

Air-Phase Petroleum Hydrocarbon (APH) Workgroup

SAC Update
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History

APH Method Public Comment Draft Issued *February 2000*

- Draft APH Method was designed to measure the gaseous-phase concentrations of volatile aliphatic and aromatic petroleum hydrocarbons that are collectively quantitated in air and soil gas in the ranges:

 - C_5 through C_8 aliphatics

 - C_9 through C_{12} aliphatics, and

 - C_9 through C_{10} aromatics

- Draft APH method also identifies and quantifies the individual concentrations of 10 target analytes, including MtBE, BTEX, and certain naphthalenes.



History *(continued)*

APH Method Workgroup First Meeting *November 2007*

The APH Method Workgroup, comprised of experienced APH Method laboratory practitioners, is tasked to review and evaluate the Draft APH Method and suggest method revisions based on their collective analytical experience, lessons learned and current available technology.



Workgroup Mission:

- Finalize the APH Method
- Develop a companion document to be included in the previously published Compendium of Analytical Methods (CAM).
 - Companion document will describe an approved analyte list, and method-specific quality control requirements and performance standards to provide "Presumptive Certainty" criteria for APH data.
- The Workgroup will also establish guidelines for EPA methods TO-14 and TO-15 procedures to be included in the CAM.



Revisions Under Consideration

Sampling Procedures –

Develop consistency with MassDEP recommended procedures ... “*Indoor Air Contamination SOP*” – August 2007”

Canister Certification Process

Develop more rigorous canister cleaning and handling procedures and performance standards

Analyte List Revisions

Remove 2-Methylnaphthalene from analyte list (not considered an air-phase petroleum hydrocarbon)



Revisions Under Consideration

(continued)

Calibration Standards Revisions

Indene, Hexylcyclohexane and 1-Methynaphthalene removed as range standards (poor performance).

Standard Preparation

Gaseous only standards will be allowed. Two vendors committed to provide certified gas standards.



Revisions Under Consideration

(continued)

Calibration Method

5-point gaseous standard calibration curve. Lowest point will be the reporting limit (RL) for Target Analytes. Range RLs still under development.

Quality Control Requirements

Consistent with EPA Method TO-15

Performance Standards

Consistent with EPA Method TO-15



Next Steps

- Draft Final APH Method will be posted on the APH Workgroup web page for general review and comments on or before: **October 17, 2008** .

<http://www.mass.gov/dep/cleanup/aphwkgp.htm>

- Comments due to Department on or before November 21, 2008. donald.muldoon@state.ma.us

- Final APH SOP to be posted on or before December 31, 2008.



Questions?

