



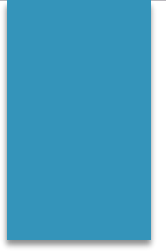
Residual Solvents Update

MAY 24, 2021

Meeting

- ▶ May 10
 - ▶ Finalized 8260 Method review
 - ▶ Conducted 3585 method review
 - ▶ Agreed to approve the 4 methods (2 prep 2 analytical)
- ▶ Finalized the motions over email communications

Motions



Approved Analytical Methods for Residual Solvents

- ▶ METHOD 8015D NONHALOGENATED ORGANICS USING GC/FID
 - ▶ Less expensive set up cost
 - ▶ Has some limitations
- ▶ METHOD 8260D VOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY
 - ▶ More expensive start-up cost
 - ▶ Has the best potential for economic success

Consensus Analytical Method Adaptations

- ▶ Following of EPA SWA-846 guidance from the methods and/or references to compendium documents is required. More QC is allowable, but less is not.
- ▶ Only approved preparation methods
- ▶ Solvents listed in WAC 314-55-102 cannot be used in any procedural step during the prep method.
 - ▶ Methanol, Hexane, DCM, etc.
- ▶ Fuel specific procedural steps
 - ▶ Such as 7.4 in 8015D.
- ▶ Follow all WSLCB rule for sampling procedures. Follow the approved methods for samples treatment as storage upon receipt

Contested Adaptation: Limiting types of calibration curves

Limitation to match Metals and WAC 314-55-103

- ▶ Prevents abuse of curve types to hide instrument maintenance and/or method performance
- ▶ Similar with the metals workgroup's direction
 - ▶ i.e. it is allowing only one curve type for solvent testing
- ▶ Adheres to WAC 314-55-103
 - ▶ Although we are requiring 5 points compared to 4

Open to all types allowed by the parent method

- ▶ Method outlines what is/isn't allowed
- ▶ Method is validated using these curve types
- ▶ Might be necessary to efficiently and accurately perform the required analysis

Approved Preparation Methods for Residual Solvents

- ▶ METHOD 3585 WASTE DILUTION FOR VOLATILE ORGANICS
 - ▶ For use on isolates, distillates, or very viscous, heavy oil-based products
- ▶ METHOD 5021A VOLATILE ORGANIC COMPOUNDS IN VARIOUS SAMPLE MATRICES USING EQUILIBRIUM HEADSPACE ANALYSIS.
 - ▶ For use on less-viscous lighter oil products

Consensus Preparation Method Adaptations

- ▶ Following of EPA SWA-846 guidance from the methods and/or references to compendium documents is required. More QC is allowable, but less is not.
- ▶ “Appropriate Solvent”
 - ▶ Both of these methods (but primarily 3585) often utilize methanol, (or another solvent from the WAC 314-55-102 list) during the procedure. Obviously this cannot happen in cannabis products
 - ▶ An organic solvent that is capable of accomplishing the dilution of the sample while still able to meet the quality control requirements of this method, the proceeding analytical method, and regulatory requirements and is NOT a required analyte per WAC 314-55-102.
- ▶ Follow all WSLCB rule for sampling procedures. Follow the approved methods for samples treatment as storage upon receipt

Going forward & Special thanks

- ▶ Work after the June 1 deadline
- ▶ Special thanks
 - ▶ Members of the Workgroup
 - ▶ Steering Committee