



CRWI Update July 31, 2019

MEMBER COMPANIES

Clean Harbors Environmental Services
Eastman Chemical Company
Heritage Thermal Services
INVISTA S.à.r.l.
3M
Ross Incineration Services, Inc.
The Dow Chemical Company
Veolia ES Technical Services, 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.
METCO Environmental, Inc.
Montrose Environmental Group, Inc.
O'Brien & Gere
Spectrum Environmental Solutions LLC
Strata-G, LLC
SYA/Trinity Consultants
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
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PFAS issues

In June, the Senate passed their version of the Department of Defense (DOD) funding legislation that included a number of provisions requiring EPA to develop a series of regulations on per- and polyfluoroalkyl substances (PFAS). These were reported in the June 2019 Update. In July, the House of Representatives passed their version of DOD's funding legislation. The House version included many of the same provisions that are in the Senate version but there are a couple of differences. The Senate version did not include a provision requiring EPA to list perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) as hazardous substances under CERCLA. The House version did and gives EPA one year to accomplish this. It should be noted that EPA has already announced their intent to designate these two compounds as hazardous substance and the current Unified Agenda has a proposed rule scheduled for October 2019. The House Rules Committee did not allow an amendment that would have banned the use of incineration as a disposal method. However, the final bill contained provisions that when DOD uses incineration as a method of disposal, the military must ensure that no PFAS's are emitted to the air, all PFAS compounds designated for disposal must be stored in accordance with 40 CFR Part 264, and that any facility used to destroy the compounds must not have had a Clean Air Act violation within the last 12 months. In addition, both versions require the military to phase out aqueous fire-fighting foam containing PFAS compounds but they differ on the date. The Senate version requires phase out by 2023 while the House has a 2029 deadline. The compromise version will likely contain a phase-out and split the difference on the date. The next step is for the House and the Senate to appoint conferees to negotiate a compromise between the two bills. Both houses will need to pass the compromise bill before it can be sent to the President for his signature. The House and the Senate are currently in recess until after Labor Day.

The House Oversight Committee on the Environment has held two hearings on PFAS issues. The first was in March and focused on PFAS groundwater contamination around military bases. The second was held on July 24, 2019, and focused on the need for corporate

accountability for PFAS contamination. The panelists for the July hearings were state officials, private citizens, and activist groups. The committee has scheduled a third hearing for September 10, 2019, where 3M and DuPont have agreed to testify.

Certain states are not content to wait on EPA to set PFAS standards. On July 18, 2019, New Hampshire set maximum contaminant levels (MCL) and ambient groundwater standards for four PFAS compounds. These are 12 ppt for PFOA, 15 ppt for PFOS, 11 ppt for perfluorononanoic acid, and 18 ppt for perfluorohexanesulfonic acid. EPA's current health advisories for PFOA and PFOS are 70 ppt. New York announced (July 8, 2019) they would move forward with 10 ppt standards for PFOA and PFOS. In the same announcement, New York said they would propose a 1 ppt MCL for 1,4-dioxane.

EPA announced a 30 day extension to the public comment period for the SW-846 Update VII, Phase II – Method 8327: Per- and Polyfluoroalkyl Substances (PFAS) Using External Standard Calibration and Multiple Reaction Monitoring (MRM) Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). The comment period now ends on August 23, 2019.

In a July 16, 2019, letter, two environmental groups asked EPA Region 4 to immediately stop the Department of Defense from using open burning or open detonation (OB/OD) or any thermal treatment of any materials containing PFAS compounds at the Holston Ammunition Plant in Kingsport, TN. The petitioners allege that such disposal methods present an imminent and substantial endangerment to human health and the environment. Petitioners point out that Kentucky regulators have blocked OB/OD of materials containing PFAS at the Blue Grass Army Depot. Region 4 has not responded to the letter.

Shortly after he was confirmed as the next Secretary of Defense, Mark Esper created a high-level task force to take a "proactive stance" on PFAS contamination in and around military installations. The memo instructs the task force to address health aspects of PFAS contamination, develop cleanup standards, find and fund an effective substitute for fire-righting foams that do not contain PFAS compounds, develop exposure standards, and act as an interagency coordinating body for cleanups.

DSW ruling

In 2008, EPA promulgated a final rule that hazardous secondary materials transferred to a third-party reclaimer can be excluded from the definition of solid waste (DSW) as long as certain conditions are met. Those conditions included making a product that had value and meeting legitimacy criteria. Environmental groups challenged this rule as being too lenient. In 2015, EPA replaced the transfer-based exclusion with a verified-recycler exclusion and made the legitimacy criteria more restrictive. In 2017, the courts vacated the verified-recycler exclusion and reinstating the 2008 transfer-based exclusion. In 2018, EPA promulgated a final rule implementing the 2017 court decision.

Environmental group used this opportunity to revive their challenge to the transfer-based exclusion as insufficiently protective of human health and the environment. Their challenge was based on two arguments:

- A generator discards hazardous materials when they pay a reclaimer to accept that material; and
- EPA failed to provide a reasoned explanation for treating hazardous materials differently based on whether it was sent to a reclaimer or a treatment facility.

On July 2, 2019, the U.S. Court of Appeals for the District of Columbia Circuit released their decision. Based on previous rulings and a plain reading of the statute, the court concluded that Congress had not directly address secondary hazardous materials that a generator has paid a third party to recycle. Thus, this decision was based on whether EPA gave a reasoned explanation for why they granted the exclusion. The court concluded they did.

The second question was whether EPA's decision to include the transfer-based exclusion was arbitrary and capricious. The petitioner contended the Agency failed to give a reasoned basis for treating the same hazardous secondary materials differently based on whether it was recycled or discarded. The court took a different view. The court reasoned that hazardous secondary materials destined for recycling are different in one key factor – they are not discarded. Since the original regulations regarding discard focused on whether a material was going to a landfill, an incinerator, or similar storage or treatment facility, hazardous secondary materials that were to be reclaimed would not enter into any of these facilities. Thus, hazardous secondary materials that are sent to a recycler are not a part of the disposal system but a part of the flow of production within an industrial process. While the materials may be handled in a similar manner, their destinations are different. To ensure this, EPA adopted the legitimacy criteria and additional requirements on length of storage, recordkeeping, etc. The court stated that the conditions required for the transfer-based exclusion advance RCRA objectives by encouraging proper recycling and promoting preservation of resources. Because there is no statutory language that the recycling requirements must be identical to RCRA Subtitle C requirements, EPA's rule was not arbitrary and capricious.

Based on these reasons, EPA denied the petition and upheld EPA's transfer-based exclusion. With all of the convoluted legal rulings and rulemakings, it can be confusing as to what regulations now apply to hazardous secondary materials that are sent to a third party for recycling. Generators can use the transfer-based exclusion as long as the process meets the first three legitimacy criteria and the fourth one is considered. The four criteria are:

- The secondary material must provide a useful contribution to the recycling process or to the product or intermediary of the recycling process;
- The recycling process must produce a valuable product that is sold to a third party or used by the recycler or generator as an effective substitute for a commercial product or as an ingredient or intermediate in an industrial process;

- The secondary material must be managed as a valuable commodity; and
- The secondary material must not contain significant concentrations of hazardous constituents (toxics along for the ride) that are not found in analogous products.

CERCLA financial assurance

In 2008, the court ordered EPA to develop regulations on financial assurance requirements under Section 108(b) of the Comprehensive Environmental Response, Compensation and Liability Act. The Agency worked on these regulations for a number of years. Dissatisfied with the Agency's progress, several environmental groups asked the courts to set a deadline for these regulations. The petitioners and EPA agreed on a schedule to finalize rules determining whether financial assurance was needed first for the hard rock mining industry followed by the chemical manufacturing, petroleum and coal products manufacturing, and the electric power generation industry sectors. In 2018, EPA published a final rule announcing its decision to not require additional financial assurance requirements for the hard rock mining industry sector. Several environmental groups challenged this decision. On July 19, 2019, the U.S. Court of Appeals for the District of Columbia Circuit issued a unanimous decision denying the petition and upholding EPA's decision. On July 2, 2019, EPA proposed a rule declining to set additional financial assurance requirements for the electric power generation industry sector.

Once in, always in proposed rule

On July 26, 2019, EPA published the once in, always in proposed rule. A summary of the proposed actions was included in the June 2019 Update. The comment period is open until September 24, 2019. On July 31, 2019, EPA announced that a public hearing would be held on August 15, 2019 in Washington, DC. Details for participating in the public hearing can be found in the *Federal Register* notice.

E-manifest

The 2012 statute establishing the e-manifest system also authorized user fees to support the program. When the Agency launched the e-manifest system in 2018, they set fees for paper manifests at \$15, scanned-image uploads at \$10, data-plus-image uploads at \$6.50, and electronic manifests at \$5. For FY 2020 (starting October 1, 2019), the Agency has increased the fees to \$25 for paper manifests, \$20 for scanned-image uploads, \$14 for data-plus-image uploads, and \$8 for electronic manifests. This increase was announced on the e-manifest website (<https://www.epa.gov/e-manifest>). The Agency stated they received about 1 million fewer manifests in FY 2019 than anticipated and the increase in costs per manifest are due to lower than predicted use. The Agency estimates that 75% of the costs for the program are in processing paper manifests.

The Agency is holding an e-manifest workshop in Chicago, IL, on August 26, 2019. Pre-registration is not required. Please contact Stephen Donnelly (Donnelly.stephen@epa.gov) for additional information.

Enforcement

Public interest groups continue to accuse the Trump EPA of lax enforcement. The Public Employees for Environmental Responsibility (PEER) released a report based on data obtained from EPA's criminal enforcement office and the Department of Justice. Based on this data, PEER states that EPA made 166 prosecution referrals to DOJ in FY 2018 and 102 referrals in the first seven months of FY 2019. They state this is the lowest numbers in 30 years and fewer than half the referrals in FY 2012. According to their data, the 78 criminal cases filed in FY 2018 were the lowest since 1994. The complete report can be found at <https://www.peer.org/news/press-releases/epa-criminal-pollution-enforcement-cratering.html>.

On July 1, 2019, the Department of Justice announced a proposed consent decree with Dow Silicones Corporation addressing violations for failing to implement a facility-wide leak detection and repair program, failing to report releases of hazardous substances in a timely manner, failing to properly characterize hazardous waste, and failing to comply with their Clean Water Act discharge permit. Under the proposed decree, Dow Silicone will be required to implement a leak detection and repair program, correct the RCRA violations, line all secondary containment systems, and address deficiencies in their storm water management program. Dow Silicones will be required to pay a civil penalty of \$4.55 million and perform a supplemental environmental program at an estimated cost of \$1.6 million. The comment period on this proposed action closed on July 31, 2019.

On July 16, 2019, the Department of Justice announced a proposed consent decree with Clean Harbors seeking injunctive relief and civil penalties for issues related to pressure relief devices at the company's tank farms at their spent solvent treatment facilities in Chicago, IL and Hebron, OH. The consent decree would require replacement of pressure relief devices, ceasing the use of loose-bolt manhole covers as emergency vents, upgrading their leak detection and repair capabilities, connecting certain pressure relief devices to closed piping to the existing thermal oxidizer control device, and increased reporting of monitoring for leaks. The proposed decree also stipulates a \$405,000 civil penalty. Comments on the proposed decree will be accepted until August 15, 2019.

Monitoring technologies

Cyanobacteria (blue-green algae) are found naturally in most surface waters. When certain conditions exist (warm water with an abundance of nutrients), they can form blooms that create health risks for humans and livestock. EPA recently released a mobile device application that warns users of algal blooms. The app was developed by EPA, NASA, the National Oceanic and Atmospheric Administration, and the U.S.

Geological Survey. It uses a number of remote assets to serve as an “early warning system” for cyanobacteria blooms. More details can be found at <https://www.epa.gov/water-research/cyanobacteria-assessment-network-mobile-application-cyan-app>.

The Oklahoma Department of Environmental Quality has been using drones to inspect water towers. This reduces the need for inspectors to climb the 150-foot towers. These drones include cameras and infrared temperature sensors allowing the inspectors to confirm hatches are closed and locked and to look for damage and disinfectant leaks. They are also using drones to aid in the walk-through of water treatment operations.

The states in the Chesapeake Bay watershed have developed a water quality trading system to help achieve the overall goal of cleaning up the Bay. The Maryland Department of the Environment has developed a series of data systems to assist them in monitoring how these trading programs are working. These include Geographic Information Systems, aerial photography, drones, and remote sensing. These tools are used to make it easier to oversee the trading programs and to ensure that entities follow through in pledges to reduce pollution.

EPA personnel

After many delays, the Senate approved Peter Wright’s nomination to be the next Assistant Administrator for the Office of Land and Emergency Response. Mr. Wright was approved on July 11, 2019 by a 52-38 vote. Mr. Wright was already working at the Agency as a special counsel to the administrator. He assumed his duties as Assistant Administrator shortly after the vote.

Clean energy plans

The House Energy and Commerce Committee has announced a plan to combat climate change. They intend to develop legislation requiring net zero emissions of carbon by 2050. The process started with a hearing in July on pathways to reduce the amount of carbon pollution emitted. They plan additional hearings on reducing industrial and transportation emissions, modernization of the electric grid, and other solutions.

On July 18, 2019, the New York Governor signed a bill that would require the state to have 70% of its electricity from renewable sources by 2030 and be carbon neutral by 2040. To implement this law, a Climate Action Panel will be appointed by January 2020. This panel will have three years to finalize the plan to implement the law.

Emergency Response Technical Showcase

CS2, Inc., is hosting an Emergency Response Technology Showcase in the Houston Ship Channel area on August 15-16, 2019. The technologies being showcased are drones, drone detection systems, snake robots, robots launched from drones, portable data networks, intrinsically safe Windows 10 tablets, sensors, emergency response

vehicles, outdoor edge security, and more. The design for this showcase is to familiarize stakeholders with the tools that can be available when responding to an emergency. The event is free. For additional information, contact Elizabeth Drake (edrake@cs2inc.com).

CRWI meeting

The next CRWI meeting will be on August 21-22, 2019, in Port Huron, MI. It will feature a tour of Clean Harbor's Sarnia hazardous waste combustion units. For additional information, contact CRWI (mel@crwi.org or 703-431-7343).