Coalition for Responsible Waste Incineration

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

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3M

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AECOM
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B3 Systems
Civil & Environmental Consultants, Inc.
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Spectrum Environmental Solutions LLC
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TEConsulting, LLC
Trinity Consultants
W.L. Gore and Associated, Inc.
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

43330 Junction Plaza, Suite 164-641
Ashburn, VA 20147

Phone: 703-431-7343
E-mail: mel@crwi.org
Web Page: http://www.crwi.org

CRWI Update
April 30, 2024

HWC MACT RTR

As of April 30, 2024, the judge had not released his decision on the deadline suit. EPA continues to work on the rule based on issuing an August 2025 proposed rule.

PFAS disposal and destruction guidance

EPA released their revisions to the 2020 per- and polyfluoroalkyl substances (PFAS) disposal and destruction guidance on April 9, 2024. This version identified three existing and potentially available disposal and destruction technologies that may effectively manage PFAS and PFAS-containing materials. They are underground injection in a permitted injection well, disposal in a permitted hazardous waste landfill, and treatment at a permitted hazardous waste combustor (incinerators, cement kilns, lightweight aggregate kilns, or granular activated carbon (GAC) reactivation units with thermal oxidizers). The majority of the guidance focuses on these three methodologies, all of which are commercially available. However, they have not endorsed any one of these methods. The guidance does not establish treatment requirements or concentrations of PFAS in wastes, spent products, or other materials that would require special handling.

The Agency's main concern with thermal destruction remains products of incomplete combustion (PIC). While the laboratory data indicated certain conditions will result in little or no PICs, EPA expressed a desire for PIC emissions data gathered from full-scale testing at hazardous waste combustors using the test protocol described in Appendix A.

EPA includes mechanochemical degradation, electrochemical oxidation, gasification and pyrolysis, and supercritical waste oxidation as emerging technologies. While current results show promise, the guidance states that additional studies are needed for all. The 2024 version also mention the need for full characterization of the outputs of these processes.

Based on potential to release PFAS into the environments (lowest to highest), the guidance prioritizes the currently available commercial options as follows:

- Interim storage with controls;
- Underground injection;
- Hazardous waste landfills;
- Disposal in all landfill for stable polymetric PFASs;
- GAC reactivation units with thermal oxidizers;
- Thermal treatment under certain operating conditions;
- Solid waste landfills with composite liners and leachate and gas collection and treatment systems;
- Thermal treatment at lower temperatures (MSW's, SSI); and
- C&D landfills

EPA plans to develop data on PFAS deposition that may have occurred near thermal treatment devices that have treated PFAS containing wastes. Once noticed in the *Federal Register*, EPA will accept comments for 180 days.

Other PFAS issues

On April 26, 2024, EPA published a final rule setting drinking water standards for perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), hexafluoropropylene dimer acid (HPFO-DA), perfluorononanoate (PFNA), perfluorohexane sulfonic acid (PFHxS), and perfluorobutane sulfonic acid (PFBS). EPA determined that the maximum contaminant level goal for PFOA and PFOS was zero but set the maximum contaminant level (MCL) at 4 ppt, the current detection limit for these two compounds. This level was based on EPA's determination that PFOA and PFOS were "likely carcinogenic." The MCLs for HPFO-DA, PFNA, and PFHxS are 10 ppt. EPA did not set an MCL for PFBS but set a hazard index standard of 1.0 for the mixture of PFBS, HPFO-DA, PFNA, and PFHxS. This rule becomes effective on June 25, 2024.

On April 19, 2024, EPA released a signed final rule that added PFOA and PFOS as hazardous substances under CERCLA. A copy of the signed rule can be found at https://www.epa.gov/system/files/documents/2024-04/pre-publication_final-rule-cercla-pfoa-pfos-haz-sub.pdf, This rule will become effective 60 days after publication in the *Federal Register*.

There are no provisions for exemptions in CERCLA. As such, the final rule does not include any. A number of "passive receivers" (e.g., public waste water treatment plants) pushed for an exemption in the final rule. While the Agency was not allowed under the statute to grant an exemption, the Agency tried to address these concerns by releasing a separate enforcement discretion policy that would focus enforcement action on parties that caused significant PFAS releases such as manufacturers and other industrial users. However, that will not prevent private parties from using the courts to force "passive receivers" to clean up PFOA and PFOS contaminated sites. Senators Capito (R-WV)

and Carper (D-DE) floated draft ideas in 2023 for amendments to CERCLA to create certain exemption but nothing has been introduced.

These two actions may have a significant impact on current and future Superfund sites. It is possible that current and closed Superfund sites will be asked to test for the presence of PFOA and PFOS. If found, current treatment plans may be revised or closed sites could be re-opened. The new MCLs may become the default cleanup standards for these sites, depending upon their anticipated future use.

Interestingly, a federal district judge that is overseeing a multi-district litigation on PFAS contamination claims recently suggested that the Superfund law might be a better place to resolve the claims against the military.

Democrats have introduced legislation in the House (H.R. 8074) and the Senate (S. 4187) to phase out the non-essential uses of PFAS. While the bill may get some traction in the Senate, it is unlikely to move forward in the Republican controlled House.

Comments on the addition of nine PFAS compounds to the list of hazardous constituents under Appendix VIII were due on April 8, 2024. This was a part of EPA's responses to New Mexico's petition to regulate PFAS under RCRA. As expected, industry opposed this idea, asking EPA to withdraw the proposed rule. While New Mexico supported the idea, they also commented that the proposed action did not go far enough in regulating these compounds and did not fully address their petition. New Mexico's comments requested EPA take immediate action to list all PFAS compounds as hazardous waste under RCRA.

Power plant rules

On April 25, 2024, EPA released final rules setting greenhouse gas emission standards for electric power plants, updating the Mercury and Air Toxics Standards (MATS) for electric power plants, revising the emission guidelines for wastewater discharge from electric power plants, and amending federal regulations for coal combustion ash disposal. The final MATS requirements will lower the emission limits for mercury for lignite facilities and require that all coal units use PM continuous emission monitors (CEM) to show compliance. The PM standard was set at the lowest level that can be reliably measured by CEMs. However, PM CEMs are not required for integrated gasification combined cycle units because of technical challenges of calibrating PM CEMs for these units and the PM emissions are very low. More information on the final MATS rule can be found at https://www.epa.gov/stationary-sources-air-pollution/mercury-and-air-toxics-standards.

Permitting website

EPA has posted a new website (www.epa.gov/permits) that is a centralized platform for information on federal permitting activities. Although the majority is about permitting

large-scale transportation projects, it has sections on air and hazardous waste permitting.

OSWI CISWI FIPs

EPA has published emission guidelines for Other Solid Waste Incinerators (OSWI) and Commercial and Industrial Solid Waste Incinerators (CISWI). Both of these guidelines are promulgated under section 129 of the Clean Air Act. For these guidelines to be enforced, either the state must develop an implementation plan or the EPA must promulgate a federal implementation plan (FIP). EPA proposed a FIP for CISWI in 2017 but never finalized it. On April 5, 2024, EPA published a proposed consent decree where they agreed to sign a proposed FIP rule for existing OSWI no later than June 30, 2026, and sign a final FIP rule by June 30, 2027. In addition, EPA has agreed to sign a final CISWI FIP rule by September 16, 2024.

EPA was originally scheduled to finalize the revisions to OSWI guidelines in March 2024 but that deadline has been extended until June 30, 2025, partly to address how the pyrolysis of plastics fits into this source category. Industry is pushing pyrolysis as "advanced recycling" and should not be included in the rule. Environmental groups are opposed to this idea. In the August 2020 proposed rule, EPA removed pyrolysis/gasification from the definition of "municipal waste combustion units." After pushback from environmental groups, EPA issued an advanced notice of proposed rulemaking in 2021 to solicit views on this change. In response to comments, EPA withdrew the portion of the 2020 proposed rule that modified the definition. It is widely anticipated that EPA will include pyrolysis/gasification units in the June 2025 OSWI amendments.

Fence line monitors

In the 2023 final technology review rule, EPA declined to require fence line monitors for lead-acid battery manufacturing facilities because they have never been used for this source category. Environmental groups sued arguing that a technology review must include developments in monitoring methods outside of the source category. EPA asked for and received (April 19, 2024) a narrow remand so they could reconsider their decision not to require fence line monitors for this source category. How the Agency responds may have impacts for all NESHAP source categories as it pertains to fence line monitors.

EPA enforcement policy update

On April 17, 2024, EPA Assistant Administrator for the Office of Enforcement and Compliance Assurance released a new policy memo pertaining to the coordination of criminal and civil enforcement. The policy will require monthly civil-criminal enforcement meetings to ensure the two enforcement groups are discussing which cases will be investigated criminally, which will be referred to the Department of Justice for civil enforcement, and which will be handled as administrative matters. Each program will

make independent decisions on which cases to pursue. It also states that at all times, both offices must comply with legal and ethical requirements on information sharing and evidence gathering. The civil program must alert the criminal program when they identify potential criminal conduct (e.g., evidence of falsification of data, concealment of evidence, chronic non-compliance, or other deceptive or misleading conduct). The policy requires coordination throughout the life of the action. It sets goals of having clear direction in the first year on what action will be taken, where possible, and charges will be filed or concluded within two to three years. For administrative matters, the goal is to conclude the action within 12 to 18 months.

EPA also plans to develop a national case tracking system as a part of their overall data management modernization efforts. Civil and criminal enforcement offices will share information on pending cases. The stated purpose is so that each office can modify their actions/decisions based on what happens in their region as well as in other regions where the company might operate.

The policy contains an appendix that lists the factors that should be considered during civil and criminal enforcement efforts. A copy can be found at https://www.epa.gov/system/files/documents/2024-04/strategic-civil-criminal-enforcement-policy-april-2024.pdf.

Environmental justice

The money appropriated by the Inflation Reduction Act (2023) is starting to flow. On April 4, 2024, EPA announced $20 billion in grants to "mobilize private capital and deliver clean energy and climate solutions." Seven billion dollars were awarded to Climate United, a non-profit formed to raise capital for low-income and disadvantaged communities. At least 60% of these funds are to go to low-income and disadvantaged communities, 20% to rural communities, and 10% to tribes. Five billion dollars go to the Coalition for Green Capital, a non-profit specializing in public-private investments. At least 50% of these funds are to go to low-income and disadvantaged communities. Two billion dollars go to Power Forward Communities, a non-profit dedicated to decarbonizing American housing. At least 75% of these funds are to go to low-income and disadvantaged communities. Smaller amounts were granted to Opportunity Finance Network ($2.3 billion), Inclusiv ($1.9 billion), Climate Justice Fund ($940 million), Appalachian Community Capital ($500 million), and Native CDFI Network ($400 million). These funds are expected to be expended over the next seven years.

If that was not enough, on April 22, 2024, EPA announced an additional $7 billion in grants to 60 groups to provide solar power to more than 900,000 low-income and disadvantaged households.

On April 23, 2024, EPA launched the Environmental Justice Clearinghouse (https://www.epa.gov/environmentaljustice/forms/ej-clearinghouse) , an online collection of resources related to environmental justice.

Several top officials in EPA's environmental justice office have recently moved on to other things. In December 2023, Mathew Tejada, who ran the environmental justice portion of the Office of Environmental Justice and External Civil Rights (OEJECR), left to join the Natural Defense Resources Council. In February 2024, Robin Collins, a senior advisor who was responsible for the delayed draft guidance on cumulative impacts to ensure compliance with the Civil Rights Act, left the Agency. In April, two other top officials in OEJECR left to take assignments in other parts of the Agency. It should also be noted that President Biden has not submitted a nominee for the Assistant Administrator position for OEJECR.

Enforcement

In 2019, Intercontinental Terminals in Houston, TX had a fire. Aqueous film-forming foam was used to extinguish the blaze. On April 9, 2024, the Department of Justice published a proposed consent decree where the company would pay a $6.645 million civil penalty for natural resources damages due to releases of petroleum products during the fire and the release of fire-fighting foam when extinguishing the fire.

CRWI meetings

Our next meeting will be on May 15-16, 2024 in Kansas City, MO. Please contact CRWI (mel@crwi.org or 703-431-7343) if you are interested in attending.