
- Manufacturers & Suppliers
- Non-governmental Accreditation Bodies
- Private Academia
- Retired but active experts

# Methods that Standard Methods Develops or Revises

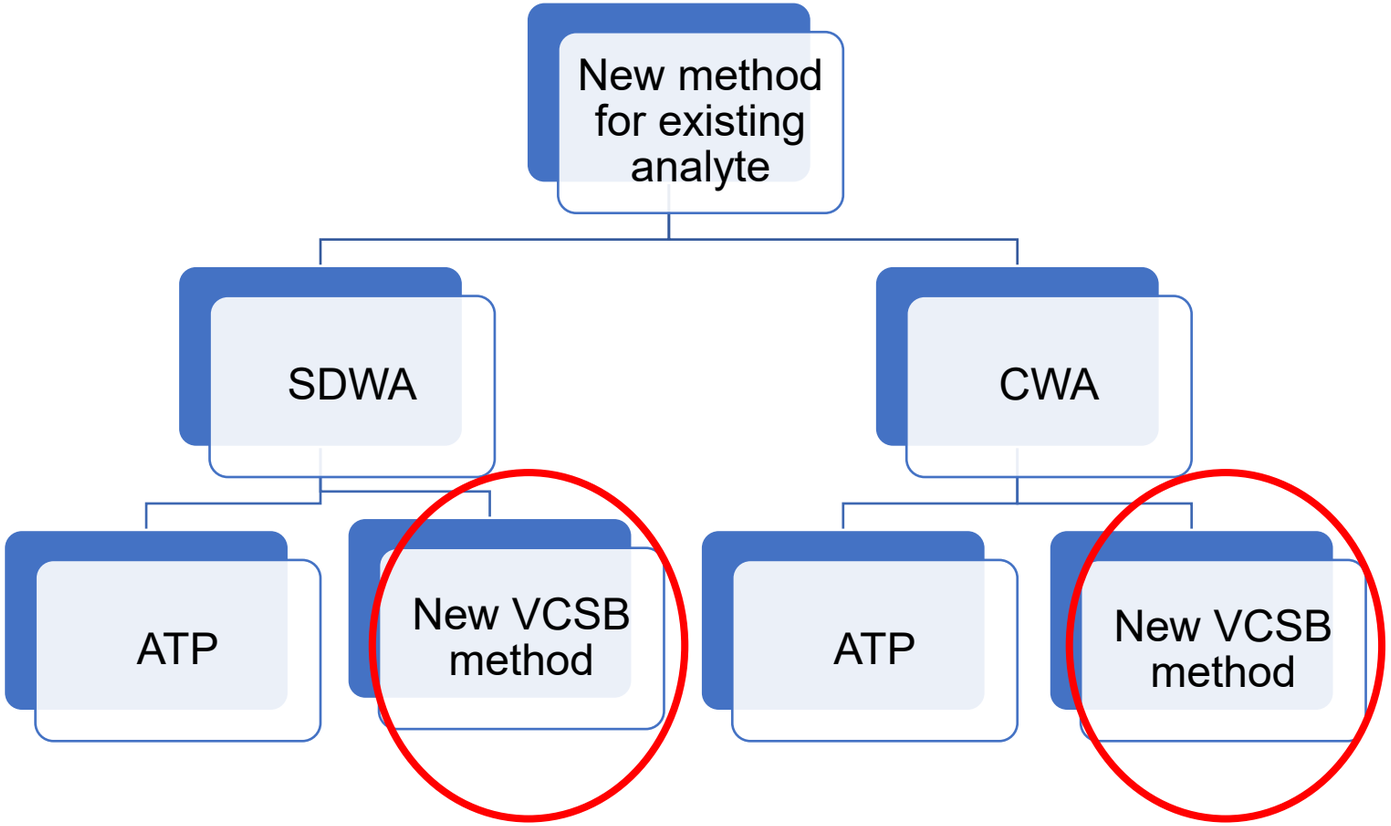


# Modification of Existing Methods – improve clarity or performance



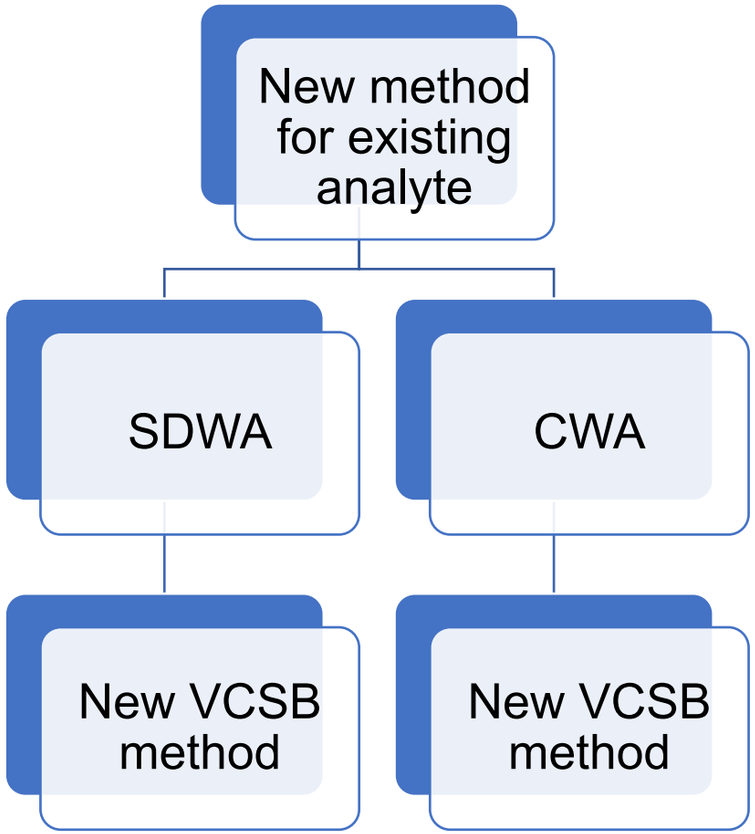

- MDL incorrect, or newer MDL needed
- Incorrect reagent recipe
- Any Technical Change
- Methods do not have to be for EPA
  - FDA
  - Other countries
  - Non-compliance
  - Aquaculture
  - agriculture

# New Methods for Existing Analytes




- There is already an existing method for the analyte
  - Different extraction
  - Different determinative step
  - Different reagents

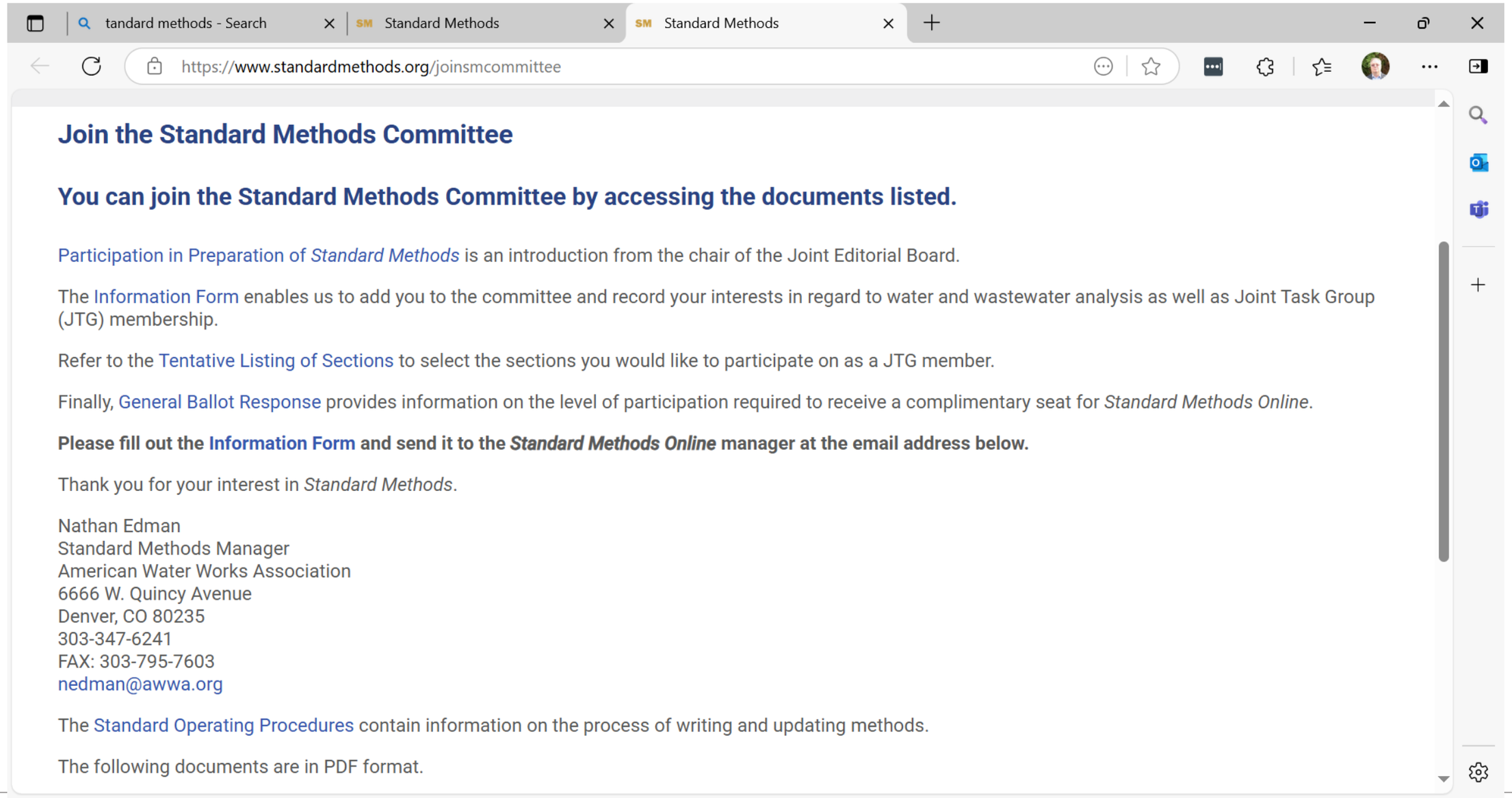
# New Method for a New Analyte



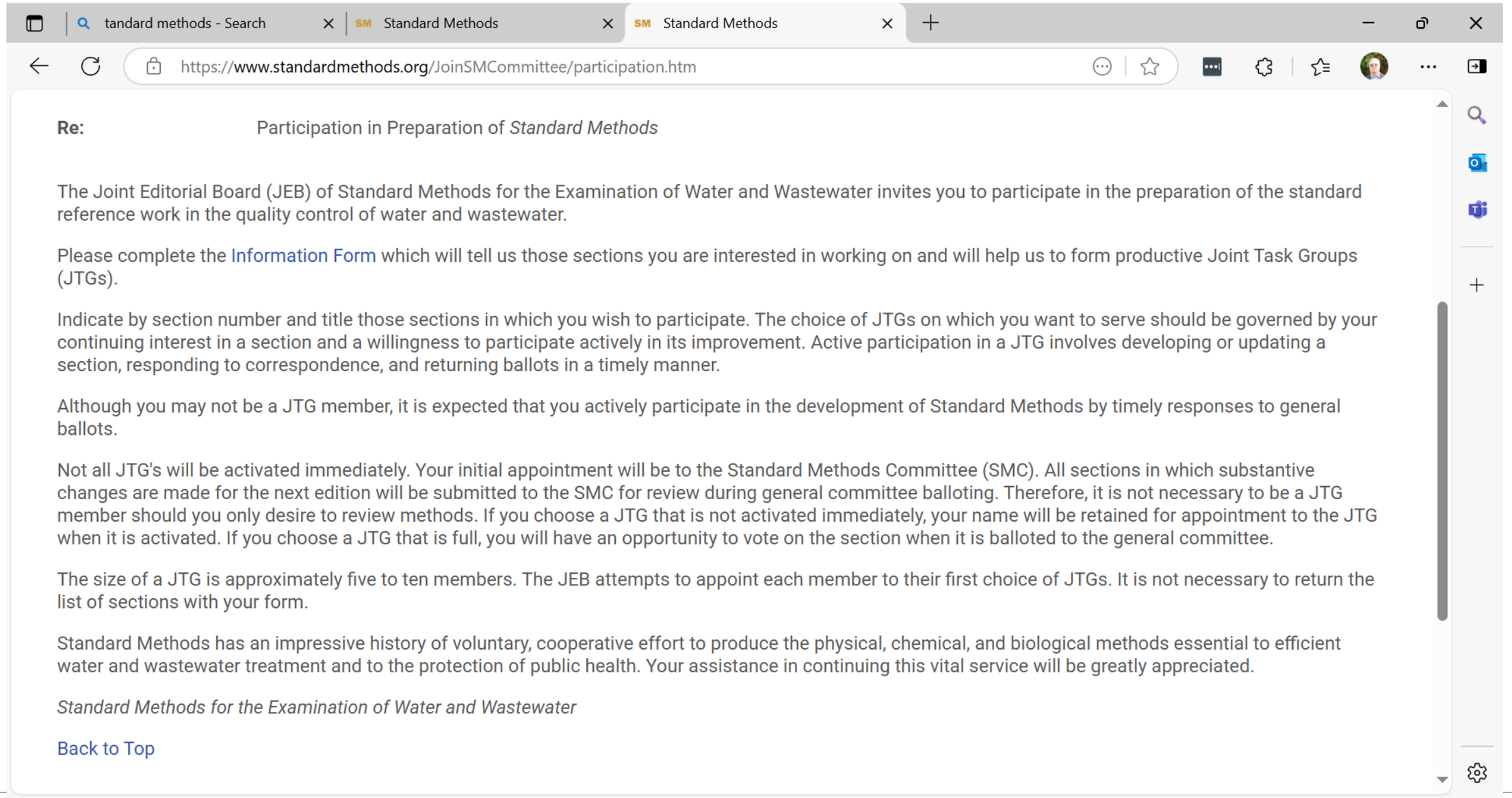

- No existing published standard
  - May be in literature
  - May be vendor app note
- Requires extensive validation

# What's new at Standard Methods?

# Click the “application” link



# The JEB says “hi”, now click “Information form”




**Re:** Participation in Preparation of *Standard Methods*

The Joint Editorial Board (JEB) of Standard Methods for the Examination of Water and Wastewater invites you to participate in the preparation of the standard reference work in the quality control of water and wastewater.

Please complete the Information Form which will tell us those sections you are interested in working on and will help us to form productive Joint Task Groups (JTGs).

Indicate by section number and title those sections in which you wish to participate. The choice of JTGs on which you want to serve should be governed by your continuing interest in a section and a willingness to participate actively in its improvement. Active participation in a JTG involves developing or updating a section, responding to correspondence, and returning ballots in a timely manner.

Although you may not be a JTG member, it is expected that you actively participate in the development of Standard Methods by timely responses to general ballots.

Not all JTG's will be activated immediately. Your initial appointment will be to the Standard Methods Committee (SMC). All sections in which substantive changes are made for the next edition will be submitted to the SMC for review during general committee balloting. Therefore, it is not necessary to be a JTG member should you only desire to review methods. If you choose a JTG that is not activated immediately, your name will be retained for appointment to the JTG when it is activated. If you choose a JTG that is full, you will have an opportunity to vote on the section when it is balloted to the general committee.

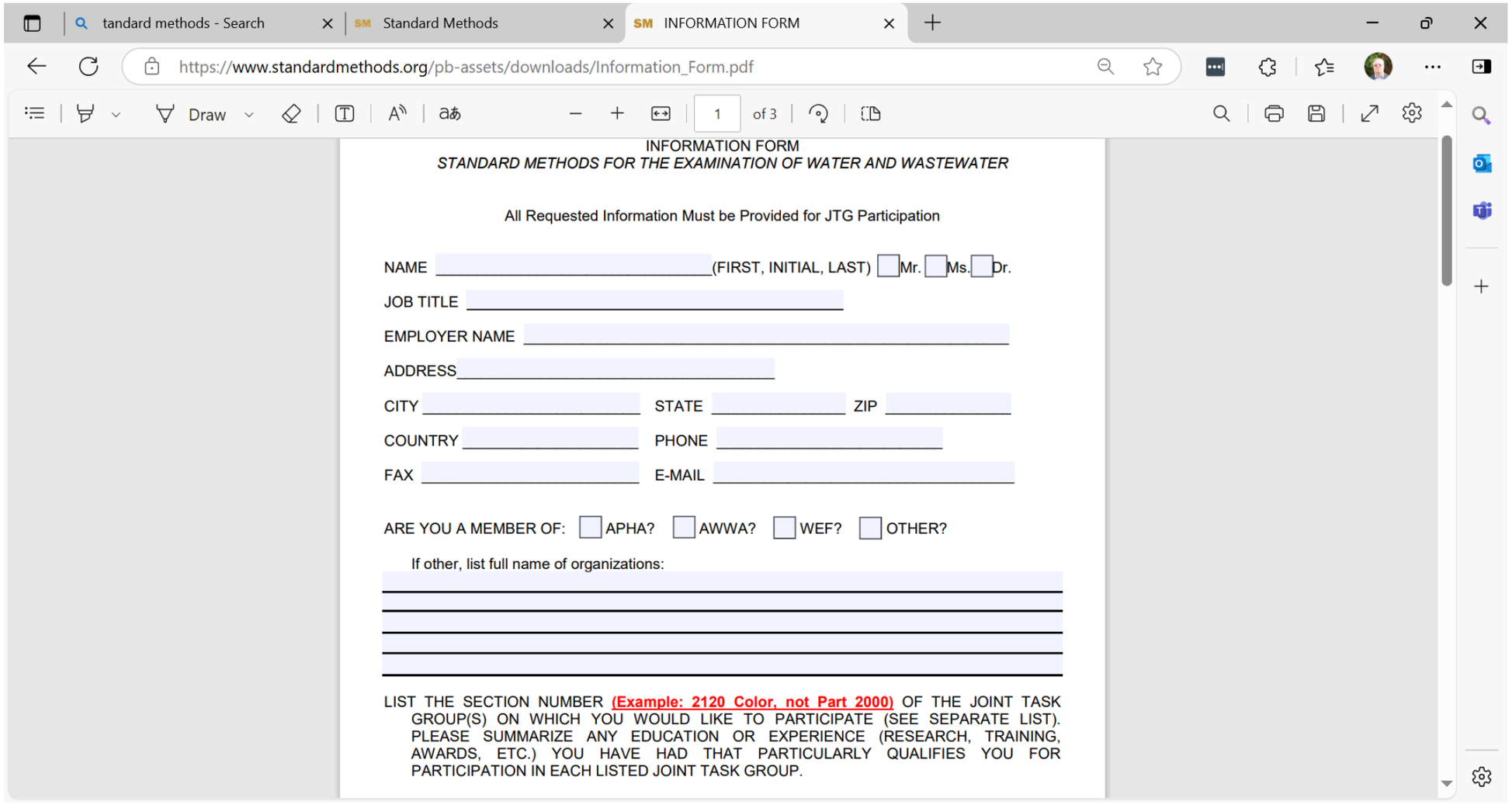
The size of a JTG is approximately five to ten members. The JEB attempts to appoint each member to their first choice of JTGs. It is not necessary to return the list of sections with your form.

Standard Methods has an impressive history of voluntary, cooperative effort to produce the physical, chemical, and biological methods essential to efficient water and wastewater treatment and to the protection of public health. Your assistance in continuing this vital service will be greatly appreciated.

*Standard Methods for the Examination of Water and Wastewater*

Back to Top

# Fill out the form and send it in.




INFORMATION FORM

*STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER*

All Requested Information Must be Provided for JTG Participation

NAME _____(FIRST, INITIAL, LAST) ☐Mr. ☐Ms. ☐Dr.

JOB TITLE _____

EMPLOYER NAME _____

ADDRESS_____

CITY _____ STATE _____ ZIP _____

COUNTRY _____ PHONE _____

FAX _____ E-MAIL _____

ARE YOU A MEMBER OF: ☐APHA? ☐AWWA? ☐WEF? ☐OTHER?

If other, list full name of organizations:

_____

_____

_____

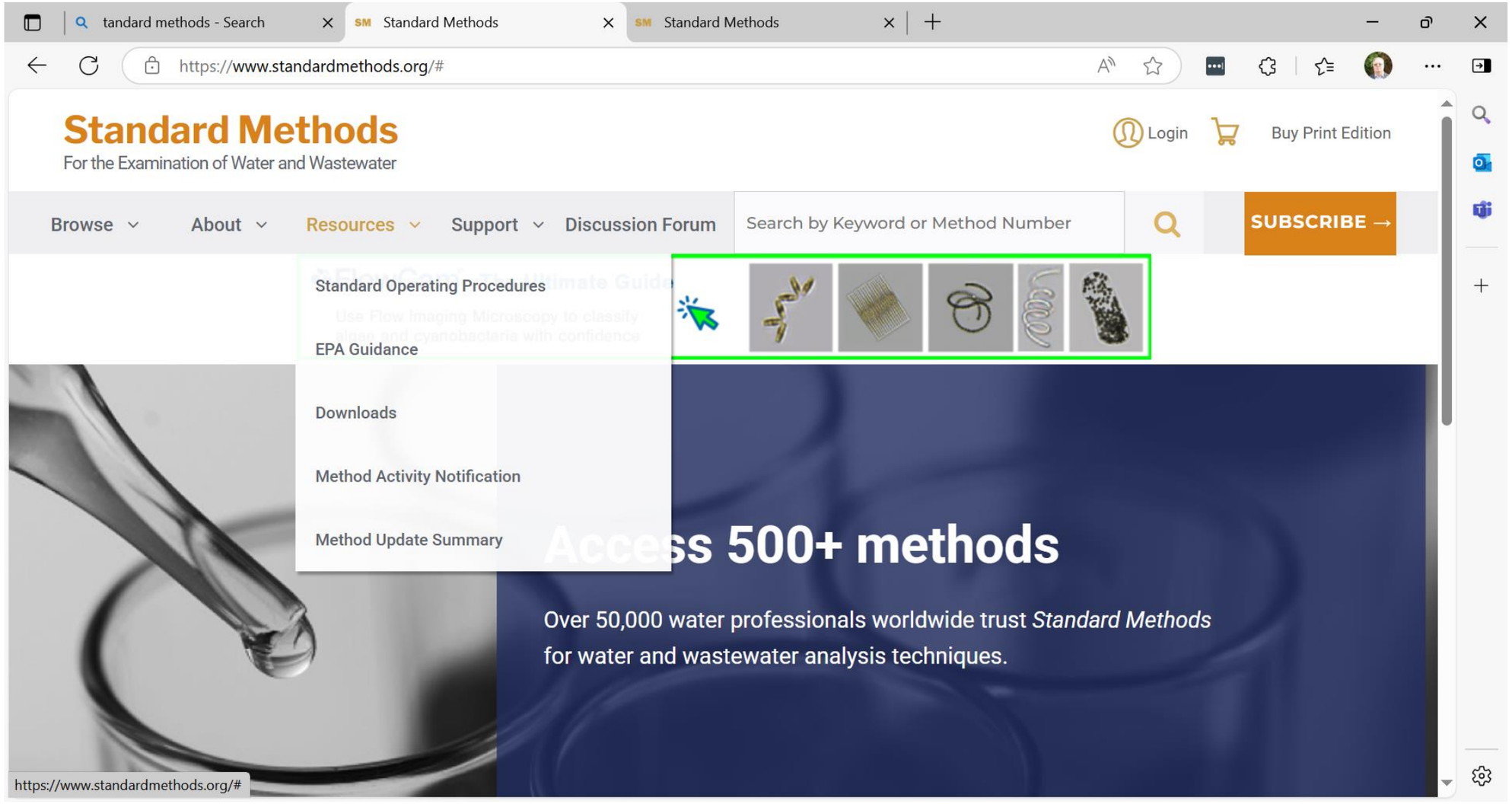
_____

_____

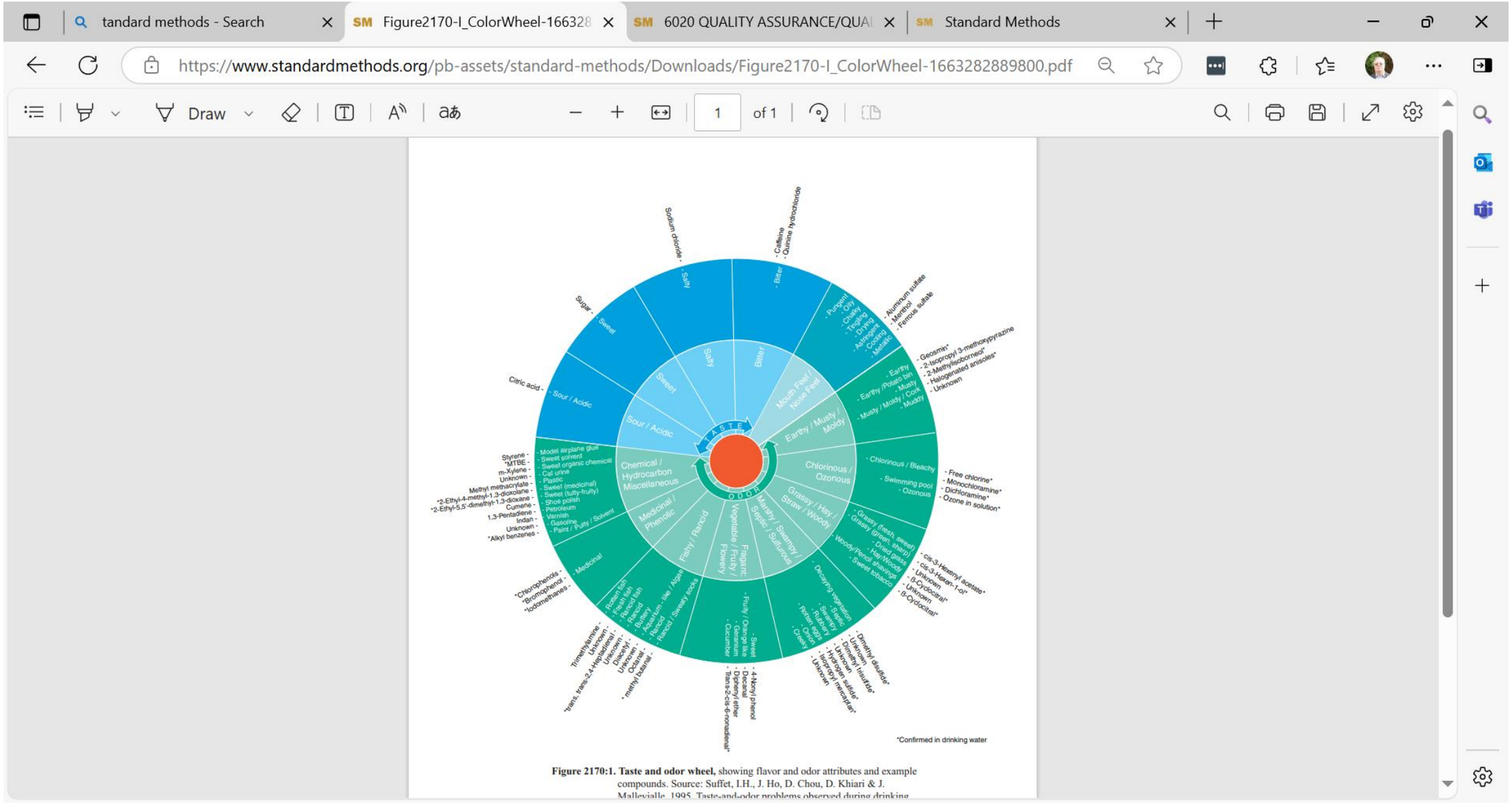
LIST THE SECTION NUMBER **(Example: 2120 Color, not Part 2000)** OF THE JOINT TASK GROUP(S) ON WHICH YOU WOULD LIKE TO PARTICIPATE (SEE SEPARATE LIST). PLEASE SUMMARIZE ANY EDUCATION OR EXPERIENCE (RESEARCH, TRAINING, AWARDS, ETC.) YOU HAVE HAD THAT PARTICULARLY QUALIFIES YOU FOR PARTICIPATION IN EACH LISTED JOINT TASK GROUP.

INFORMATION FORM

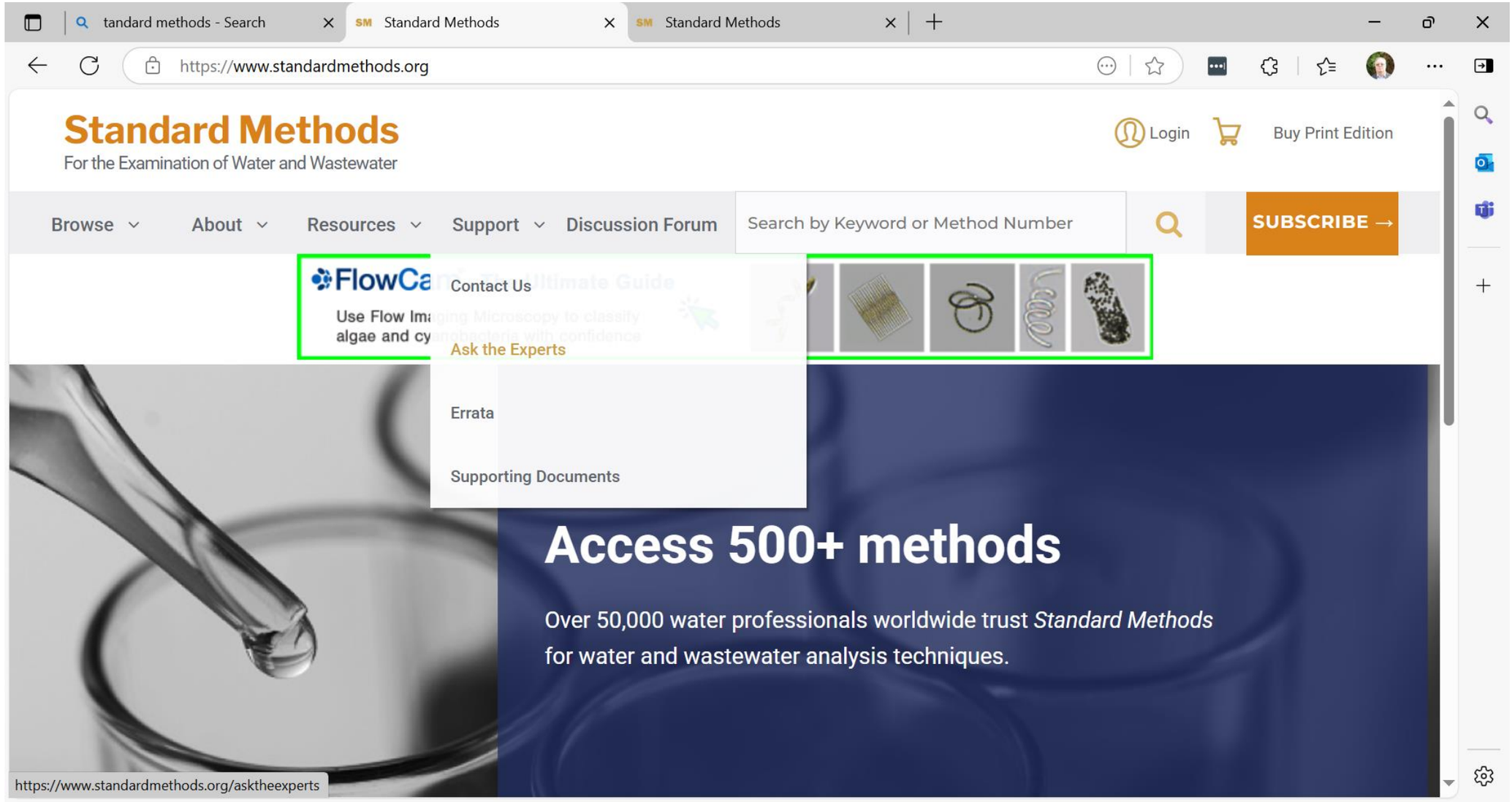
# Important Information under Resource Tab



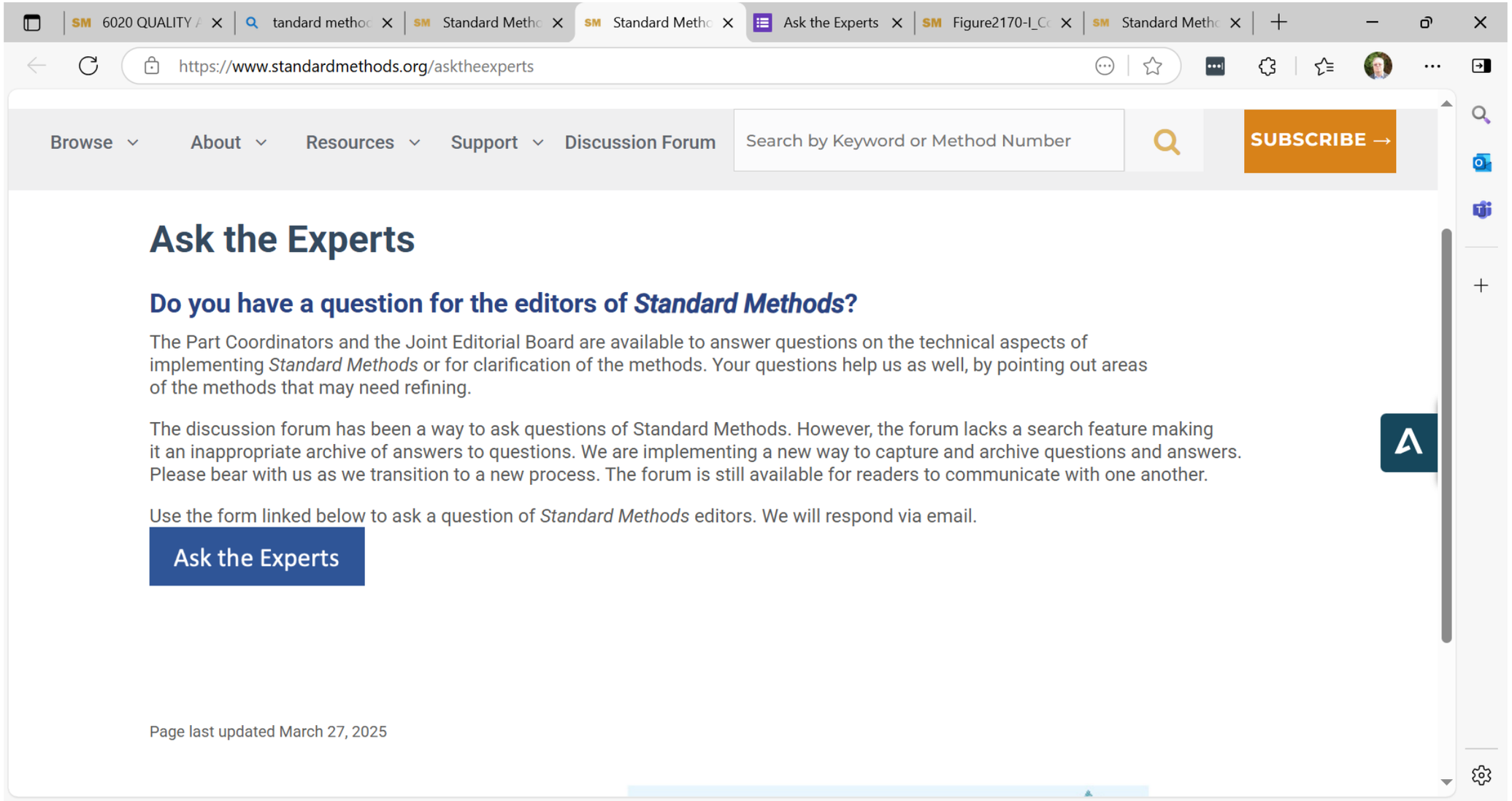
# Resources link provides information needed for methods



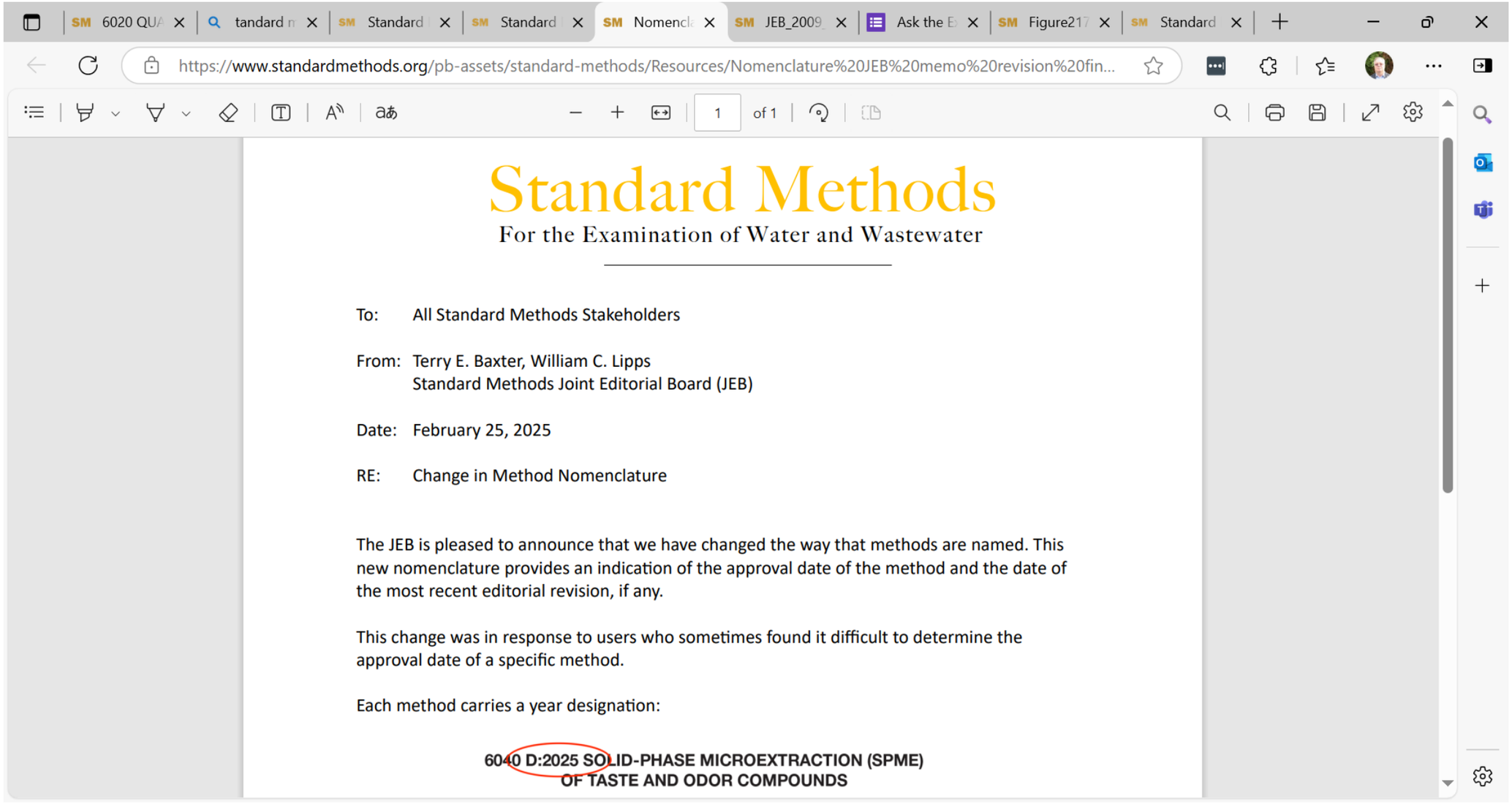
# New “ask the Experts” and “errata” under support tab



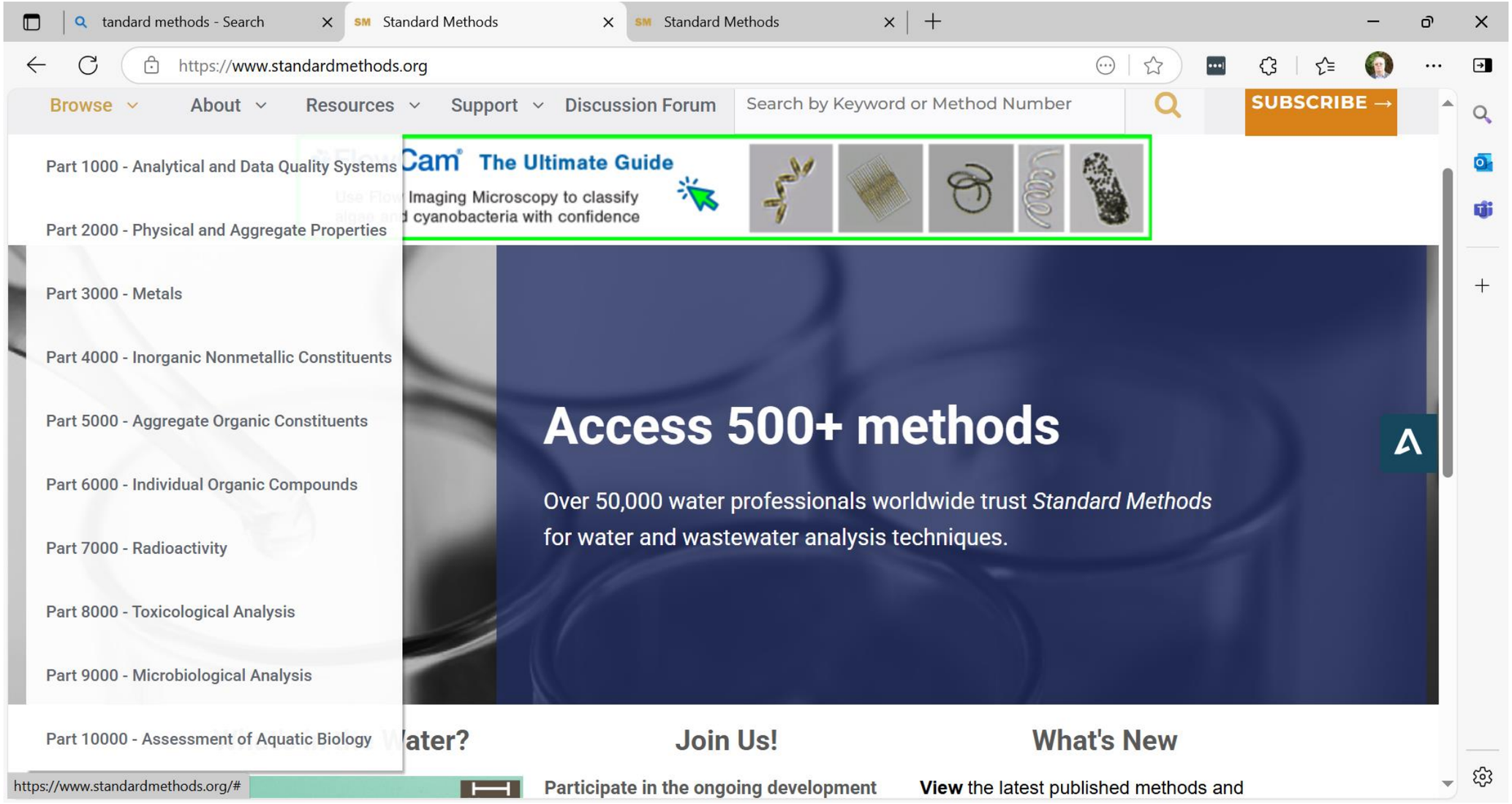
# “Ask the Experts” can help to clear ambiguity in text



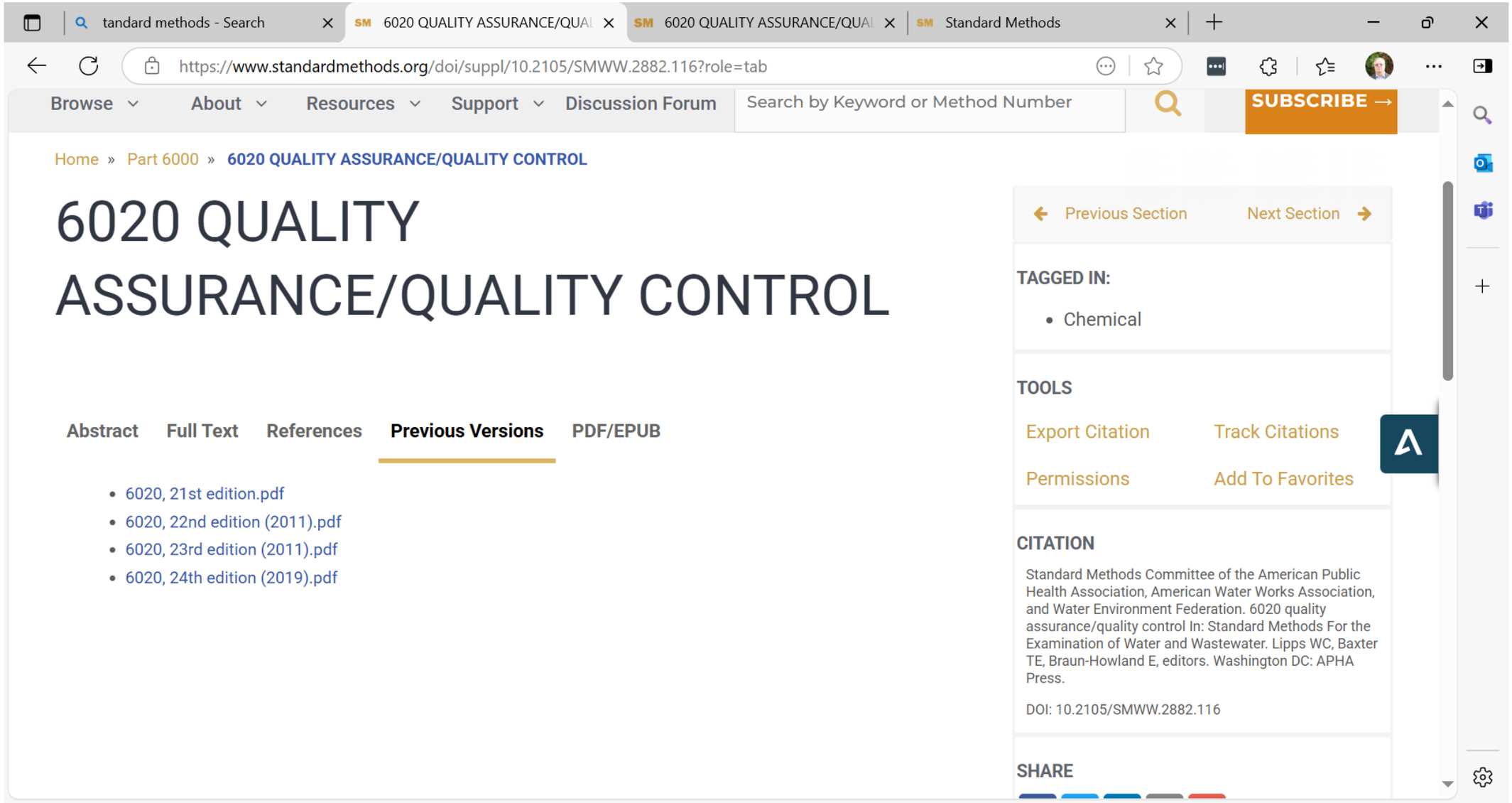
# Supporting documents may also include other information



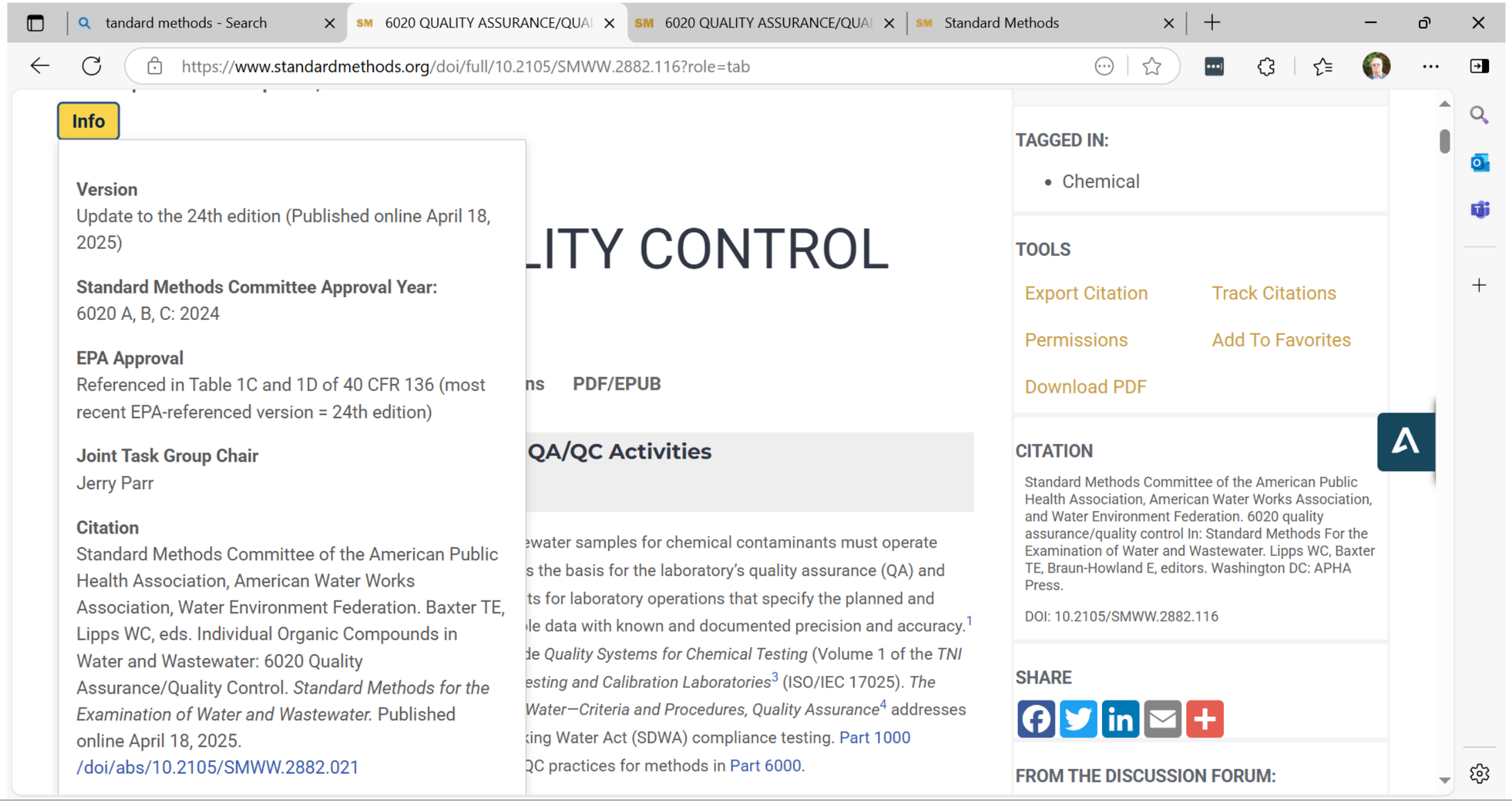
# Access to all methods, new and some older ones



# Previous versions are available in pdf.



# Info button (new) provides approvals and what changed



# Recently Published Methods – 2110 Appearance

https://www.standardmethods.org/page/summaryofupdates

- 2110A
  - water quality aesthetics, including appearance, odor, and taste
  - drinking water regulations and guidance levels for drinking water aesthetics published by the US EPA, the WHO, the EU, Canada, and India.
- 2110B
  - contains a color Guide to Particles and Color in Tap Water,
  - check-if-apply list for customer complaints
  - table to guide selecting the appropriate sensory method

# Recently Published Methods – 2150 Taste and Odor

https://www.standardmethods.org/page/summaryofupdates

- 2150B
  - Technical revisions for sample storage, temperature range method blank
- 2150C
  - Added Inter-lab study data
  - Technical changes
- 2150D
  - Attribute Rating Test added
    - Sensory analysis with Inter-lab study

# Recently Published Methods – 4500 PAA and PFA

https://www.standardmethods.org/page/summaryofupdates

- Entire section updated to add Performic Acid

# Recently Published Methods – 6020 QA/QC Organics methods

- 6020A editorially revised,
  - suggests TNI for QMS
- 6020B substantial revisions on Lab QC practices
  - Calibration
  - IDC
  - MDL and MRL
  - Blanks
  - LFB, LFM, LFMD
  - Internal Standards or Surrogates
  - Extracted Internal Standards
- 6020C added to include additional QC practices
  - Corrective Action
  - Frequency of QC
  - Data Qualifiers and Narratives

**Updating the Quality Control Requirements for Organic Methods in Standard Methods**

Crafting Consensus Standards
Oral Presentation

**Prepared by J. Parr**
The NELAC Institute, 210 S Lamar St., Weatherford, TX, 76086, United States

**Contact Information:** jerry.parr@nelac-institute.org; 817-308-0449

**ABSTRACT**

Section 6020 of Standard Methods contains the general Quality Control (QC) requirements for all methods for analyzing organic constituents. This section was last reviewed in 2011. A Joint Task Group (JTG) was created to review 6020 to ensure that it is up to date with modern QC practices for specific organic methods, including, but not limited to GC, GCMS, GC-MS/MS, LC. LCMS, and LC-MS/MS. The primary goal of the JTG was to revise Section 6020 to make it more consistent with 3020, 4020, and 5020 to the extent possible. In addition, ensure that Part 6020 terms and definitions do not conflict with Part 1000; however and if necessary, terms and definitions for organic analysis may be added. Specifically, there is no discussion of the various calibration techniques such as isotope dilution and minimal discussion on internal standards and surrogates. In addition, there is no discussion of the various MS/MS techniques, such as used in 6040 or 6810. A goal is to make SM 6020 a resource for laboratories regarding discussion on organic analysis including extractions, quality control procedures including those largely unique to organic methods, calibration models and when to use them, and instrument techniques.

# Recently Published Methods – 6040 Taste and Odor Compounds

- 6040 A, B, C, and E editorially revised
- 6040D completely revised
  - 19 compounds
  - Descriptors, such as earthy, musty, ....
  - Inter-lab study
  - Ruggedness testing
  - Reduced sample volume
  - Holding time study

**Method Development and Analysis of 19 Taste & Odor Compounds in Drinking Water Following SM 6040D**

Drinking Water
Oral Presentation

**Prepared by K. Kohoutek[1], H. Adams[2], S. Reeder[2], M. Ashman[3], E. Morales[4], C. Hoppe-Jones[1]**
1 - American Water, 1115 South Illinois St., Belleville, IL, 62220, United States
2 - Cypress Environmental Laboratory, City of Wichita Falls – Water Source & Purification Divisions, 4801 Big Ed Neal Drive, Wichita Falls, TX, 76310, United States
3 - Aqua Pennsylvania, 762 W. Lancaster Avenue, Bryn Mawr, PA, 19010, United States
4 - Weck Laboratories, 14859 Clark Avenue, Industry, CA, 91745, United States

**Contact Information:** katie.kohoutek@amwater.com; 618-210-8958

**ABSTRACT**

Drinking water samples are routinely tested for aesthetic water quality concerns such as the Taste & Odor (T&O) compounds geosmin and 2-methylisoborneol (MIB) by solid-phase microextraction gas chromatography-mass spectrometry (SPME GC-MS) following Standard Method (SM) 6040D. However, public water systems (PWSs) would benefit from a more robust T&O method, encompassing a diverse range of compounds, to monitor systems from source to tap to inform treatment decisions.

In this work, SM 6040D was revised to include 19 T&O compounds from multiple odor categories including earthy, musty, grassy, woody, fishy, septic, fruity, and sweet. Calibration ranges were chosen to bracket Odor Threshold Concentrations for each compound when possible. Method development, sample preparation improvements, holding times, and analysis of the expanded list of compounds will be discussed. Four laboratories with different instrumentation, columns, and SPME fibers participated in an interlaboratory comparison study, and method performance, accuracy, precision, reproducibility, and ruggedness will be examined. Additionally, method application through the analysis of source water, treated water, and reclaimed water will be reviewed.

# Recently Published Methods – 7020 Quality Systems (RadChem)

- Table 7020:1 updated with new acceptance limits for SDWA PTs

- 7020 A.3 Quality Control revised
  - Specify standard deviation for control charts
- 7020 A.3d equation correction

# New Method Activity – Balloting in Process

- 5210 BOD – revisions for clarity
  - Based on comments
  - CBOD control limits
  - Blanks
  - GGA
- 6010 Introductory Material to organic analysis
- 10120 Cyano qPCR methods
- 10200 Plankton – Imaging method

https://www.standardmethods.org/methodactivitynotification

# New Method Activity – in process or seeking volunteers

## Part 1000

1020 Quality Assurance **JTG in progress**

1040 Method Development **JTG forming, seeking volunteers, chair or co-chairs**

1050 Expression of Results **JTG forming, seeking volunteers, chair or co-chairs**

1080 Reagent Water **JTG forming, seeking volunteers, chair or co-chairs**

1090 Lab Occupational Health and Safety **JTG in progress**

## Part 2000

2020 QA/QC **JTG in progress, volunteers welcome**

2120 Color **JTG forming, seeking volunteers**

2130 Turbidity **JTG in progress, volunteers welcome**

2540 QA/QC **JTG forming, seeking volunteers**

2710: Tests on Sludges

# New Method Activity – in process or seeking volunteers

## Part 3000

Part 3000 New method for metals speciation analysis with capability to measure trace levels. **Recruiting JTG members**

3020 Quality Assurance/Quality Control and information for JTG to review/revise to ensure essential quality control and equipment supplies and materials relevant information included. **Seeking Joint Task Group Chair**

3125: Interference Correction-REE: **Seeking labs for interlaboratory study; JTG in progress**

# New Method Activity – in process or seeking volunteers

## Part 4000

4500-$F^-$ Fluoride **Seeking volunteers**

4500-$NH_3$ **Seeking volunteers**

4500-$N_{org}$ **JTG in progress**

4500-N: Nitrogen **Recruiting for JTG members; seeking labs to participate in interlaboratory study**

Method for online measurement technologies; in collaboration with EPA.

**Actively recruiting; volunteers welcome**

## Part 5000

5220: Chemical Oxygen Demand (COD) **JTG in progress**

Method for online measurement technologies; in collaboration with EPA.

**Actively recruiting; volunteers welcome**

# New Method Activity – in process or seeking volunteers

## Part 6000

6040 Taste and Odor Compounds for method C Purge and Trap **Seeking JTG Chair**

6200 Volatile Organics **JTG in progress**

6410 Extractable Organics **JTG in progress**

6630 Organochlorine Pesticides **JTG in progress**

6910 New Method: PFAS **JTG in progress**

## Part 7000

7500-$^{3}$H Tritium: Screening Method **JTG in progress**

7500-U Uranium **JTG in progress**

# New Method Activity – in process or seeking volunteers

## Part 9000

**See Next Slide**

9020: QA/QC **JTG in progress**

9213 G Enzyme Substrate, P aeruginosa **seeking JTG chair and members**

9215 E HPC, Enzyme Substrate Method, **seeking JTG chair and members**

9223: Enzyme Substrate Coliform Test **JTG in progress**

9230 D: Fecal Enterococci, Fluorogenic Substrate Test **seeking JTG chair and members**

## Part 10000

10120 - Cyano qPCR; **JTG in progress**

10210 Plankton, Method J: Flow Imaging Microscopy **JTG in progress**

10500 Benthic Macroinvertebrates **seeking JTG chair and members**

10750 Nematodes; **seeking JTG chair and members**

# Part 9000 update in detail

NEXT MEETING: ST. LOUIS, MISSOURI - AUGUST 4-8 2025

Environmental Measurement Symposium

*a combined meeting of the Forum on Environmental Accreditation and the National Environmental Monitoring Conference*

Home | About EMS | EMS 2025 | 2025 Program | Previous Conferences | Register

Information For...

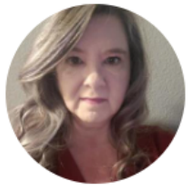
- Attendees
- Exhibitors
- Presenters
- Innovative New Technology Showcase
- Charlie Carter Award Nominations

Submit Presentation for EMS 2025

Important Presenter Dates

| Milestone | Due |
|---|---|
| Abstracts | 2-7-25 |
| Speaker Registration | 6-20-25 |
| Presentations | 7-11-25 |

## Standard Methods Part 9000 Update



Crafting Consensus Standards
Oral Presentation

**Prepared by E. Turner**
Eurofins Environment Testing, 1712 Addison Grace Lane, Wylie, TX, 75098, United States

**Contact Information:** Elizabeth.Turner@et.eurofinsus.com; 945-248-7271

### ABSTRACT

Standard Methods Part 9000 Update
Standard Methods for the Examination of Water and Wastewater is a consensus organization that develops and maintains analytical methods for water and wastewater analysis. The methods are organized in ten parts. Part 1000 serves as an introduction to analytical and quality systems while the remaining nine parts are organized based upon the type of analyte such as Part 3000 for Metals and Part 5000 for Aggregate Organic Constituents. Each Part is further organized by sections based on analytical group and/or analytical technique. Methods are contained in each section. Sections and Methods are reviewed and updated

Part 9000 of Standard Methods is on Microbiological Analysis of Water and Wastewater. There are currently several sections under review and revision:
• Section 9020 Quality Assurance / Quality Control, and
• Section 9223 Enzyme Substrate Coliform Test.
A new section is currently under development:
• Section 9810 Wastewater Surveillance.
Several other sections in Part 9000 are due for review and revision.

The author will present the current status of reviews and revisions for Part 9000 and discuss how individuals can become involved in Part 9000 activities.

Thursday
Crafting Consensus
10:35 – 11:00

# Join the Standard Methods Committee

Participation in Preparation of *Standard Methods* is an introduction from the Joint Editorial Board.

The Information Form enables us to add you to the committee and record your interests in regard to water and wastewater analysis as well as Joint Task Group (JTG) membership.

Refer to the Tentative Listing of Sections to select the sections you would like to participate on as a JTG member.

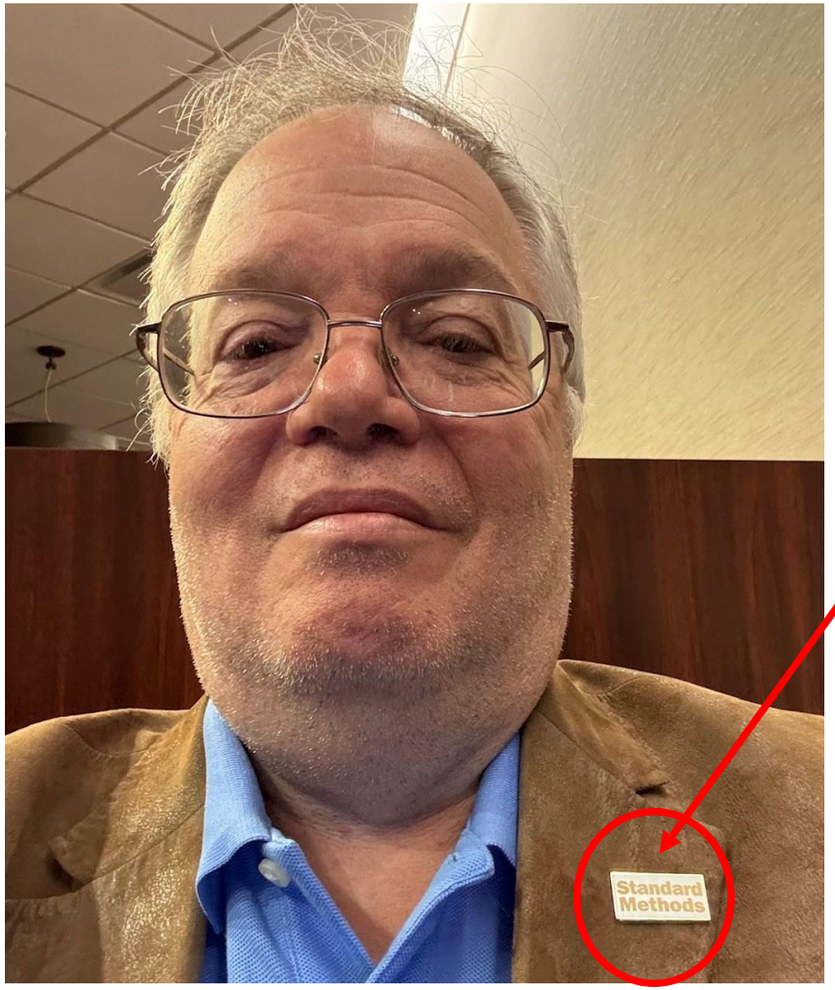
Finally, General Ballot Response provides information on the level of participation required to receive a complimentary seat for *Standard Methods Online*.

**Please fill out the Information Form and send it to the *Standard Methods* manager.**

Thank you for your interest in *Standard Methods*.

# Questions?

wclipps@shimadzu.com




Ask for your member pin