



CRWI Update March 31, 2021

MEMBER COMPANIES

Clean Harbors Environmental Services
Eastman Chemical Company
Heritage Thermal Services
INV Nylon Chemicals Americas, LLC
3M
Ross Incineration Services, Inc.
The Dow Chemical Company
Veolia ES Technical Solutions, LLC

GENERATOR MEMBERS

Eli Lilly and Company
Formosa Plastics Corporation, USA

ASSOCIATE MEMBERS

AECOM
Alliance Source Testing LLC
B3 Systems
Civil & Environmental Consultants, Inc.
Coterie Environmental, LLC
Focus Environmental, Inc.
Franklin Engineering Group, Inc.
Montrose Environmental Group, Inc.
Ramboll
Spectrum Environmental Solutions LLC
Strata-G, LLC
SYA/Trinity Consultants
TEConsulting, LLC
TestAmerica Laboratories, Inc.
TRC Environmental Corporation
W. L. Gore and Associates, 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

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Regan EPA

Even though the Biden EPA has not released the list of Trump Administration rules they plan to review and/or revise, there are some early indications of what actions will be taken. EPA has delayed the effective date for the lead and copper revisions rule to allow the Agency can take additional comments. The Agency is asking for additional comments on five final rules on persistent, bioaccumulative, and toxic chemicals issued under TSCA. Specifically, EPA will be asking for feedback on whether amendments are needed for these five rules. EPA is also re-opened the comment period for the coal combustion residuals disposal rule. EPA has asked for and received a 90-day stay of the risk management plan litigation. The stay will allow EPA to decide whether they intend to continue to defend the rule or will take a remand to allow for revisions. While none of these actions are definitive in amending or rescinding previous administration rules, it indicates an interest in modifying these actions.

In public meetings since his confirmation, Mr. Regan often includes environmental justice issues in his comments. This leaves little doubt that this issue will play a large role in the future rulemaking, permitting actions, and enforcement actions during his tenure. In probably the largest signal to date, on March 31, 2021, Mr. Regan dissolved the membership of the Science Advisory Board and the Clean Air Scientific Advisory Committee and will request nominations to refill all slots. Typically, a new Administrator will fill slots as committee members rotate off. In this case, Mr. Regan has decided the Trump Administration policy of not allowing academia who received EPA grants to serve on the committee was creating a bias on the current committees. EPA determined that the only way to resolve this bias was to dissolve the committee and re-appoint members. A request for nominations is expected to be published in the April 1, 2021, *Federal Register* with nominations due by May 3, 2021.

PFAS

The first proposed rule sent to the Office of Management and Budget for review by the Biden EPA is a rule to require recordkeeping and reporting of the production of per- and

polyfluoroalkyl substances (PFAS) under TSCA. This was a requirement of the FY 2020 National Defense Authorization Act. This rule, if finalized, would require reporting of PFAS compounds manufactured or imported since January 1, 2011.

In response to a citizen science report of PFAS compounds in pesticide products, EPA determined that the source of the contamination was the fluorinated containers. They found eight PFAS compounds that most likely formed during the container fluorination. These compounds were present in the 20-50 ppb range. In response, EPA has asked that the manufacturers discontinue use of fluorinated containers for mosquito repellent and the current stock be held in inventory until a disposal method can be determined. They are looking at other pesticides packaged and sold in fluorinated containers to see if these problems also occur there and are encouraging the industry to find alternate packing options.

On March 17, 2021, EPA published an advanced notice of proposed rulemaking asking for data on PFAS releases to wastewater from the organic chemicals, plastics, and synthetic fibers source category. This is part of an overall program to identify source categories that release PFAS compounds into wastewater. The goal of this data collection is to gather information on number and locations of facilities that work with PFAS. Comments will be accepted until May 17, 2021.

In January 2021, New York proposed an air emissions limit for perfluorooctanoic acid (PFOA) of 0.0053 $\mu\text{g}/\text{m}^3$. If finalized, this would be the second state to set an air emission limit for PFOA. Michigan currently has a limit of 0.07 $\mu\text{g}/\text{m}^3$. In comments on the proposed New York limits, Sierra Club argued that the limit should be non-detect and suggested that the state set non-detect limits for all 29 individual PFAS compounds that can be measured using OTM-45.

California is proposing to list PFOA as a carcinogen under the state's toxics warning label law. Comments on this proposed rule are due on May 3, 2021.

In a March 24, 2021, House armed services appropriations subcommittee hearing, the Department of Defense (DoD) was asked to estimate the amount of funds that would be needed to clean up PFAS contamination and to dispose of current stocks of aqueous film forming foam. DoD responded that they were waiting on EPA's decisions on which disposal methods are acceptable before it knows what its disposal costs would be but estimated it would take between \$2 and \$3 billion.

General Provisions SSM requirements

Sierra Club sued EPA over the startup, shutdown, and malfunction (SSM) exclusions in the General Provisions of 40 CFR Part 63. In 2008, the U.S. Court of Appeals for the District of Columbia Circuit agreed that emission limits under the Clean Air Act must apply continuously and vacated those exclusions. By putting an SSM exclusion in the General Provisions, the Agency failed to make the emission limits "continuous." Although the court did not specifically identify 63.6(f)(1) and (h)(1) in the opinion, EPA

concluded that the court ruling vacated the SSM exemptions in these two paragraphs. This was documented in a letter from Adam Kushner, then Director of EPA's Office of Civil Enforcement. The letter was released on July 22, 2009. Once the mandate was issued (October 16, 2009), the SSM exclusion in the General Provisions could no longer be used even though it was still in the Code of Federal Regulations. Every source category whose rule incorporated the SSM exclusion by reference to the General Provisions could no longer use this exclusion. However, this did not impact NESHAP rules that included SSM exclusions in their individual regulatory language. EPA has been slowly removing those exclusions as they revise the rules as a part of the risk and technology process.

On March 11, 2021, EPA published a final rule to implement the 2008 court decision. EPA stated that this is a ministerial provision to formally change the Code of Federal Regulations to implement the 2008 court ruling. The notice removes the phrase "during periods of startup, shutdown, and malfunction, and" from 40 CFR 63.6(f)(1) and (h)(1).

ADI update

Periodically EPA publishes a list of the applicability determinations, alternative monitoring decisions, and regulatory interpretations made by the Agency. They then post these decisions on their Applicability Determination Index (ADI). On February 22, 2021, EPA published a notice they were adding a number of determinations to the list. The additions include alternative monitoring provisions for waste incinerators, sewage sludge incinerators, and hazardous waste incinerators. The modification for hazardous waste units was a minor modification for Methods 5, 26A, and 29 that allows the use of a Teflon transfer line between the filter and the first impinger. Additional information can be found in the *Federal Register* notice and in the index (<https://cfpub.epa.gov/adi/>).

Air sensors

On March 24, 2021, EPA held a webinar to discuss two testing protocols for low-cost air sensors. These two protocols, one for ozone and the other for fine particulate matter (PM 2.5), were released in February of 2021 (<https://www.epa.gov/air-sensor-toolbox/air-sensor-performance-targets-and-testing-protocols>). The Agency and the California South Coast Air Quality Management District have done extensive testing on various air sensors. Both found that the data quality is highly variable, there are often interferences, the sensors degrade over time, and readings can be impacted by changes in temperature and relative humidity. The purpose of the two protocols is to give the manufacturers consistent methods to show how their sensors perform under varying conditions. The protocol lays out the structure for basic testing and enhanced testing. For the basic testing, at least three sensors must be co-located with a federal reference method. The test must be conducted for at least 30 consecutive days under varying temperature, relative humidity, and pollutant levels. Enhanced testing is done in an environmental chamber where temperature (20 °C and 40 °C) and relative humidity (40% and 80%) can be varied and various interferences (for ozone) can be introduced. The protocol provides the metrics to determine how well each sensor responds. They

set targets for precision (standard deviation), bias (slope and intercept as plotted against the reference method), linearity (correlation coefficient), and error (root mean square error). This is not a certification program but a method by which air sensor manufacturers can show how well their sensors perform against federal reference methods or equivalent.

E-manifests

In 2018, EPA launched their e-manifest system for tracking hazardous waste shipments as a replacement for the paper manifest system. Transition has been slow. In 2020, only about 0.3% of the manifests were entirely electronic. The majority (about 80%) of the manifests were submitted as “data plus image.” In this option, a paper manifest is used. All handlers sign the paper copy and the receiving facility uploads a data file along with the scanned copy of the paper manifest. During the E-manifest Advisory Board meeting on March 2-4, 2021, EPA announced that the mailed paper option for submitting a manifest would no longer be available after June 30, 2021. This was the option where a paper manifest was signed by all handlers and a copy mailed to EPA. EPA was then responsible for entering the data and images into the e-manifest system.

Hazardous waste generators

EPA has developed a six-volume reference document explaining hazardous waste generator regulations. These volumes cover satellite accumulation areas, ID numbers, co-generation, household hazardous waste, personnel training, and tanks and containers. These can be found at <https://www.epa.gov/hwgenerators/hazardous-waste-generator-regulations-compendium>. In addition, the Agency has developed tables that show where old citations now appear in the new regulations. These can be found at <https://www.epa.gov/hwgenerators/hazardous-waste-generator-regulations-crosswalk>.

OIG report on TSDFs

On March 29, 2021, EPA’s Office of Inspector General (OIG) released a report on the failure of the Agency to follow policies for inspecting closed hazardous waste units. EPA policy requires inspection every two years for treatment, storage, and disposal facilities (TSDFs) that are closed with waste in place. The report found that the Agency failed to inspect 339 of the 687 units in this category as required. The report also found possible double counting of accomplishments between the RCRA corrective action programs and the Superfund programs. A copy of the report can be found at https://www.epa.gov/sites/production/files/2021-03/documents/epaig_20210329-21-p-0114.pdf.

EPA personnel

On March 10, 2021, the Senate conformed Michael Regan by a 66-34 vote to be the next EPA Administrator. On March 24, 2021, the Senate Environment and Public

Works Committee approved Janet McCabe's nomination by a 11-9 vote to be the next EPA Deputy Administrator. The date for the floor vote on Ms. McCabe's nomination has not been placed on the Senate calendar.

NY DEC Norlite PFAS study

In March of 2020, Bennington College took soil and water samples from four locations around the Norlite lightweight aggregate kiln in Cohoes, NY. In April of 2020, they released the results drawing the conclusion that emissions from the Norlite facility was contributing to the PFAS contamination around the facility. This study had a number of flaws including the number of samples taken and locations of the samples. However, it prompted the New York Department of Environmental Conservation (NY DEC) to take additional samples.

NY DEC collected 22 soil samples from 18 locations and water samples from 14 locations in October and November of 2020, and analyzed these samples for PFAS compounds and metals. Soil samples were taken at locations upwind of the facility and at locations considered most likely to be impacted from kiln emissions. Water samples were taken upstream from the facility (Salt Kill), at an on-site quarry pond, at an immediately off-site pond, and downstream of the facility (Salt Kill).

In March of 2021, NY DEC released the results of the study. Their conclusions were:

- Soils PFAS concentrations do not show clear evidence of increased downwind contamination;
- There is no significant increase in downwind metals concentrations;
- The concentrations of PFOA and PFOS are below the Department of Health risk levels for the current land use;
- There is a possible influence of soils on the PFAS concentration in water in certain areas but not in locations downstream of the facility; and
- The likely sources of PFAS contamination in areas of ponded water near or on the facility property are not likely associated with kiln emissions.

A copy of the report can be found at <https://www.dec.ny.gov/chemical/121118.html>.

A-Gas DFFO

A-Gas (Bowling Green, OH) reclaims used chlorofluorocarbon (CFC) refrigerants from commercial, industrial, and automotive sources. All refrigerants are reclaimed through distillation no matter what the end use is. The company has three end uses for the reclaimed materials: selling the reclaimed refrigerant for reuse, destroying the material for a fee, and destroying the material for the purpose of creating carbon credits. The destruction process takes place in two argon plasma arc units. Ohio's regulations exclude CFC refrigerants from being a hazardous waste provided they are reclaimed and reused as a refrigerant. In 2018, A-Gas submitted a petition for an exemption from the Ohio hazardous waste regulations. On April 1, 2021, Ohio EPA is expected to grant

that petition in a Director's Final Findings and Orders (DFFO). Under the order, A-Gas is exempted from the requirements to obtain a RCRA Part B permit and allowed to receive CFCs without a hazardous waste manifest provided the facility complies with all of the provision in the order. The exemption applies to all CFCs stored and treated at the facility.

Climate change

There appears to be a significant amount of pressure from the international side of President Biden's climate change team to be able to announce something to the international community that the US is doing its part and more to combat climate change. One idea that is being considered is the development of a secondary National Ambient Air Quality Standard (NAAQS) for carbon dioxide of 350 ppm. If done, this would immediately put the entire country into non-attainment for this standard. While there are no timetables for regulated entities to come into compliance with secondary NAAQS, it could trigger requirement for offsets for new projects under the New Source Review provisions. It would also require states to develop plans to come into compliance with the new requirements. This could have potential impacts on all combustion sources in the US.

CRA

One of the tools Congress can use to overturn regulations from a previous administration is a resolution of disapproval under the Congressional Review Act (CRA). Nine joint resolutions of disapproval have been introduced in either the House, the Senate, or both for regulations finalized in the late stages of the Trump Administration. Resolutions of disapproval for EPA's regulation of methane emissions from new, reconstructed, or modified sources in the oil and natural gas sector have been introduced on the House (H. J. Res 34) and the Senate (S. J. Res 14). Should one of these joint resolutions pass and President Biden signs it, this regulation would be removed and the Agency would be prevented from developing a similar regulation in the future. Both of these resolutions were introduced in late March and assigned to the committees of jurisdiction. It is unclear how quickly these committees will act.

Use of satellite imagery in enforcement

During the Spring Environmental Council of the States meetings, Professor Daniel Ho discussed a Stanford University program that combines satellite imagery and artificial intelligence that he says can increase the efficiency of enforcement efforts. This program has been used to detect facilities encroaching on wetlands or other spatial violations and locating animal feeding operations that may not have the proper permits. Maryland indicated they are working on using predictive analysis and remote video to identify potential violations but recognized that on-site inspections are still necessary. These programs are in their infancies but as the technologies grow, one should expect more use in the future.

CRWI meetings

Our May 19-20, 2021, meeting will be virtual. Please contact CRWI (mel@crwi.org or 703-431-7343) if you have interest in attending.