

Heated Tobacco Products (HTP) Task Force: Update for ISO/TC126/WG22

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Objectives

- 1. Establish standardized terminology and definitions that encompass all categories of Heated Tobacco Products.
- 2. Define one or more specific approaches and regimes for the generation and collection of emissions for Heated Tobacco Products.
- 3. Define and agree on priority compounds to be analysed (or not); review current CRM suitability, edit, or develop methods for Heated Tobacco Products.



Work in Progress: 2 year PLUS plan

Proposed New Project	Link to Objective	Timeline (start)	Timeline (completion)
Proficiency Study – Basic analytes and CO, NO, NOx	Objective 3	Q3, 2020	Q2, 2022
Puffing Regime CRMs for HTP sub categories (depends on Prof Study Outcome)	Objective 2	Q3/Q4 2021	Q2, 2022
Draft CRMs for Basic analytes and CO, NO, NOx (depends on Prof Study Outcome)	Objective 3	Q1, 2022	Q3, 2022
Collaborative study for water activity	Objective 3	Q2, 2022	Q1, 2023
Study for carbonyls	Objective 3	Q2, 2022	Q2, 2023
Study for TSNAs	Objective 3	TBC	TBC
Study for Volatiles	Objective 3	TBC	TBC
Study for B[a]P / PAHs	Objective 3	TBC	TBC



Work in Progress: Building 5 year plan

At this stage discussion topics:

- Main focus: Targeted analytes in emissions
 - Extending and prioritising current targeted analytes list
 - Tobacco specific
 - HTP specific
- Non-targeted analysis
 - Highly specialised
 - Complex and multiple approaches
 - Potential to develop "Best Practices"
- > HTP sub-category reference products

> Potential specific tobacco related toxicants:

- Nicotine (potentially other alkaloids and form (whether this should consider: aerosol pH?))
- CO, NO, NOx
- PAHs (Benzo[a]pyrene)
- Carbonyls
- TSNAs
- Volatiles
- Ammonia
- Carbon Black
- Other constituents: pyridine, dimethyl trisulfide, acetoin, methylglyoxal
- Metals (raised in other sections)



Proficiency Study: Basic Analytes, CO, NO and NOx

Analytes:

- Glycerol, propylene glycol, nicotine, CO, NO, NOx and
- ACM (DML for aHTP)

Four products:

- eHTP Philip Morris and British American Tobacco
- aHTP Japan Tobacco
- CHTP RJ Reynolds Tobacco

16 laboratories participated

Pending results, aim to:

- Support puffing regime CRMs for each sub-category
- Draft CRMs for basic analytes and CO, NO, NOx

WORK IN PROGRESS

Report being drafted



Water Activity

- Conduct a collaborative study to determine if CRM N°88, Determination of Water Activity of Tobacco and Tobacco Products is fit for use for HTP consumables.
- 9 laboratories shared interest in participating
- Conduct study in parallel with carbonyls study
 - Same products to be distributed for both studies



Carbonyls

- To conduct a study to determine the carbonyls method and develop a CRM.
- Focus: 8 carbonyls on HC list
 - Formaldehyde, Acetaldehyde, Acrolein
 - > Acetone, Propionaldehyde, Crotonaldehyde, MEK, Butyraldehyde
- Proposed method drafted
- Small ring-trial being organised



Summary

- Studies being planned over the next 2 years:
 - Water Activity
 - Carbonyls in emissions
 - TSNAs in emissions
 - Volatiles (e.g. 1,3-butadiene, benzene) in emissions
 - B[a]P/PAHs in emissions



Collaboration between CORESTA and ISO

ISO members (who are not members of CORESTA) are welcome to participate in CORESTA HTP Task Force studies as "Guests"

- If interested in finding out more please contact:
 - > HTP TF specifics:
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 - Jason.W.Flora@altria.com
 - Participation in CORESTA studies:
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