

**Technical Review Workgroup for Metals and Asbestos
Asbestos Committee Annual Report:
Accomplishments and Activities for Calendar Year 2018**

Members

Region 1

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Region 2

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Region 3

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Technical Review Workgroup: Asbestos Committee Accomplishments of Calendar Year 2018

The Technical Review Workgroup (TRW) Asbestos Committee is dedicated to supporting and promoting consistent application of the best science in the field of human health risk assessment for asbestos at contaminated sites. To support its mission and contribute to the Agency's core mission to protect human health and the environment, the TRW Asbestos Committee engaged in several activities and projects in 2018, which are summarized below.

Reports and Guidance Development on Asbestos Site Characterization and Risk Assessment (completed and active projects)

1. **PROJECTS TO IMPROVE THE SAMPLING AND ANALYSIS OF ASBESTOS IN SOIL**

AND AIR: Since inception, the TRW Asbestos Committee has researched, evaluated, and developed asbestos-related sampling and analysis methods, products and tools.

- A. **Fluidized Bed Asbestos Segregator (FBAS) Research:** The fluidized bed asbestos segregator (FBAS) is a sample preparation instrument that utilizes air elutriation to separate asbestos structures from heavier particles in a bulk sample, such as soil, and deposit these structures onto a filter which can then be analyzed by transmission electron microscopy (TEM) or other appropriate microscopic techniques. The FBAS facilitates quantification of asbestos fibers at much lower levels than the traditional polarized light microscopy methods. The ability to quantify the asbestos content in soil accurately is important for supporting cleanup decisions and for determining if cleanup standards have been attained.

Asbestos Committee members from Regions 8 and 10 continued development and evaluation of the TRW-sponsored FBAS for quantifying asbestos levels in soil. They have been conducting multiple studies including method improvement, methods comparison, and an inter-laboratory evaluation in collaboration with EPA's Environmental Response Team. Three EPA labs participated in the FBAS sample preparation (EPA Region 10, EPA Region 8 Troy Montana Prep lab, and ERT-East Lab in Edison New Jersey). All the sample filters generated for this project were analyzed at one commercial TEM lab – Reservoirs Environmental in Denver Colorado.

If proven effective, the FBAS may be able to replace the currently recommended Activity-Based Sampling method for evaluation of asbestos exposure and human health risk. Activity-Based Sampling is a time-consuming, labor-intensive method for estimating human exposures to asbestos fibers released from soil to the breathing zone because of soil disturbance activity by humans.

2. **RISK ASSESSMENT SUPPORT:**

A. **Regional Collaboration:** The Asbestos Committee continues to develop and refine guidance, provide clarification on existing guidance, and support regional risk assessors with site-specific questions about asbestos. Committee members work collaboratively with regional personnel to promote awareness and consistent application of appropriate data, methods, and assumptions for risk assessment for asbestos-contaminated sites nationally.

B. **Framework Update:** The Asbestos Committee is incorporating updates to the Asbestos Framework, reflecting, for example, recent technical developments regarding the FBAS and PLM, PCM, and TEM methods. The information and resources within the Asbestos Framework support site characterization

and exposure estimates for risk-based removal and remedial actions. The Framework is being updated with input from the members of the Asbestos Committee to incorporate the latest science and recommendations based on lessons learned by the Asbestos Committee since the Asbestos Framework was published in 2008.

Communication, Training, and Outreach

1. **Hotline:** The TRW Asbestos Committee responds to questions from inquiries made either by telephone (toll-free 1 866-282-8622) or email (asbestoshelp@epa.gov) to the TRW Asbestos Committee hotline. The TRW Asbestos Committee responded to seven (7) request for assistance in 2018. Common issues included questions related to asbestos analytical methods and sampling. See attached appendix detailing the requests for assistance that were received in 2018.
2. **Presentations/Training:** TRW Asbestos Committee members published and presented at conferences in 2018. These are listed in the table below.

Meeting/Presentation/ Training	Dates	TRW Asbestos Committee Member(s)	Title of Presentation or Topic
OSC Academy	February	Wroble	Asbestos Training
American Industrial Hygiene Conference	May	Frederick	The Complexities of Soil Sampling and Analysis for Asbestos and other Mineral Fibers
Region 10 RPMs	August	Wroble	Asbestos Overview
International Association of Engineering Geology and the Environment	September	Berry	Detection of asbestos in talc
		Wroble	Overview of soil asbestos research
Region 1 OSC training workshop	September	Lipson	Asbestos Awareness Training
Southeastern Air Pollution Control Agency	November	Frederick	The Complexities of Soil Sampling and Analysis for Asbestos and other Mineral Fibers, and Use of FBAS Data to Aid in Clean-up Decisions

3. **Website:** This website has been migrated to one-EPA format. The TRW continues to support the incorporation of materials, as appropriate.
4. **Charter:** Revised the TRW Charter to better develop, maintain, and promote consistent application of the best available science in the field of human health risk assessments and methods for assessing human health risk posed by asbestos at contaminated sites.
5. **Asbestos Committee Biennial Meeting:** Took place in early December in Seattle.

Coordination with Regions, EPA Program Offices, and Other Federal Agencies

Region 5: Supported discussions concerning Gordie Howe International Bridge (between Detroit MI and Windsor ON) and the Carlisle Building Site in Ashtabula, Ohio.

Regions 7 and 9: Supported development of best practice protocols for sampling following fires involving asbestos materials.

Region 10: Supported Region 10 discussions concerning the Portland Warehouse fire.

ORD: The TRW Asbestos Committee continued its review of the ORD Analytical Method Comparison report. Review of the subcontractor laboratory analysis found useable data for most samples and analyses, with the exception of indirect analysis where data is more limited. Next steps needed to complete the comparisons and the report were identified.

TSCA: TRW members signed the Region 10 TSCA letter concerning the Proposed Rule, Asbestos, Significant New Use Rule. The comment letter raised issues with the TSCA rule that changes the listing of asbestos forms, proposes to deregulate some uses and changes import/export restrictions.

Coordination with Other Non-government Groups

- Conferred with Australian regulators and researchers about the TSCA proposed Asbestos, Significant New Use Rule.

Activities for 2019

- Seven TRW members attended the 2019 Beard Asbestos Conference during April in Denver, CO. Four presented their research.
- An Analytical Methods Workshop for EPA staff will be developed by the Asbestos TRW. Projected dates for the workshop will be in July or August of 2019. Attendees will learn various methods for asbestos detection and quantitation.
- Two new co-chairs will be brought on board under the mentorship of our current, experienced co-chairs, David Berry, Chuck Nace and Andrea Kirk

