



CRWI Update March 31, 2019

MEMBER COMPANIES

Clean Harbors Environmental Services
DowDuPont
Eastman Chemical Company
Heritage Thermal Services
INVISTA S.à.r.l.
3M
Ross Incineration Services, Inc.
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
University of Utah

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PFAS issues

Discussions on potential contamination by per- and polyfluoroalkyl substances (PFAS) continues on several different levels. EPA released their PFAS action plan in February (See the February Update for details). Since then, EPA has started sampling Superfund sites in Region 2 (New York and New Jersey) for potential contamination by perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) even though neither compound has yet been listed as a “hazardous substance” under CERCLA. EPA says they have started the process to list these two chemicals as hazardous substances but few details have been released on how this will take place. Additional sampling of existing Superfund sites also raises questions on re-opening the cleanup plans as well as the potential for new liabilities at sites where cleanup has been completed.

States have expressed concern about the slow pace of EPA actions. As a result, several have started state regulatory processes to set groundwater cleanup standards. For example, New Jersey has issued a directive requiring five companies (Solvay, Dow, DowDuPont, Chemours, and 3M) to conduct a statewide assessment of damages caused by PFAS compounds and to establish a fund to remediate the impacts. In March, New Jersey set interim groundwater quality standards for PFOA and PFOS at 10 ng/l. EPA’s 2006 guidelines are 70 ppt for each of these compounds. Michigan has announced it will propose drinking water standards by October 1, 2019. In January, Vermont proposed drinking water standards of 20 ppt for five PFAS compounds. Massachusetts and New York are also working on setting drinking water standards. California announced an investigation plan where it will sample drinking water wells around 31 airports and 252 municipal solid waste landfills starting in the Fall of 2019.

Congress has also gotten involved. The Senate Environment and Public Works Committee held a hearing (March 28, 2019) on risks associated with PFAS compounds. Officials from EPA, the Department of Defense, the Agency for Toxic Substances and Disease Registry, and the National Institutes of Health testified at

the hearing. Both Republican and Democrat Senators expressed concern over PFAS contamination in their states. The House Oversight and Reforms Committee also held hearings on PFAS risk on March 6, 2019. In addition, fourteen Senators (eight Democrats and six Republicans) have introduced legislation that would set a one-year deadline requiring EPA to designate all PFAS compounds as hazardous substances under CERCLA. Similar legislation has been introduced in the House.

In addition, the issue has made it to the Democrat Presidential campaigns. Senator Kirsten Gillibrand (D-NY) stated at a March 15, 2019, campaign event in New Hampshire that the entire class of compounds should be banned. Given that two of the early primary states (New Hampshire and Michigan) have significant PFAS groundwater contamination, the issue may become a campaign issue for Democrat Presidential hopefuls.

RTR rules

EPA continues to promulgate risk and technology review (RTR) rules as required in a series of court orders. On March 4, 2019, EPA published a final RTR rule for the surface coating of wood building products source category. On March 15, 2019, EPA published a final RTR rule for the three additional source categories (surface coating of large appliances; printing, coating, and dyeing of fabrics and other textiles; and surface coating of metal furniture). In all cases, EPA did not add requirements due to either a risk review or a technology review. In all cases, the Agency added requirements to electronically report performance test results and removed startup, shutdown, and malfunction provisions. Details can be found in the two *Federal Register* notices.

EPA is currently working under court ordered deadlines or consent decrees to promulgate RTR rules. EPA met the December 31, 2018, deadlines but still have deadlines for 26 source categories in 2020 and nine in 2021. Seven RTR rules are the most EPA has ever done in a year (2018). Getting 26 done in the next two years will present some significant hurdles. To what may seem like “piling on,” the Agency recently received court order to finalize RTR rules for four additional source categories. The deadlines for these source categories range from 2020 to 2023. Additional details on the newest court order can be found in the March 5, 2019, *Federal Register* notice.

ADI notice

On March 18, 2019, EPA announced the availability of 45 new applicability determinations, alternative monitoring decisions, and regulatory interpretations made in regard to the New Source Performance Standards, the National Emission Standards for Hazardous Air Pollutants, the Emission Guidelines and Federal Plan Requirements for existing sources and/or the Stratospheric Ozone Protection Program. While none were specific to Subpart EEE, some may be of interest to members. These include:

- Applicability determination for Hospital/Medical/Infectious waste incinerators;
- Test waiver and alternate means of compliance for baghouses;

- Clarification of emergency and non-emergency generator use;
- Alternate monitoring for pressure relief devices on portable containers; and
- Performance test time extension for coal-fired boiler.

Details can be found in the *Federal Register* notice or at <https://cfpub.epa.gov/adi/>.

Superfund annual report

On March 4, 2019, EPA released a report on their major accomplishments and environmental progress in fiscal year 2018 for the Superfund program. Some of the accomplishments include;

- Deleting 18 sites from the National Priorities List;
- Deleting parts of four additional sites from the National Priorities List;
- Controlling exposure risks at 32 additional Superfund sites;
- Identifying 51 sites as having long-term protection in place and returning them to the community for redevelopment;
- Completing or providing oversight of 242 Superfund removal actions where contamination posed an imminent threat; and
- Making decisions that moved many other sites closer to completion.

Superfund cleanup continues to be a priority for EPA. A copy of the full report can be found at <https://www.epa.gov/superfund/superfund-remedial-annual-accomplishments>.

Citizen science ICR

All federal agencies are required to have an information collection request (ICR) approved by the Office of Management and Budget before they can collect data for any purpose, including rulemaking and enforcement. These requests typically are renewed every three years. Obtaining or renewing an ICR is normally a straight-forward paperwork exercise, generating few comments and little controversy. In the latest ICR renewal for collecting data using citizen science, the Fertilizer Institute submitted comments opposing the renewal. In their comments, the Fertilizer Institute stated that data collected using citizen science is of limited value because the techniques used do not comply with EPA methods, there is a lack of scientific protocol, no data validation, multiple sampling errors, and a lack of peer review. It remains to be seen whether any of these arguments will prompt the Office of Management and Budget to modify or cancel this ICR.

TCEQ CPT submittal requirements

On March 20, 2019, the Texas Commission on Environmental Quality (TCEQ) announced that any comprehensive performance test (CPT) plan submitted after May 1, 2019, must have the following components:

- A CPT plan cover sheet;
- A CPT plan review checklist;
- An original and four copies of the plan including the quality assurance project plan and continuous monitoring system performance evaluation plan; and
- Any subsequent CPT plan requires a redline/strikeout version showing changes from the previous plan.

Copies of a cover sheet, the checklist, and other information can be found at https://www.tceq.texas.gov/permitting/waste_permits/ihw_permits#HWC.

Solar panels as hazardous waste

Solar panels are manufactured using a semiconductor material sandwiched between two sheets of tempered glass. The semiconductor material often contains cadmium telluride or copper indium selenium. Some of the older panels also contain lead solder. As such, when discarded, solar panels become hazardous waste. This creates issues for manufacturers, recyclers, communities, and other entities involved with their management. These issues will become more widespread as older solar panels are replaced by newer, more efficient models. California is attempting to address this issue by proposing a rule to allow discarded solar panels to be treated as universal waste. California intends to start the regulatory process on April 19, 2019, and will allow a 45-day comment period on the proposed rule. Additional details can be found at <https://www.dtsc.ca.gov/HazardousWaste/PVRegs.cfm>.

Green New Deal

Resolutions have been introduced in the House (H. Res. 109) and Senate (S. Res. 59) that provides for a road map of issues the more liberal wing of the Democrat Party would like to pursue over the next two years (See the February 2019 Update for more details on the contents of the resolutions). The ideas introduced in these resolutions have created the normal separations with the more liberal Democrats strongly supportive while the more conservative Republicans strongly opposed. Interestingly, the AFL-CIO sent a letters to Senator Edward Markey (D-MA) and Representative Alexandria Ocasio-Cortez (D-NY), the sponsors of the two resolutions, saying they would not support any proposal that would cause an immediate loss of jobs and/or decrease union member families' standards of living.

While the House will proceed in a more orderly fashion (holding multiple hearings in multiple committees before voting on the resolution), the Senate took a more direct approach. Senate Majority Leader Mitch McConnell (R-KY) introduced Senate Joint Resolution 8 with the same language as S. Res. 59. He then proceeded to take it directly to the floor without any committee hearings. The resolution failed by a 0-57 vote. All Republicans and four Democrat Senators voted against S. J. Res. 8 while all other Democrats voted "present." The "present" vote was in protest for bypassing the normal committee processes. While the Democrats were furious about this tactic, the

vote made it very clear that any “Green New Deal” legislation would need substantial modification before it stands a chance of passing the current Senate.

EPA budget request

On March 11, 2019, President Trump sent his fiscal year 2020 budget requests for EPA to Congress. Like the past couple of budget requests, this one calls for a 25% reduction in funds for the Agency. If history is a predictor of the future, Congress is likely to ignore this budget and fund the Agency at levels similar to the current budget. However, this difference could once again lead to a confrontation between the President and Congress over funding.

EPA personnel

On March 25, 2019, EPA Administrator Andrew Wheeler appointed Anne Idsal as the new Principal Deputy Assistant Administrator for the Office of Air and Radiation. She replaces Mandy Gunasekara who resigned on February 7, 2019. Ms. Idsal was formerly the Regional Administrator for Region 6 and will start her new job on April 1, 2019. David Grey, currently the Deputy Administrator for Region 6 will serve as acting Regional Administrator.

Enforcement

On March 7, 2019 (*Federal Register* notice on March 12, 2019), EPA announced a settlement agreement with ExxonMobil to resolve claims resulting from a 2013 explosion and fire at their Beaumont refinery that killed two employees and injured 10 others. Two workers were using a torch to remove the bolts from the top of a heat exchanger when the torch ignited hydrocarbons being released. Under the decree, ExxonMobil will pay a \$616,000 civil penalty, hire an independent third party to conduct a compliance audit of the company’s procedure for opening equipment at ten different processes within the refinery, and fund a supplemental environmental project to purchase a hazardous materials incident command vehicle (\$730,000) for the Beaumont Fire and Rescue Services.

Recycling and high tech trash collection

One of the major challenges with recycling has been getting a “clean” stream. Contamination is partially blamed for the China’s 40% reduction in importing recycling materials. Until recently, there were no automated methods of sorting recyclable materials from “ordinary” trash. This was largely a manual process to sort a highly variable mix of materials. Some early methods of using magnets to sort steel and iron and puffs of air to blow unwanted materials off the conveyor belt are still used. These are now being supplemented by three different types of robots working alongside humans to produce much cleaner recycling streams. These methods can create a waste stream where every item has been selected for content and cleanliness. In addition, waste management companies are installing internet connected cameras in

dumpsters to alert the company when a “bag of trash” is thrown into a dumpster reserved for a specific type of recycling. Haulers will not pick up that dumpster until the problem has been rectified, reducing the amounts of contamination brought into the recycling facility.

One of the biggest hurdles in recycling plastics is that seldom can the plastic be recycled back into what it once was, especially in the food industry. It is particularly difficult to meet the criteria for food-grade containers using recycled plastic. However, they can be used for other applications such as paint cans, shipping pallets, and pipes. Most of the time, recycled plastic is used for decking, a supplement to asphalt in road building, or more recently when combined with glass fibers as replacement railroad ties.

These problems have spawned a series of tech-trash companies. One example is Rubicon Global. This company was started in 2008 in Kentucky by two friends whose families had been in the waste and recycling business for a number of years. The company created a software platform that analyzes customer waste streams and matches it with haulers, clients, and recyclers. Their goal is to reduce costs to customers by reducing inefficiencies and maximizing the amount of waste diverted from landfills. Think of this as Uber or Lyft for trash haulers. They have been successful enough that Forbes to put the company’s valuation at more than \$1 billion.

In addition to private solutions, the Plastics Industry Association, the American Chemistry Council, and other industry groups are starting a push for new federal matching funds (\$500 million) to build up local waste management options. The concept is to think of local waste collection systems as a type of infrastructure (like roads and airports) that require federal funding. While it far for clear whether this type of funding will be possible, it might trigger support from the Democrat majority in the House. Often these ideas take several years of work before coming to fruition.

IT3 call for abstracts

The next IT3 conference will be held on October 2-3, 2019, in League City, TX. The conference organizers are accepting abstracts for papers until April 15, 2019. Additional details can be found at <https://www.awma.org/IT3>.

CRWI meeting

The next CRWI meeting will be on May 21-22, 2019, in Kingsport, TN. It will feature a tour of Eastman’s hazardous waste combustion units. For additional information, contact CRWI (mel@crwi.org or 703-431-7343).