

**Technical Review Workgroup for Metals and Asbestos
Asbestos Committee Annual Report:
Accomplishments and Activities for Calendar Year 2019**

Full Members

Region 1

Gary Lipson

**Office of Emergency Management
(OEM)**

Brian Schlieger

Region 2

Nick Mazziotta (co-chair)

Charles Nace

**Office of Superfund Remediation
and Technology Innovation (OSRTI)**

Andrea Kirk (co-chair)

Edward Gilbert

Region 3

Jack Kelly

Greg Voigt

Region 4

Tim Frederick

Candice Teichert

Nardina Turner

Region 5

Elizabeth Nightingale

Region 6

Anna Milburn (co-chair)

Region 7

Dave Williams

Region 8

David Berry

Region 9

Daniel Stralka

Region 10

Jed Januch

Julie Wroble

TRW Asbestos Committee Accomplishments of 2019

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. An overview of these efforts for 2019 is provided below.
 - 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. 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.
 - Analytical Methods Comparison Research (Air Sampling)
The TRW Asbestos Committee continued its review of the ORD Analytical Method Comparison report and raw data to extract additional information from the research to support recommendations for the updated Framework.
2. ***Risk Assessment Support.*** The Asbestos Committee continues to develop and refine guidance, provide clarification on existing guidance, and support regional requests for site-specific assistance with asbestos at sites. 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. The following projects were undertaken to support work being conducted in the regions.
 - 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.

- Health and Safety Recommendations
Members of the Asbestos Committee are developing recommendations for Health and Safety monitoring for Regions doing ABS or soil sampling at sites where asbestos is a contaminant of potential concern.

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 ten (10) request for assistance in 2019. Common issues included questions related to asbestos analytical methods and sampling. See Attachment 1 for details on the questions.
2. **Presentations/Training.** The following is a brief summary of training or presentations by the TRW Asbestos Committee members:
 - Jed Januch offered training on asbestos microscopy to TRW Asbestos Committee members in August 2019.
 - 2019 Beard Conference on Asbestos Sampling, Analysis and Management in Denver, CO: Nardina Turner presented a status update of the work done by the TRW on evaluation of data generated a Method Comparison study. Tim Frederick presented a status update of the RARE project focused on improvements to soil sampling and analysis. David Berry presented a comparison between PCM and TEM analysis of filters loaded with LA-spiked soil standards using the FBAS.
 - Tim Frederick, Jack Kelly, Gary Lipson Betsy Nightingale, and Julie Wroble are working with other OSCs, removal program staff, and a contractor to develop a 16-hour training course on asbestos that meets OSHA requirements for training but also is focused on the types of sites that EPA typically encounters. Many site examples will be incorporated throughout the training.
3. **Website.** The TRW continues to support the incorporation of new material as appropriate to the TRW Asbestos Committee website.
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, metals and bioavailability of soil and soil-like (e.g., floodplains) contaminants at affected sites nationwide. (The TRW Charter is currently in review by OSRTI management.)
5. **Asbestos Committee Biennial Meeting.** The Asbestos Committee is planning a meeting for the fall of 2020.

Coordination/Support with States, Regions, EPA Program Offices, and Other Federal Agencies

1. ***Region 3:*** Supported discussions concerning sampling to characterize exposure at the Sheraton Airport Hotel in Pittsburgh, PA.
2. ***Region 5:*** Supported discussions concerning post-abatement sampling at a Montessori School in Michigan where HVAC renovation did not follow NESHAPS. Supported development of a demolition plan for McLouth Steel Stoves in Michigan where a stack with asbestos was being demolished.
3. ***Toxic Substances Control Act (TSCA):*** TRW members continued to track TSCA Proposed Rule, Asbestos, Significant New Use Rule.
4. ***Residual Risk Rule for Taconite:*** Julie Wroble provided comments to EPA staff on the definition of asbestos being considered in this proposed rule.

TRW Asbestos Committee Plans for 2020

1. **Framework Update.** Complete revisions to the Framework and release the document in 2020. This update will include information from the Analytical Methods Comparison and Fluidized-bed Asbestos Segregator (FBAS) research projects. A meeting is planned for spring 2020 to work on the Framework.
2. **Framework Training.** Develop and offer training on the updated version of the Framework
3. **Health and Safety Recommendations.** Coordinate with regional and national health and safety coordinators to implement the health and safety recommendations for sampling at sites where asbestos is a contaminant of potential concern.
4. **Johnson Conference.** Participate in the July 2020 Johnson Asbestos Conference to be held in Burlington, VT.
5. **TRW Committee Business**
 - **Biennial Meeting.** Plan Biennial Meeting for fall of 2020.
 - **Annual Report.** Develop and release the Calendar Year 2019 Asbestos Committee Annual Report.