

**Technical Review Workgroup (TRW) for Metals and Asbestos
Asbestos Committee Annual Report:
Accomplishments and Activities for Calendar Year 2021**

Full Members

Region 1

Gary Lipson

Region 2

Nick Mazziotta (co-chair)

Charles Nace

Region 3

Jack Kelly

Joseph Gawarzewski

Region 4

Tim Frederick

Nardina Turner

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Region 5

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Region 6

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Region 8

David Berry

Jason Fritz

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Jed Januch

Julie Wroble

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**Environmental Response Team
(ERT)**

Phil Solinki

**Office of Emergency Management
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Brian Schlieger

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

Andrea Kirk (co-chair)

Edward Gilbert

TRW Asbestos Committee Accomplishments of 2021

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 2021 is provided below.
 - Analytical Methods Comparison Research (Air Sampling)
The TRW Asbestos Committee continued its review of the Office of Research Development (ORD) Analytical Method Comparison report and raw data to extract additional information from the research to support recommendations for the updated Framework. A contractor is supporting the committee by performing an outlier analysis and statistical comparisons using modified Phase Contrast Microscopy (PCM) and Transmission Electron Microscopy (TEM) databases from this study. The outlier analysis has been completed and the statistical comparison analysis will be completed in 2022.
 - Analytical Methods Comparison Research (Soil Sampling)
The TRW Asbestos Committee began a soil methods comparison study comparing results for PE samples using the 3 PLM soil methods in the updated version of the Framework. Data from labs is currently in review.
 - Refinement of Analytical Preparation Methods for Asbestos in Soil (Soil Sampling and Analysis)
A subcommittee of the TRW Asbestos Committee are continuing to work on the regional applied research effort (RARE) project focused on improving reproducibility and representativeness of asbestos in soil. Five replicate samples comprised of 100-increments each were collected using ISM techniques from 3 asbestos-contaminated sites. Performance evaluation samples with 2 asbestos types at 2 soil concentrations were prepared. All of these samples are being evaluated side by side using 2 standard asbestos analytical methods: Fluidized Bed Asbestos Segregator (FBAS) preparation followed by TEM analysis and ex situ child's play scenario/activity based sampling (ABS) followed by TEM analysis.
 - National Asbestos Data Entry Sheet (NADES)
The TRW Asbestos Committee updated the NADES PCM and TEM spreadsheets according to feedback regarding the rounding of the final result reported to Scribe and to align the TEM sheet with the updated framework. Updates that were made to the ISO10312 method in 2019. NADES is a data management tool that facilitates recording and transmittal of national sampling results for asbestos for the methods most often employed in analysis of samples from Superfund Sites. Data management services are provided for Polarized Light Microscopy (PLM) analysis of bulk materials, in air and dust using TEM and air samples using PCM. NADES includes

checks and error codes to guide data entry and electronic data deliverable support for import into Scribe software or other data management tools.

2. ***Risk Assessment Support.*** The TRW 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.

- a. Framework Update

The TRW Asbestos Committee incorporated updates to the Asbestos Framework, reflecting, for example, the development of the Libby Amphibole Asbestos (LAA) IRIS toxicity values, recent updates to the ISO 10312 and 13794 TEM methods, and recent technical developments regarding the FBAS and PLM, and PCM methods. The information and resources within the Asbestos Framework support site characterization and exposure estimates for risk-based removal and remedial actions. The Framework was updated with input from the members of the TRW Asbestos Committee to incorporate the latest science and recommendations based on lessons learned by the TRW Asbestos Committee since the Asbestos Framework was published in 2008.

- b. ERT SOP 2084 for ABS Update

The TRW Asbestos committee, in coordination with the Environmental Response Team (ERT), incorporated updates to ERT SOP 2084 for ABS and its corresponding “Helpful Hints” document. Some of the updates include the development of updated soil moisture language and guidance on how to combine three samples from a two-hour ABS activity. The “Helpful Hints” document was incorporated into the updated Framework (as Appendix E).

- c. Health and Safety Recommendations

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

- d. Libby Amphibole Asbestos (LAA) Reference Concentration (RfC) Applicability Technical Memo

A subcommittee of the TRW Asbestos Committee updated text from a previous draft of a technical memo (2018) that supports application of the LAA RfC to other amphiboles (tremolite, crocidolite, actinolite, amosite). (The updated technical memo is currently in review by the TRW Asbestos committee.)

Communication, Training, and Outreach

1. **Hotline.** The TRW Asbestos Committee is available to respond 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 did not respond to any requests for assistance in 2021.
2. **Presentations/Training.** The following is a brief summary of training or presentations by the TRW Asbestos Committee members:
 - A subcommittee of the TRW Asbestos Committee along with other On Scene Coordinators (OSCs), removal program staff, and a contractor developed a 16-hour training course on asbestos that is focused on the types of sites that EPA typically encounters and meets Occupational Safety and Health Administration (OSHA) requirements for training. Many site examples are incorporated throughout the training. The four week course was offered in a virtual format beginning 11/16/2021.
3. **Website.** The TRW continues to support the incorporation of new material as appropriate to the TRW Asbestos Committee website.
4. **Charter.** The TRW Charter was not revised in 2021. (The TRW Charter is currently in review by OSRTI management.)
5. **Asbestos Committee Biennial Meeting.** The Asbestos Committee is planning an in-person meeting for the spring of 2022.

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

1. **Region 5:**

Consulted on the Brown Funeral Home Time Critical Removal Action (TCRA) Site, Flint, Michigan. The site is a former funeral home that has been abandoned for several years and recently had a fire that destroyed nearly all of the buildings (which contained asbestos containing material [ACM]) at the site. Region 5 requested TRW Asbestos Committee input regarding site clean-up and clearance sampling after debris is hauled away.

Consulted on the Cahokia Heights site where a water system has a majority of drinking water distribution lines made from asbestos concrete pipes with standing sewage above ground. They plan to make wide-spread repairs to the infrastructure and sought feedback from TRW Asbestos Committee regarding the removal and future use of asbestos concrete pipes.

Consulted on the Illinois state/USACE Section 1122 project at Waukegan harbor where they plan to restore beaches along Lake Michigan in Illinois using dredged sand. There are community concerns that the sand contains asbestos. The TRW Asbestos Committee

provided feedback on analytical methods and a subcommittee plans to support the site as future sampling and analysis plans are developed.

2. ***Region 9:*** Consulted on the Hazardous Substances Brownfields & Navajo Forest Products Industry Site. OSCs for this site (where buildings have been demolished and ACM is now strewn about) planned a removal action.

3. ***Toxic Substances Control Act (TSCA):***

TRW members continued to track TSCA Proposed Rule, Asbestos, Significant New Use Rule.

TRW Asbestos committee members provided feedback on a form that TSCA is developing to query companies importing asbestos containing material.

4. ***FDA's Interagency Working Group on Asbestos in Consumer Products (IWGACP):***

TRW members participated in inter-agency work group meetings.

TRW Asbestos Committee Plans for 2022

1. **Framework Training.** Continue to develop training materials (PowerPoint Presentation with voiceover discussion and supplemental videos) on the updated version of the Framework
2. **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.
3. **Health and Safety Training.** Deliver the 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. Virtual delivery is planned for the foreseeable future.
4. **NARPM Training.** Present on the updated Framework in a plenary session of the 2022 NARPM Training.
5. **Data/study review.** Review relevant data/studies regarding the migration of asbestos to groundwater.
6. **Johnson Conference.** Participate in the Summer 2022 Johnson Asbestos Conference to be held in Burlington, VT.
7. **TRW Committee Business**
 - **Annual Meeting.** Plan Annual Meeting for Spring 2022.
 - **Annual Report.** Develop and release the Calendar Year 2021 Asbestos Committee Annual Report.