



CRWI Update June 30, 2022

MEMBER COMPANIES

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

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
SYA/Trinity Consultants
TEConsulting, LLC
TRC Environmental Corporation
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>

PFAS

In 2016, EPA set the health advisory levels for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) at 70 ppt. On June 21, 2022, EPA published a notice of availability announcing the release of revised health advisory levels for PFOA and PFOS and new advisory levels for two other per- and polyfluoroalkyl substances (PFAS). It should be noted that health advisory levels are the concentrations at which the Agency anticipates no adverse health effects. Health advisories do not set enforceable limits by themselves. However, many states used the 2016 levels as the basis for binding drinking water standards. In addition, if the health advisory level indicates a concentration that is not harmful, one could surmise that any concentration above that level could cause harm. The new health advisory level for PFOA was set at 0.004 ppt, PFOS at 0.02 ppt, hexafluoropropylene oxide dimer acid (Gen-X) at 10 ppt, and perfluorobutane sulfonate (PFBS) at 2,000 ppt. These values were based on the recent revisions to the toxicology of these compounds (see the February 2022 Update). The current method detection limit for these four chemicals is 4 ppt. With the exception of North Carolina, most states seem to be taking a wait-and-see approach on how to incorporate these new values into drinking water standards. Public Employees for Environmental Responsibility sent a letter to EPA on June 27, 2022, urging the Agency to expand the health advisory levels to know precursors of PFOA and PFOS.

EPA cannot set national effluent limitation guidelines based on these advisory levels until they have an approved measurement method. EPA released draft Method 1633 in April after validation from one laboratory. This method can measure 40 PFAS compounds. EPA expects to complete a multi-laboratory validation for the draft method in December 2022.

EPA is sponsoring research on various methods for destroying PFAS compounds. At the 3rd Annual National PFAS meetings, EPA scientists reported results from pilot testing of the destruction of dilute aqueous film forming foam using super critical water oxidation. Tests were run by Battelle, Aquarden, and 374Water. EPA reported 99.9% reduction of PFAS in the effluent as compared to

the influent. The influent and effluent were analyzed for 24 compounds.

As of June 30, 2022, the proposed rule to add PFOA and PFOS to the list of hazardous substances under CERCLA is still under review by the Office of Management and Budget.

For FY22, Congress gave EPA \$75 million to address PFAS issues. In the current version of FY23 funding as passed by the House of Representatives Appropriation Committee, EPA will have \$126 million for PFAS activities. In the report language for this bill, the Committee urges EPA “to act expeditiously in setting drinking water standards for PFAS and in designating PFAS as a hazardous substance under CERCLA.” The report also asks EPA to develop and submit a spend plan for FY23 funds to show how the Agency plans to allocate funds as compared to the items in the Agency’s PFAS Strategic Roadmap. In contrast, the Department of Defense (DoD) is seeking less funding in FY23 for PFAS clean up activities. DoD believes they have sufficient funding from previous years that will carry over into FY23.

As has been the case for the past few years, the most likely vehicle for PFAS legislation will be the National Defense Authorization Act (NDAA). On June 2, 2022, eighteen industry groups sent a letter to the Senate Armed Services Committee leaders urging them to refrain from including measures in the FY23 NDAA that would circumvent EPA’s regulatory process. The letter specifically mentions avoiding provisions that ban procurement, ban incineration, and would mandate effluent guidelines.

Environmental justice

Early in June, two EPA offices released draft National Program Guidance documents describing how they intended to integrate environmental justice into their programs. On June 2, 2022, EPA’s Office of Enforcement and Compliance Assurance released their draft (<https://www.epa.gov/system/files/documents/2022-06/fy23-24-oeca-draft-npg.pdf>). This document starts with the four memos released in 2021. These are:

- Using all appropriate injunctive relief tools in civil enforcement (April 26, 2021) – use of advanced monitoring, audits, electronic reporting, and posting of compliance data;
- Strengthening enforcement in communities with environmental justice concerns (April 30, 2021) – increasing the number of inspections in overburdened communities;
- Strengthening environmental justice through criminal enforcement (June 21, 2021) – seeking restitution to redress harm; and
- Strengthening environmental justice through cleanup enforcement actions (July 1, 2021).

It also restated some of the national compliance initiatives including reducing hazardous air emissions from hazardous waste facilities by increasing the number inspectors and increasing the number of RCRA inspections especially in overburdened communities;

continuing AA/BB/CC inspections; ensure proper characterization of incoming wastes, treatment and stabilization processes, and sampling techniques to meet land disposal restriction requirements; and conduct federal inspections at 50% at facilities with potential environmental justice concerns.

The Office of Environmental Justice and External Civil Rights Compliance Office released their draft guidance on June 2, 2022

(<https://www.epa.gov/system/files/documents/2022-06/fy23-24-oej-ecrco-draft-npg.pdf>).

While the details in this guidance are a little more vague, it lays out three objective to “achieve measurable environmental, public health, and quality of life improvements in most overburdened, vulnerable, and underserved communities.” These are:

- Empower and build capacity of underserved and overburdened communities to have meaningful participation in agency actions;
- Integrate environmental justice and civil rights into all of the Agency’s work to maximize benefits and minimize impacts to underserved and overburdened communities by continuing to build resources to implement civil rights guidance, support the use of equity and justice screening tools to analyze for disparate impact, and implement best practices to demonstrate responses to environmental justice concerns; and
- Strengthen enforcement of and compliance with civil rights laws to address the legacy of pollution in overburdened communities.

On June 6, 2022, the New Jersey Department of Environmental Protection published a proposed rule on how to incorporate environmental justice into every new major source permit and every major source permit renewal for facilities located or proposed to be located in an overburdened community. The proposed rule is designed to implement a state law enacted on September 20, 2020. The requirements include development of an environmental justice impact statement as part of the permit application. If the Department finds that granting the permit would “cause or contribute to adverse cumulative environmental or public health stressors in the community” that are higher than other communities in the state, they can either deny or approve the permit with additional conditions. Where a new facility cannot avoid disproportionate impact, the Act requires denial of the permit unless the new facility would serve a compelling public interest to the overburdened community. Under the proposed rule, facility wide risk assessments are required for major source permit renewals. The comment period closes on September 4, 2022.

On June 28, 2022, a group of local and national environmental groups filed a petition asking EPA to force the Texas Commission on Environmental Quality (TCEQ) to incorporate environmental justice into their air permitting program. The petition alleges that TCEQ “refuses to evaluate the environmental justice impacts of its permitting decisions even when concerns are raised by public comments.” The petition asks EPA conduct a review of the TCEQ program under Title VI of the Civil Rights Act and to withhold federal funds until the state complies.

West Virginia v. EPA

In 2015, the Obama Administration promulgated the Clean Power Plan (CPP) which was designed to address carbon dioxide emissions from coal- and natural gas-fired power plants. The Agency used the authority from section 111(d) of the Clean Air Act to develop this rule. The rule was based on three building blocks. The first was the heat improvement rates at coal-fired boilers. The second was shifting from coal-fired plants to natural gas-fired plants. The third was shifting to renewable sources of electricity (wind and solar). The Supreme Court stayed this rule in 2016 preventing it from taking effect. Under the Trump Administration, EPA decided the CPP exceeded its authority and replaced it with the Affordable Clean Energy (ACE) rule, also under the authority of section 111(d). In 2020, the U.S. Court of Appeals for the District of Columbia Circuit vacated the Agency's repeal of the CPP and remanded it to the Agency for further consideration. It also vacated and remanded the ACE rule in that ruling. This decision was appealed to the Supreme Court and on June 30, 2022, the Court issued a ruling that the Agency did not have the authority under section 111(d) to require shifting of the generation of power from coal to natural gas to renewables. The ruling does not prevent EPA from regulating the emissions of carbon dioxide but it will take some time for Agency to determine just what authorities they currently have to restrict greenhouse gas emissions. The opinion suggested that capping carbon dioxide emissions at a level that would require a transition away from the use of coal to generate electricity may be a sensible solution but Congress has not given EPA that authority. Until they do, EPA will be restricted to the authorities already in the Clean Air Act.

In anticipation of this ruling, the Climate Protection and Restoration Initiative filed a petition with EPA on June 16, 2022, asking the Agency to regulate greenhouse gases under the Toxics Substances Control Act. EPA has 90 days to respond to this petition.

Enforcement

In 2019, 3M reported a release of hydrofluoric acid off-gassing from a corroded 55-gallon hazardous waste container at the Cottage Grove, MN facility. Later in 2019, the Minnesota Pollution Control Agency conducted an inspection of the facility. In 2020, 3M submitted a series of Notices of Noncompliance that covered:

- Inaccurately identifying hazardous waste sent to the incinerator as non-hazardous waste;
- Failure to have a third-party certify the facility's laboratory processes as required by their permit;
- Failure to verify the profiles of more than 1800 waste streams; and
- Storage of hazardous waste in unapproved areas, some stored more than a year.

As a part of the stipulated agreement, 3M will pay a \$2.8 million fine and complete 24 corrective actions.

On June 9, 2022, the Department of Justice announced a settlement agreement with Westlake Chemicals over alleged violations of flaring requirement at their facilities in Calvert City, KY and Lake Charles, LA. Under the settlement agreement, Westlake agreed to perform injunctive relief that includes flare gas minimization, increasing flaring efficiency measures, and fence line monitoring for benzene. They also agreed to a \$1 million fine. EPA is touting parts of the agreement as using enforcement efforts to improve the conditions of already overburdened communities.

OB/OD memo

On June 7, 2022, EPA issues a memo to division directors and the regions to communicate existing requirements and provide guidance for the permitting of open burn/open detonation (OB/OD) units under RCRA. Under this memo, each facility must evaluate whether safe alternative technologies are available to treat their waste explosives. If safe alternatives are available, the facility must use those alternatives. EPA acknowledges that OB/OD will still be needed for some materials. In those cases, this memo provides guidance on recommended permit conditions for OB/OD units to reduce impacts to human health and the environment. To qualify to continue to use OB/OD, the facility must demonstrate that their waste explosives “cannot safely be disposed of through other modes of treatment.” Because new technologies routinely become available, the facility must repeat this analysis when their permit is renewed. The memo also includes additional monitoring and recordkeeping requirements. A copy can be found at (https://www.epa.gov/system/files/documents/2022-06/OBOD_Policy_Memo_signed_6.7.22_508.pdf).

EPA funding

The House of Representatives Appropriation Committees have completed their appropriations bills. The Senate has yet to start on their part of the process. The House version would fund EPA at \$11.5 billion in FY 23. This is slightly lower than what the Administration requested but significantly higher than the \$9.56 billion allocated for FY 22. Interestingly, the report language that accompanies the bill (HR 8236) “directs the Secretary of Defense to use the fiscal year 2023 Defense Environmental Restoration Program appropriations to determine the efficacy of whether selected technologies--such as supercritical water oxidation--are scalable, mobile, and ready for the destruction of PFAS on-site without incineration or the release of harmful byproducts.”

Illinois PFAS incineration ban signed

On June 8, 2022, the Illinois Governor signed HB 4818 into law. This will prohibit the incineration of any TRI-PFAS wastes. TRI-PFAS is defined as the chemicals on the list of per- and polyfluoroalkyl substances as set forth in the EPA's Toxic Release Inventory rules (40 CFR 372.65). However, it excludes liquid or gaseous fluorocarbon or chlorofluorocarbon products used chiefly as refrigerants. Under the Act, incineration includes burning, combustion, pyrolysis, gasification, or the use of an acid recovery

furnace or oxidizer, ore roaster, cement kiln, lightweight aggregate kiln, industrial furnace, boiler, or process heater. Incineration does not include the use of a thermal oxidizer as a pollution control or a resource recovery device at a facility that is using PFAS or chemicals containing PFAS. The Act allows the incineration of landfill gas that may contain PFAS; hospital, medical, and infectious waste incineration; and sewage sludge incineration of wastes from municipal waste water treatment plants. The law went into effect upon signing.

CSB Chair resigns

On June 10, 2022, Katherine Lemos, Chair of the Chemical Safety Board (CSB) submitted her resignation effective on July 22, 2022. Her current five-year term would have expired in 2025. It has been reported that she has clashed with the two new members of the Board on how to run the organization. On June 8, 2022, President Biden nominated Catherine Sandoval to fill one of the empty slots on the Board. Ms. Sandoval was formerly a member of the California Public Utilities Commission. If confirmed, this would fill three of the five Board member slots.

CRWI meetings

Our next meeting will be on August 17-18, 2022, in Durham, NC. It will include a tour of the Enthalpy Analytical laboratories. Please contact CRWI (mel@crwi.org or 703-431-7343) if you have interest in attending.