



CRWI Update November 30, 2023

MEMBER COMPANIES

Bayer CropScience
Clean Harbors Environmental Services
Eastman Chemical Company
Heritage Thermal Services
INV Nylon Chemicals Americas, LLC
Ross Incineration Services, Inc.
The Dow Chemical Company
Veolia ES Technical Solutions, LLC
Westlake US 2, LLC

GENERATOR MEMBERS

Eli Lilly and Company
Formosa Plastics Corporation, USA
3M

ASSOCIATE MEMBERS

AECOM
Alliance Source Testing LLC
B3 Systems
Civil & Environmental Consultants, Inc.
Coterie Environmental, LLC
Eurofins TestAmerica
Focus Environmental, Inc.
Franklin Engineering Group, Inc.
Montrose Environmental Group, Inc.
Ramboll
Spectrum Environmental Solutions LLC
Strata-G, LLC
TEConsulting, LLC
TRC Environmental Corporation
Trinity Consultants
Wood, PLC

INDIVIDUAL MEMBERS

Ronald E. Bastian, PE
Ronald O. Kagel, PhD

ACADEMIC MEMBERS

(Includes faculty from:)

Clarkson University
Colorado School of Mines
Lamar University
Louisiana State University
Mississippi State University
New Jersey Institute of Technology
University of California – Berkeley
University of Dayton
University of Kentucky
University of Maryland
University of Utah

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HWC MACT RTR

As of the end of November, the judge has not released his decision on the deadline suit.

The first part of the Information Collection Request (questionnaire) for hazardous waste combustors (HWC) to support the upcoming rulemaking was sent to nine companies in August. On November 21, 2023, EPA released a draft of the second part – a draft test plan. As drafted, each category of HWCs will be required to provide emissions data for a slightly different set of pollutants. EPA will request incinerators, cement kilns, and lightweight kilns test for:

- Polycyclic aromatic hydrocarbons (PAH) and polychlorinated biphenyls (PCB);
- Total hydrocarbons;
- Hydrogen fluoride and hydrogen bromide;
- Hydrogen cyanide;
- Hydrazine;
- Phosphine;
- Asbestos;
- Gas flow rate;
- Oxygen and carbon dioxide; and
- Moisture.

EPA will request boilers test for:

- Polychlorinated dibenzo dioxins and furans (D/F), PAH, and PCB;
- Total hydrocarbons;
- Hydrogen fluoride and hydrogen bromide;
- Hydrogen cyanide;
- Hydrazine;
- Phosphine;
- Gas flow rate;
- Oxygen and carbon dioxide; and
- Moisture.

EPA will request hydrochloric acid furnaces test for:

- D/F, PAH, and PCB;
- Total hydrocarbons;
- Hydrochloric acid, chlorine, hydrogen fluoride, and hydrogen bromide;
- Hydrogen cyanide;
- Hydrazine;
- Phosphine;
- Particulate matter and metals;
- Gas flow rate;
- Oxygen and carbon dioxide; and
- Moisture.

EPA will also ask for the following feed stream analysis:

- Higher heating value;
- Moisture;
- Fluorine, bromine, and chlorine when either dioxin/furan or hydrochloric acid and chlorine stack sampling is being performed;
- PCB (for PCB containing feed streams only);
- Metals (when EPA Method 29 sampling is being conducted) including antimony, arsenic, barium, beryllium, cadmium, chromium, lead, silver, thallium, and mercury; and
- Ash content (when sampling for particulate matter is being conducted).

These lists raise several questions. Some of these may be answered in the December 6, 2023, meeting to discuss the draft. All test data are to be reported through EPA's Electronic Reporting Tool. EPA would like comments on this draft by December 15, 2023.

We should expect the Agency to release a final version of the test protocol early in 2024 and pick the nine companies that will be requested to develop these data. It may or may not be the same nine companies that were sent the questionnaire.

Secondary lead smelter rule

On November 20, 2023, EPA published a final new sources performance standards rule for the secondary lead smelting source category. In this rule, the Agency determined that the best system of emissions reduction for particulate matter (PM) was a fabric filter in series with high efficiency particulate air filters, venturi scrubber, and/or a wet electrostatic precipitator. Based on this, EPA is setting a PM standard of 10 mg/dscm for new or reconstructed blast furnaces. The Agency is also removing all startup, shutdown, and malfunction provisions and requiring electronic reporting for all performance test data.

Environmental justice

In 2016, EPA released their Technical Guidance for Assessing Environmental Justice in Regulatory Analysis. The purpose of the guidance is “to outline analytic expectations and discuss technical approaches and methods that can be used by Agency analysts to evaluate environmental justice concerns for regulatory actions.” On November 15, 2023, EPA released draft revisions to the 2016 guidance document. The draft will expand or include new discussions on how meaningful involvement can inform regulatory analysis, vulnerability to climate change, inform compliance and enforcement, and consider multiple stressors and cumulative effects. EPA will be hosting two webinars on the draft. The first is on December 6, 2023, and the second is on December 12, 2023. EPA will be accepting comments until January 16, 2024. Additional information can be found at <https://www.epa.gov/environmental-economics/epa-draft-revision-technical-guidance-assessing-environmental-justice> or in the November 15, 2023, *Federal Register* notice.

On November 16, 2023, EPA announced draft revisions and a solicitation for comments on revisions to their 2003 Public Involvement Policy. These revisions are intended to set an Agency-wide approach to meaningful involvement and outline the practices that staff can use when designing public outreach. The goals of the policy are to improve acceptability, efficiency, feasibility, and sustainability of Agency decisions; ensure EPA’s decisions take into account the interests and concerns of affected people; and establish clear guidance for conducting meaningful involvement. The guidance lays out the steps EPA staff are to use to accomplish these goals. It also defines meaningful involvement as:

- People have an opportunity to participate in Agency decisions that may affect their environment or health;
- Public contributions can influence regulatory decisions; and
- Decision makers have sought out and facilitated the involvement of those potentially impacted by the decisions.

Additional details can be found at <https://www.epa.gov/environmentaljustice/epas-meaningful-involvement-policy> or the *Federal Register* notice. Comments will be accepted until January 16, 2024.

During November, EPA announced a series of grants to address environmental justice issues in Region 6. These include \$3.21 million for five projects in Louisiana, \$881,709 for two projects in Oklahoma, \$3.6 million for six projects in Texas, and more than \$2 million for three projects in New Mexico.

Region 6 also announced a pilot cumulative impact assessment in the West Dallas area of Texas. The project will measure air, soil, water, and fish impacts centered around concrete batch plants.

In addition, EPA announced the availability for almost \$2 billion in funding for community driven projects to “deploy clean energy, strengthen climate resilience, and build capacity for communities to tackle environmental and climate justice challenges.” These grants can be used to fund a wide range of activities including: mitigating climate and health risks from urban heat islands; pollution monitoring, prevention, and remediation; investment in low- and zero-emission technologies; reducing indoor pollution; and facilitating disadvantaged community engagement in regulatory activities. EPA will review these applications on a rolling basis through November 21, 2024. EPA has identified five target investment areas based on unique circumstances, geography, and need. These are Alaskan tribes, tribes in other states, territories, disadvantaged unincorporated communities, and U.S. Southern border communities. The Agency is also providing \$200 million in technical assistance for entities to be able to learn how to access these funds. Additional details can be found at <https://www.epa.gov/inflation-reduction-act/inflation-reduction-act-community-change-grants-program>.

PFAS

Kevin Harwick filed suit in an Ohio court alleging that ten manufacturers of per- and polyfluoroalkyl substances (PFAS) were responsible for the levels of those compounds in his blood. In 2022, a judge certified all residents in Ohio with 0.05 ppt perfluorooctanoate and at least 0.05 ppt for any other PFAS compound as a part of the class action suit. This was appealed and on November 27, 2023, the U.S. Court of Appeals for the 6th Circuit remanded the case for dismissal. This was a unanimous decision where the court ruled that Mr. Harwick did not have standing because he did not prove which company manufactured the PFAS in his body, does not know if any of these compounds would make him sick, nor does he currently have any symptoms. It now goes back to the district court to decertify the class.

Using e-manifest data, Public Employees for Environmental Responsibility (PEER) released a report on the movement of PFAS compounds between generators and disposal companies. For a five year period, PEER reported that there were over 10,000 shipments of almost 27 million kilograms of PFAS wastes. The material came from 1,371 generators and went to 126 destinations. The report states that since PFAS are not regulated compounds, these numbers were likely a significant underestimation. The three largest sources were Naval Base San Diego, American Airlines, and Chemours. The three largest recipients were U.S. Ecology, Texas Molecular, and Heritage Thermal Services. PEER used this data to renew their call to regulate PFAS as hazardous waste.

In September, EPA approved the shipment of Gen-X waste from a Chemours facility in the Netherlands to the Fayetteville Works in North Carolina. In the approval, EPA cited that it lacked the authority under the Basel Convention to deny the request. After the Governor of North Carolina, several North Carolina Congressmen, and environmental groups raised objections, EPA rescinded the conditional approval on November 29, 2023, citing recent information that the company miscalculated the volume of waste and a general concern about the company’s ability to safely manage the waste.

EPA personnel

One of the top environmental justice officials at EPA, Matthew Tejada, has announced he is resigning and taking a position at the Natural Resources Defense Council (NRDC) as a senior vice president for environmental health. Mr. Tejada has been with EPA since 2013. He will start at NRDC on December 11, 2023, and oversee the organization's Safe Drinking Water Initiative. This program is focusing on replacing all lead drinking water pipes in the U.S. within 10 years.

Transportation of energetics

On November 30, 2023, the Pipeline and Hazardous Materials Safety Administration proposed a rule to revise the classification and approval process for certain low-hazard fireworks, small arms cartridges including tracers, to create a portal to submit applications, and to allow for voluntary termination of an explosive approval. Comments are due by February 28, 2024.

SERDP SON 2024

The Strategic Environmental Research and Development Program (SERDP) is one of the Department of Defense research arms. Every year, they publish a statement of needs (SON) as part of the solicitation for future projects. SERDP's SON for FY 2025 was released in early November (<https://serdp-estcp.org/newsitems/details/ced2980d-1cbe-4940-bbc1-b352da5488db/serdp-releases-fy-2025-solicitation>). One of the solicitations is on the treatment of PFAS-impacted matrices. SERDP is asking for proposals on "innovative research to develop cost effective remedial technologies for matrices impacted by per- and polyfluoroalkyl substances (PFAS) resulting from the use of aqueous film-forming foam (AFFF) formulations." They state a preference for small-scale, proof-of-concept efforts. This request is mostly for contaminated water but also includes sediments and spent media (granular activated carbon and single-use ion exchange resins). Additional information can be found on the web site.

Carbon capture and sequestration

Carbon capture and sequestration is one of the tools that has been used to reduce carbon dioxide concentrations in the atmosphere. In most cases, this involves using some method to extract carbon dioxide from flue gases at combustors. Graphyte (www.graphyte.com) is trying a novel approach. Their process dries plant residues (i.e., sawdust, rice hulls, etc.) and compresses it into bricks. The bricks are then coated with an "impenetrable barrier" to prevent decomposition. The bricks are stored in underground sites and monitored to ensure no decomposition occurs. This process is much less expensive than traditional methods of separating carbon dioxide from the air. American Airlines recently signed a contract to store 10,000 tons. It is not clear whether this will have a significant impact on the carbon credits business but if it works, it should

provide a market opportunity for farming and timber residues. It could also change the dynamics for sequestering biomass specifically grown for carbon capture.

CRWI meetings

Our next meeting will be on February 21-22, 2024 in Durham, NC. Please contact CRWI (mel@crwi.org or 703-431-7343) if you are interested in attending.