



CRWI Update November 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
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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PFAS

On November 14, 2022, EPA published their fifth Contaminant Candidate List (CCL5) under the Safe Drinking Water Act. This list includes 66 chemicals, three chemical groups (per- and polyfluoroalkyl substances (PFAS), cyanotoxins, and disinfection byproducts), and 12 microbes. PFAS compounds were listed as a single group of chemicals. For this list, EPA defines PFAS as chemicals that contain at least one of the following three structures:

- $R-(CF_2)-CF(R')R''$, where both the CF_2 and CF moieties are saturated carbons, and none of the R groups can be hydrogen;
- $R-CF_2OCF_2-R'$, where both the CF_2 moieties are saturated carbons, and none of the R groups can be hydrogen; or
- $CF_3C(CF_3)RR'$, where all the carbons are saturated, and none of the R groups can be hydrogen.

EPA notes that this definition is only for the purpose of CCL5 and does not apply to any other EPA actions. Adding a chemical to CCL is the first step in the regulatory process under the Safe Drinking Water Act. But it does not mean that any of these chemicals will be regulated in the future nor does it give a timetable for regulations. Only a handful of chemicals that have been included in CCLs have been regulated since the program began in 1996.

On November 17, 2022, EPA released a progress report on how they are achieving the goals outlined in the 2021 PFAS Strategic Roadmap. Some of the accomplishments over the past year includes:

- Publishing a proposed rule to designate perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) as hazardous substances under CERCLA;
- Releasing drinking water health advisory levels for four PFAS compounds;
- Beginning to distribute \$10 billion to address emerging contaminants under the Bipartisan Infrastructure Law to clean up PFAS and other emerging contaminants in small and disadvantaged communities;
- Issuing more than 30 scientific publications on PFAS topics;

- Releasing EPA's thermal treatment database; and
- Issuing an administrative order requiring 3M to sample and provide treatment for PFAS contaminated drinking water near the company's Cordova, IL facility.

The update also states that over the next year, the Agency plans to:

- Propose national drinking water standards for PFOA and PFOS;
- Complete the designation of PFOA and PFOS as hazardous substances under CERCLA; and
- Address PFAS in biosolids.

A copy of the report can be found at <https://www.epa.gov/newsreleases/epa-highlights-important-progress-protecting-communities-pfas>.

Environmental justice

In a November 3, 2022, presentation to EPA's Science Advisory Board, EPA Assistant Administrator Chris Frey provided definitions for cumulative impact and cumulative impact analysis as they are to be used in the Office of Research and Development. Cumulative Impacts are defined as the totality of exposures to combinations of chemical and non-chemical stressors and their effects on health, well-being, and quality of life outcomes. Cumulative Impact Assessment is defined as a process of evaluating both quantitative and qualitative data representing cumulative impacts to inform a decision. The presentation did not give any details on how these two definitions would be applied in future decisions. It is not known if other EPA offices will use the same definition.

On November 4, 2022, EPA announced the selection of 29 Environmental Finance Centers that will assist communities across the country to access federal funding for infrastructure projects that improve public health and environmental protection. These centers are designed to deliver targeted technical assistance to local governments, states, Tribes, Territories, and non-governmental organizations to protect public health, safeguard the environment, and advance environmental justice. Funds for these centers came from the Bipartisan Infrastructure Law. A complete list of the centers can be found at <https://www.epa.gov/waterfinancecenter/efcn>.

On November 17, 2022, the Federal Energy Regulatory Commission approved a new liquified natural gas export terminal in Louisiana over the objections of EPA and several environmental groups. The commission expressed sympathy for the concerns raised but stated that the Natural Gas Act does not include authority to address climate change or environmental justice impacts.

Also on November 17, 2022, EPA published a proposed rule to modify how the Agency responds to Freedom of Information Act (FOIA) requests. While the main purpose seems to be to remove the requirement put in place by the previous administration that all FOIA requests must be approved by a political appointee, it also has some

environmental justice provisions. Foremost is a proposed requirement that requesters can seek expedited processing if their request is related to environmental justice needs. The preamble suggests using EJSCREEN as a tool for determining if a request is related to environmental justice. Comments are due on December 19, 2022.

EPA is under considerable pressure to develop indicators of how current environmental justice programs are reducing disparity. During the November 30, 2022, National Environmental Justice Advisory Council meeting, EPA Deputy Assistant Administrator Matthew Tejada told the council that the Agency was developing disparate impact elimination indicators. Some of these indicators are:

- Socioeconomic status improvements in minority communities within one mile of a Superfund site;
- Lowered blood lead levels in children;
- Reduced asthma in children;
- The number of people with low socioeconomic status in areas meeting PM2.5 ambient air quality standards; and
- Increased green space and canopy cover in low socioeconomic communities.

PSD fugitive emissions proposed rule

On November 14, 2022, EPA extended the comment period for the proposed prevention of significant deterioration fugitive emissions rule. Comments are now due on February 14, 2023.

EPA's reactivation policy

Hess Oil Virgin Islands Corporation started construction on the Limetree Bay Refinery, U.S. Virgin Islands, St. Croix in 1966. The refinery started operations in 1974, processing as much as 650,000 barrels of oil a day. Hovensa LLC took over operations of the facility in 1998. In 2011, Hovensa paid a \$5.3 million penalty for Clean Air Act violations. In 2012, the company closed the refinery but continued to operate the storage terminals. In 2015, a joint venture obtained \$1.25 billion in funding and purchased the property. In 2018, the Virgin Islands Department of Planning and Natural Resources authorized the new company to restart limited refinery operations and to begin processing low-sulfur fuel for maritime use. In 2020, EPA issued a final Plantwide Applicability Permit (PAL) to the facility. But before the facility could completely re-open, a new administration took office and on May 14, 2021, ordered the company to pause all operations citing imminent and substantial endangerment to public health or the welfare of the environment. The joint venture declared bankruptcy and a bankruptcy judge approved the sale of the facility for \$62 million. The newest owners asked EPA to reopen the facility under the 2020 PAL.

On November 17, 2022, EPA denied that request and instead told the facility they would need a new prevention of significant deterioration (PSD) permit based on the reactivation policy. This policy was developed in 1999 from a court decision on

reactivation of a shutdown power plant (Monroe Electric). EPA determined that the refinery was permanently shut down in 2012 and that restarting the unit qualifies as construction of a new major stationary source. The requirement for a new PSD permit significantly changes the emission requirements for the facility. EPA stated that the reactivation policy has been consistently applied for 30 years. However, the policy has a number of caveats and the definition of permanent shutdown is not clear. One caveat is that the presumed permanence of a shutdown lasting more than two years can be rebutted by evidence from the owner/operator that it did not intend to permanently shut down. Complicating this action is the fact that the refinery is in an environmental justice community. One should expect EPA's 2022 decision to be challenged. The outcome could have significant ramifications on whether existing facilities that are temporarily shut down will become new facilities when restarted.

EPA personnel

Joe Goffman has been nominated to be the next EPA Assistant Administrator for the Office of Air and Radiation. On November 29, the Senate Environment and Public Works Committee voted 10-10 to move Mr. Goffman's nomination to the Senate Floor. A tie vote does not discharge the nomination from committee. In a press statement, a committee aide stated that the Senate Majority Leader intends to make a floor motion to discharge the nomination from Committee. This was done under similar circumstances to discharge the nomination of David Uhlman's nomination to be the Assistant Administrator for the Office of Enforcement and Compliance Assurance. All nomination not completed by the end of this session of Congress must be withdrawn and re-submitted to the new Congress.

CSB personnel

The Senate Environment and Public Works Committee held a hearing (November 17) on the nominations of Steven Owens to be the next Chair of the Chemical Safety Board and Catherine Sandoval for a five-year term on the Board. Mr. Owens is currently a member of the Board and has been serving as the interim Chair. Ms. Sandoval is a former California utility regulator. Based on questioning during the hearing, the committee appears favorable to both nominations. A vote in committee has not yet been scheduled.

Drone for tracking chemical plumes

Researchers at Osaka University, SoftBank Corporation and Tokyo Institute of Technology have recently developed a palm-sized quad-copter that could be used to track chemical plumes. To monitor chemicals in the air in three-dimensions, the team attached odor sensors on the upper and frontal surfaces of their drone and developed a 3D surge-casting algorithm inspired by the biological mechanisms through which flying moths can track chemical plumes. In limited experiments, this drone has been capable of pinpointing the source of an emission. A description of the unit and its performance can be found at <https://ieeexplore.ieee.org/document/9933476>.

EPA air monitoring grants

On November 3, 2022, EPA announced the Agency is planning to awarded \$53 million in grants for 132 air pollution monitoring projects throughout the US. The funds for these grants came from the Inflation Reduction Act. In their applications, the community was to propose using “commercially available technology and/or proven methods” to monitor air pollutants. Any method proposed must have been previously researched and documented in the literature. EPA stated they will not fund research, development, demonstration, or evaluation of new air monitoring methods or equipment projects under this request. Other than the description in the request, there is very little information on what monitors can/will be purchased and for what purpose. The web site states that the Agency will start the process to award the funding by the end of 2022 and that additional details may be released after the funds have been awarded. A searchable list of the grants can be found at <https://www.epa.gov/arp/selections-arp-enhanced-air-quality-monitoring-competitive-grant>.