

Accurate Monitoring of Surface Ozone Virtual Workshop 5-9 October 2020

### Task Group 1: Identifying and implementing change Summary Report

9 October 2020

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#### ; desirable to decide how to name the new ozone cross-section value

- i. based on the academic tradition (first author.year): Hodges.2019
- ii. inspired by WMO/GAW system for scales (organisation.compound.year): CCQM.O3.2019
  - How to make an official announcement, where to publish (anybody can refer to the announcement regarding the name)
- iii. other alternatives



How should we reference the new value?



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Total of 17 responses

### One suggestion for "BIPM.O3.2019"

#### ; how to implement the new value

- 1) Related stakeholders to modify their regulation/directive documents to adopt the new value
  - i. any issues to be discussed

#### Main takeaways:

- Some regulations may not change (EU), but others will have to modify documentation due to reference to Hearn value (USA).
- Implementation changes can move forward without the modification of directives treat these separately.
  - Some target thresholds based on separate criteria, e.g., WHO determined health effects
- More important to change the standards, e.g., ISO 13964.

#### ; how to implement the new value

- 1) Related stakeholders to modify their regulation/directive documents to adopt the new value
  - any issues to be discussed
- 2) NMI/DIs to implement the new value in SRPs at the same date (e.g., 1 Jan. 2022).

All agree on changing to the new value in the SRPs. Now just a matter of when (and how).



#### ; how to implement the new value

- 1) Related stakeholders to modify their regulation/directive documents to adopt the new value
  - i. any issues to be discussed
- 2) NMI/DIs to implement the new value in SRPs at the same date (e.g., 1 Jan. 2022).
- 3) Analyzers in networks
  - i. rely on calibrations as each calibrated instrument is adjusted/modified
- There will be a transition period (~1 y) for all instruments to be calibrated.
  - Most calibrations occur on an annual basis.
- Will need to **flag data** to indicate which value is being used.
  - This will help with issues of not knowing which stations are in the process of changing, or have decided not to change
- Need detailed instructions and guidelines
- Instrument changes may not be required if the analyzers meet acceptance criteria

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- 3) Analyzers in networks
  - i. rely on calibrations as each calibrated instrument is adjusted/modified
  - ii. recommend the same change as within SRP in analyzers already deployed in the field at the same date
- This may rely too heavily on manufacturers
- Some changes may be possible in the field (Teledyne), but others difficult (Thermo)
- Not enough transparency for reliable data reporting
- May not be able to meet the same date, due to annual time scale of calibrations
- We cannot enforce the implementation throughout various measurement networks
  ITECGM

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- 3) Analyzers in networks
  - i. rely on calibrations as each calibrated instrument is adjusted/modified
  - ii. recommend the same change as within SRP in analyzers already deployed in the field at the same date
  - iii. other alternatives (e.g., changing slopes by 1.23% at the same date)
- This is the easiest option
- But may not actually be done no requirement/guidelines to change if within acceptance

#### ; how to implement the new value

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- 2) NMI/DIs to implement the new value in SRPs at the same date (e.g., 1 Jan. 2022).
- 3) Analyzers in networks
  - i. rely on calibrations as each calibrated instrument is adjusted/modified
  - ii. recommend the same change as within SRP in analyzers already deployed in the field at the same date
  - iii. other alternatives (e.g., changing slopes by 1.23% at the same date)
  - iv. manufacturers can be requested to ensure that any new analyzers built after the date are programmed with the new value
- 4) Instructions/guidelines are needed for each approach or consensus method?

### **Question 2:** Will a change be mandatory or voluntary?

Q5

Answered: 56 Skipped: 6

CCQM

Would a process based on voluntary adoption of the new value lead to universal implementation?



#### ♀ Q7

Should each stakeholder community press for mandatory uptake of the new value?



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## **Question 2:** Will a change be mandatory or voluntary?

**Q**5

Would a process based on voluntary adoption of the new value lead to universal implementation?

♀ Q7

Should each stakeholder community press for mandatory uptake of the new value?

- Different opinions, no set consensus.
- Many would prefer mandatory, but enforcement is not attainable (we do not have the authority).
- Ideas for stronger wording to emphasize the importance of implementation
- "Essential", "strongly recommended", etc.
- Avoid "voluntary" too weak, not as effective/convincing
- Agreement on the need for documenting cross-section values in the data



## **Consensus Opinion**

- How do we clearly identify the change being made?
  - i. Naming: CCQM.O3.2019
    - a. Need to decide how/where to make an official announcement
  - ii. How to implement the change
    - a. Related stakeholders to modify their regulation/directive documents to adopt the new value
      - Some regulations may not change (EU), but others will have to modify documentation due to reference to Hearn value (USA)
      - Implementation changes can move forward without the modification of directives treat these separately
      - More important to change the standards, e.g., ISO 13964 (all directive document just refers to ISO 13964 so that they don't need to be changed later)
      - Agrees on separating this issue from the implementation of the new cross-section value
    - b. NMIs/DIs/Institutes to implement the new value in SRPs at the same date
      - Agree on changing to the new value in the SRPs. Now just a matter of when (and how).
    - c. Analyzers or monitors in networks
      - Rely on calibrations
      - There will be a transition period (~1 y) for all instruments to be calibrated (most calibrations occur on an annual basis)
      - Need to <u>flag data</u> to indicate which value is being used. This will help with issues of not knowing which stations are in the process of changing, or have decided not to change
      - Need detailed instructions and guidelines

## **Consensus Opinion**

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