



Rhode Island Department of Environmental Management
Office of Land Revitalization & Sustainable Materials Management

REVITALIZATION



Completion: Fall 2020

Environmental Protection Supporting Livable Communities, and a Sustainable Future!

RHODE

Issue 13 SUMMER 2024

Bristol Landfill—Largest Solar Farm in Rhode Island

By: Mark Dennen

The largest solar farm in RI, located at 10 Minturn Farm Road in Bristol, had its ceremonial ribbon cutting on Thursday, July 25th, 2024. The farm contains 22,000 panels on about 25 acres and is said to reduce the annual carbon equivalent of 375 vehicles traveling around the earth



See Largest Solar on Pg. 8

RIBBON CUTTING at SAUL TARLOW FIELD in CENTRAL FALLS

By: Rachel Simpson

Located at 987 High Street in Central Falls, the City submitted a Targeted Brownfield Application (TBA) for the property in October 2018. Historically, the site has always been used as a baseball field, however, the property has been surrounded by a variety of manufacturing sites since the early 1900s. The TBA Program completed a Phase I Environmental Site Assessment for the site in December 2018 and a site investigation was conducted in 2019. Metals, polycyclic aromatic hydrocarbons (PAHs), and total petroleum hydrocarbons (TPH) were identified in soil above the Residential Direct Exposure Criteria. From May through November 2022, the site was remediated with engineered caps. Then, in February of 2024, the City held a ribbon cutting for their new field, the Saul Tarlow Little League Field and Carol Evans Memorial Concession Stand. Present at the ribbon cutting were the Mayor of Central Falls: Maria Rivera, Chairman Messoletta, and RIDEM Director: Terry Gray.





Join us in welcoming our newest hires



Jalen Cutchens graduated from Auburn University in Auburn, AL in 2022, with a degree in Ecological Engineering. This is his first time living in New England, and he's excited for the new scenery. He's eager to start working at the UST division of the Office of Land Revitalization and Sustainable Materials Management and with the State of RI. In his free time, Jalen enjoys cooking, listening to music, and gardening.



Alexander Worrell graduated with a BS in Mechanical Engineering in 2021 followed by an MS in Environmental Engineering in 2023, both from URI. He previously worked with RIDEM OLRSM in 2022 as an Intern while completing his independent study for grad school with a focus on the processes of managing LUST sites. Soon after getting his MS, he earned his EIT and began working as an Environmental Engineer for RIDOH's Center for Drinking Water Quality before transferring back to the UST Department. While at URI he was a weapon captain on their fencing team. Alex also plays drums in his free time.

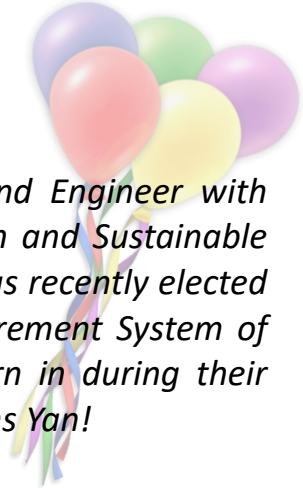


Kyla Foley recently graduated from the University of Rhode Island with a B.S. in Environmental & Natural Resource Economics and a B.A. in Marine Affairs. In 2023 she interned with Rhode Island Energy analyzing and tracking data for industrial energy efficiency programs and is now very excited to work in the Office of LRSMM with the RI UST Fund as an Environmental Analyst through NEIWPC. In her free time, Kyla enjoys watching movies, going to the beach and spending time with friends and family.

Congratulations!



Yan Li, an active state employee and Engineer with RIDEM's Office of Land Revitalization and Sustainable Materials Management (LRSMM), was recently elected to the board of the Employees' Retirement System of RI. The elected members were sworn in during their March 13th meeting. Congratulations Yan!



Congratulations to Jessica Carney-Almeida, an Environmental Scientist with LRSMM's UST Division, on the birth of LRSMM's newest and cutest honorary member of the UST Staff, Daphne Janice (Carney) Almeida. Daphne was born on Wednesday, February 28, 2024. Congratulations to her parents and grandparents, Sean Carney from The Office of Air Resources and Debbie Carney in The Office of Compliance & Inspection, both at RIDEM!



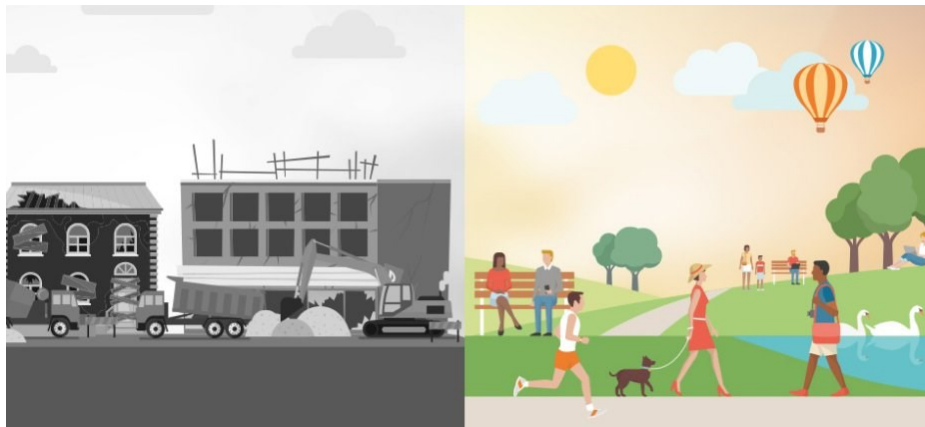
IN THE NEWS

ASTSWMO State Superfund & Brownfields Symposium
Portland, OR
August 13-15, 2024



BIL Remediation Funding

The Brownfield Bipartisan Infrastructure Law (BIL) Program through the Environmental Protection Agency (EPA) invests more than \$1.5 billion in its Brownfields Program funding more than 350 programs. Communities are encouraged to apply for funding and work with the State of RI to receive up to \$250,000 per remediation project for municipalities and non-profits. The Department of Environmental Management will hire the consultants and contractors in a fair and open bid process and oversee the remediation work for the applicant. If you have a remediation project that you need financial assistance with, please contact Kelly Owens at (401) 537-4358 / kelly.owens@dem.ri.gov or Rachel Simpson at (401) 537-4362 / Rachel.simpson@dem.ri.gov for more information.



From EPA Website

Largest Solar ...Cont'd From Cover Pg

twice. This project generates 8.7 million kilowatt hours of clean, renewable energy, enough to power more than 700 homes a year. The work was done under the new regulations and recently finalized [***GUIDANCE TO DEVELOPING SOLAR ON RHODE ISLAND CLOSED LANDFILLS.***](#)

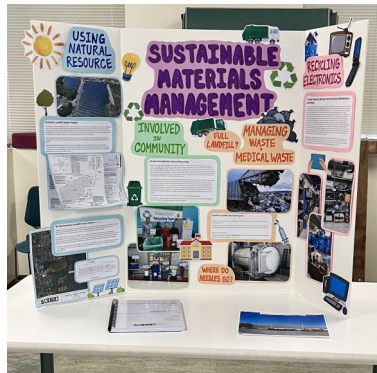
Over the last several years, the solid waste regulations were modified and guidance was developed to allow a more streamlined and consistent process for placement of solar farms on closed and inactive landfills. Given that closed landfills have limited ecological value (as they cannot support deep rooted vegetation), encouraging solar development is a way of helping to preserve forest and farms by prioritizing landfills for development of solar farms. As was the case here, solar development can also provide a mechanism to help cities and towns pay for maintenance and upgrades of landfills caps, thereby minimizing impacts to groundwaters.

WHAT IS 5C WEEK at RIDEM?

The RIDEM holds hundreds of events annually throughout the State to educate and motivate the public. But what about their employees? Every year the Department holds a week long extravaganza where staff comes together to celebrate RIDEM's mission. Each day is dedicated to a different "word" or aspect that will help staff improve the mission. This year, 5-C Week was comprised of Clean & Charity, Colleagues, Connect, Care & Canine, and Celebrate!

Staff started the week off with some spring cleaning and a presentation from the Rhode Island Resource Recovery Corporation on **Recycle Right RI**.

On Tuesday, everyone focused on connecting and improving communications with **colleagues** through some fun team building games and activities!



Then, on Wednesday, each Division set up a display to showcase their current projects. Employees were given the opportunity to **connect**, explore, and learn more about what each division does daily!

Thursday brought in **Care & Canine**, where employees were given the chance to sign up for the State Health Fair to receive a personalized biometric screening. Later on in the day, Captain Chris Duguid and K9 Grizzly stopped in to perform some demonstrations for everyone!



Finally, to wrap up the week, RIDEM came together to **Celebrate** each other's work and the mission!

LRSM's Jeff Crawford receives the Distinguished Service Award, presented by Director, Terry Gray.



Meet Our Summer Interns!



Hello! My name is Becca Schultz and this is my second summer as a Student Environmental Remediation Engineer in OLRSM. I am currently going into my senior year at Worcester Polytechnic Institute (WPI), where I am studying Environmental Engineering. On campus, I am a part of Engineers Without Borders (EWB) and I work at the school bookstore. In my free time, I love listening to music and going to concerts, hammocking, history, and going to the beach!



I'm Emma Doyle and I am one of the Environmental Remediation Engineer interns this summer. I am from Massachusetts, but I go to school in New Hampshire at the University of New Hampshire to study Environmental Engineering. At UNH I am a part of Engineers Without Borders as well as a research assistant at the Stormwater Research Center. I love to read, camp, and go to the beach to look for sea glass. I've had so much fun this summer at RIDEM. My favorite part has been the variety of work both in and out of office that I have gotten to be a part of.



I'm Trevor Wilkins and I'm one of this year's Student Environmental Remediation Engineers. I'm originally from Massachusetts but I go to school right here in Providence, at Brown University! My concentration is Environmental Engineering with a minor in Urban Studies. In my free time, I enjoy reading, walking my dog, grabbing coffee with friends, and binge-watching Survivor. My favorite part of the summer so far has been being able to go out into the field and get so much hands on experience!



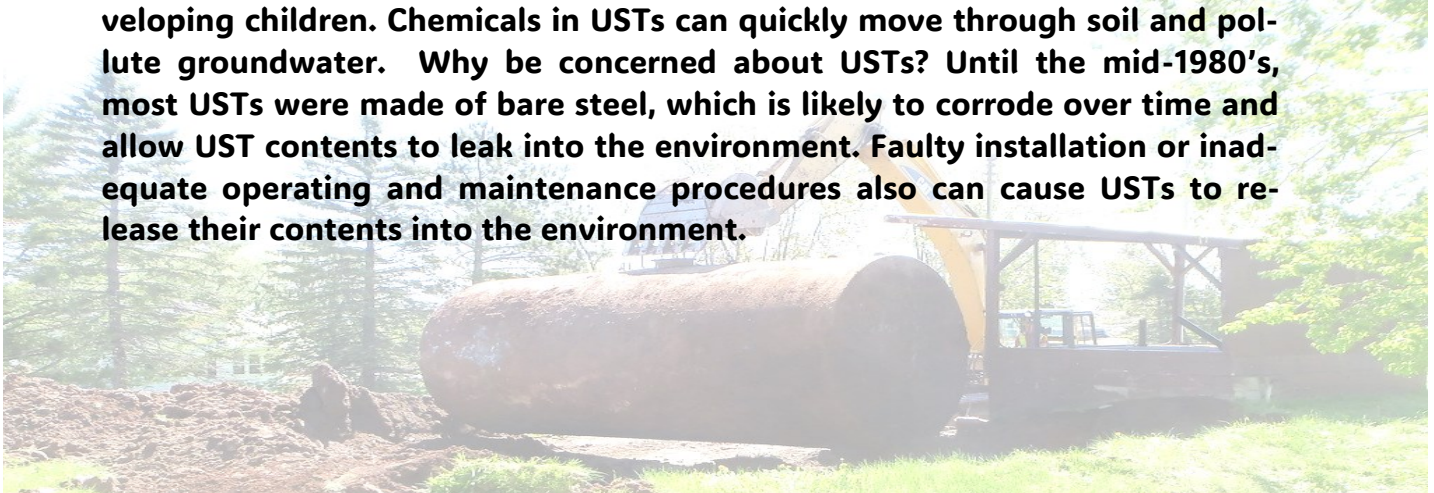
Hello, I'm Olivia Findlay. I am currently in school for Psychology and have been with DEM for several seasons now. While working towards my degree, I have obtained my EMT License and attended the RI Fire Academy, where I received my Firefighter II certification. I then specialized in medical administration with the Air National Guard which later led me to work as a Medical Assistant throughout Rhode Island's Covid-19 clinics, where I spent the next three years. Once all our clinics closed, I made the transition back to DEM—where I thoroughly enjoy working!



“What are the effects of leaking underground storage tanks?”

By: Lisa Brice

Underground storage tanks hold toxic material, such as gasoline and waste oil, which contain dangerous substances that can cause cancer and harm developing children. Chemicals in USTs can quickly move through soil and pollute groundwater. Why be concerned about USTs? Until the mid-1980's, most USTs were made of bare steel, which is likely to corrode over time and allow UST contents to leak into the environment. Faulty installation or inadequate operating and maintenance procedures also can cause USTs to release their contents into the environment.



Tires and Landfills

By: Lisa Brice

Tire buildup in landfills is one of the main challenges in recycling tires. Their rounded, hollow design takes up a lot of space in landfills. Tires also don't stay buried very long. Unfortunately, they tend to trap gasses, such as methane which then seeps through the landfills, tearing through the liners in the process.

When a car owner purchases new tires, they typically recycle their old ones at a service station. Naturally, the greenest way to handle tire recycling is to prolong the life of your tires by keeping them in good working order. Adhering to eco-friendly, sensible car maintenance procedures, such as keeping up with tire rotations, alignments, and keeping tires properly inflated, is one way to keep tire debris out of landfills.

Thankfully, tires can now be recycled in a variety of ways. For most people, the easiest is to locate a nearby tire recycling facility where they can drop off their used or old tires. Many businesses offer to pick up old tires and will sometimes even pay for them! Visit [A-Z List from RI Resource Recovery CO. \(rircr.org\)](http://rircr.org) and click on your city/town to see your options.

Source: [The Problem of Tires in Landfills: Why It's So Important to Recycle \(ecogreenequipment.com\)](http://ecogreenequipment.com)

Sustainability in Nature: RHODE ISLAND

By: Olivia Findlay

Interested in exploring sustainability in your own backyard? Rhode Island has hundreds of recreational and conservational areas to explore. *Sustainable Materials Management* emphasizes the Rhode Island Department of Environmental Management's zero waste initiative through recycling and reusing waste and damaged materials, which is exactly what Danish recycle art activist Thomas Dambo has accomplished.

Dambo utilizes discarded materials and gives them a new life by turning them into large-scale artworks that can be viewed throughout the world. He uses his sculptures to tell stories of conservation and the importance of sustainability in our environment. Many of these works are hidden in parks, green spaces, and wooded areas, encouraging and bringing awareness to explore and preserve nature.

Ninigret Park, Charlestown, Rhode Island is now home to two of Dambo's sculptures; Erik Rock and Greta Granite. These two works are a part of a much larger scale project—the Trail of a 1000 trolls. Each troll is made from locally sourced materials wherever they are built. Erik Rock and Greta Granite feature materials like sea shells, glass, driftwood, bamboo and maple branches. Occasionally, Dambo holds workshops where he teaches the public how to reuse and upcycle.



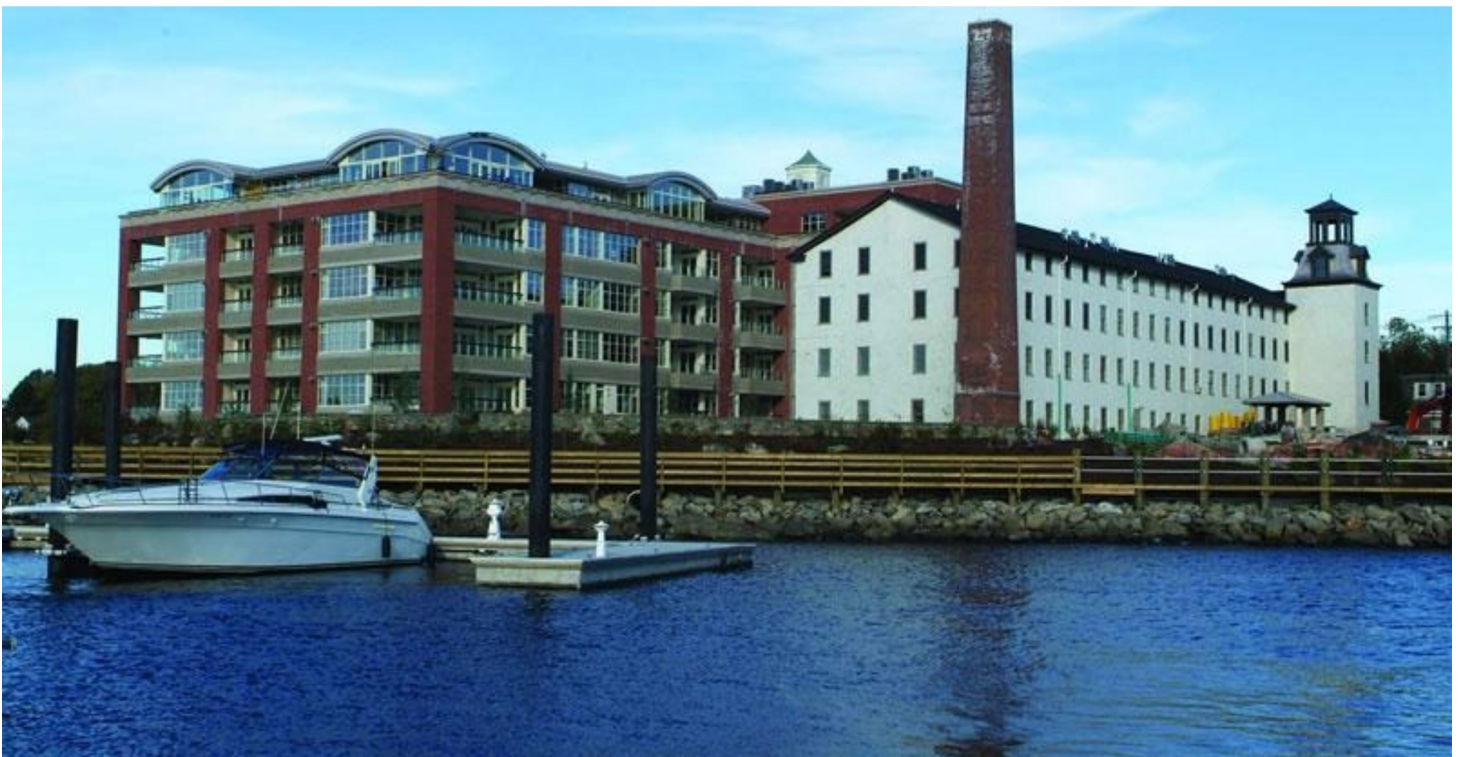
Check out Dambo's weekly "Trash Talk" videos here: <https://www.youtube.com/@ThomasDambo>

Trail of a 1000 Trolls—
<https://www.thomasdambo.com/trollmap>

"Our planet is drowning in waste and something must be done to create awareness of this huge problem." - Thomas Dambo

HELP CLEAN UP THE BROWNFIELD SITE

By: Olivia Findlay



SPOT THE 6 DIFFERENCES

E-Waste Spot the 10 differences

By: Olivia Findlay



Did You Know??

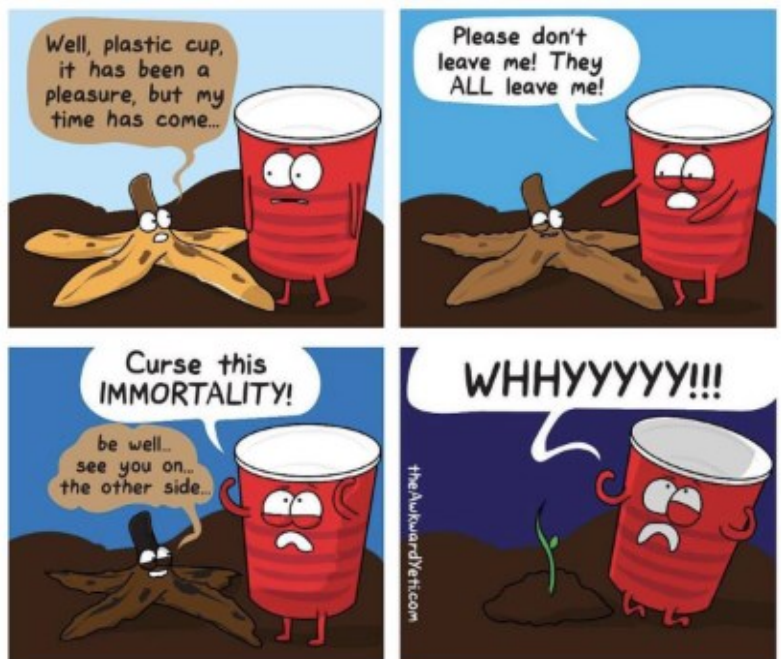
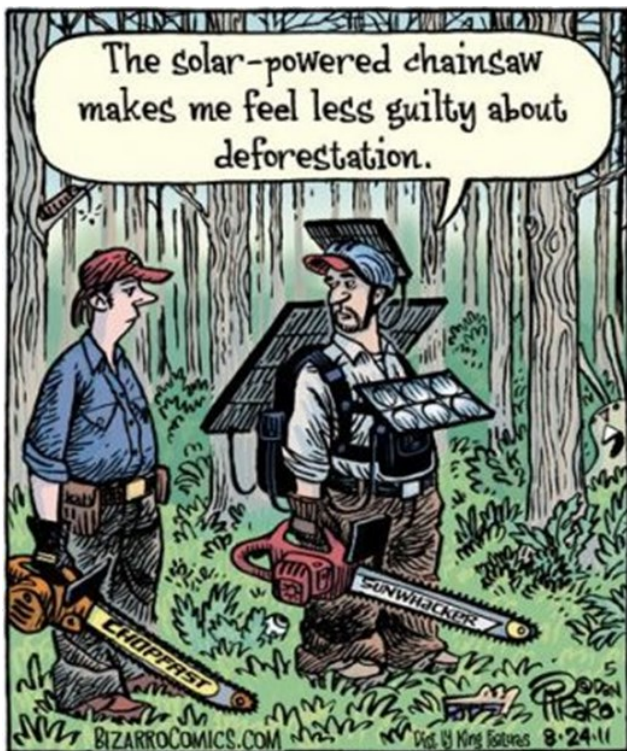


By: Lisa Brice

Did you know that paper is one of the few truly sustainable materials in the U.S.?

Most paper is made from the wood pulp found in trees. Paper producers work with private landowners to continually source, plant and grow trees. Thanks to their efforts, the volume of tree growth in the U.S. each year is roughly double the amount harvested.

When you use paper products, you're doing your part to help the planet. Because the paper, packaging, and boxes you rely on every day are designed to be easily recycled. In fact, paper is the most recycled material in the US, it comes from a natural and renewable resource—trees. Choosing paper products encourages US forest owners to grow and maintain healthy forests, nearly twice the amount that's used to make the products we need.





OSCAR the Q&A Mascot

By: Michelle Jong

Rainy/Flood Season vs. UST

It's that time of the year again, with all the summer fun. While we all love the sunny summertime, it also means wet flood season. Flooding can significantly impact our underground storage tank systems, causing erosion, leaking, buoyancy, and electrical damage and the owners and the operators of the USTs should be prepared to minimize any damage to the UST and the environment.

During a flood, moving water can cause soil erosion and scour, exposing the system to stressors from floodwater pressure or floating debris. This could lead to UST being undermined or to collapse. Underground piping can also shift and release harmful product into the environment. Water or other debris can enter UST through openings, and as water and debris settle on the bottom of the UST, product will rise and float on top until it exits the tank through the opening. UST system surrounded by flood waters or saturated soil is subjected to buoyant forces that could offset the restraint of backfill, pavement, or hold-down straps causing the tank to shift and float. This also results in releasing product into the environment. Also, extended contact with flood waters may cause damage to electrical equipment associated with UST systems.

So, what can we do to before the flood to best avoid these situations? There are many ways that UST owners and operators can do to reduce the chance of any UST accidents. This includes turning off all electricity to the UST system, taking product inventory and water level reading of USTs to help account for possible product loss, filling the tank to weigh down the tank so it will not float out of the ground, securing all openings on top of the tank including fill caps, making sure the seal of spill bucket plungers are operational so water cannot enter the tank, closing the shear valve on pressurized piping to prevent water from entering, placing something heavy like dumpster, sand bags over the tank to reduce the chance of a tank floating out of the ground.

For more information, check out EPA's UST Flood Guide here: <https://dem.ri.gov/sites/g/files/xkgbur861/files/programs/benviron/waste/ust/ustfloodguide.pdf>

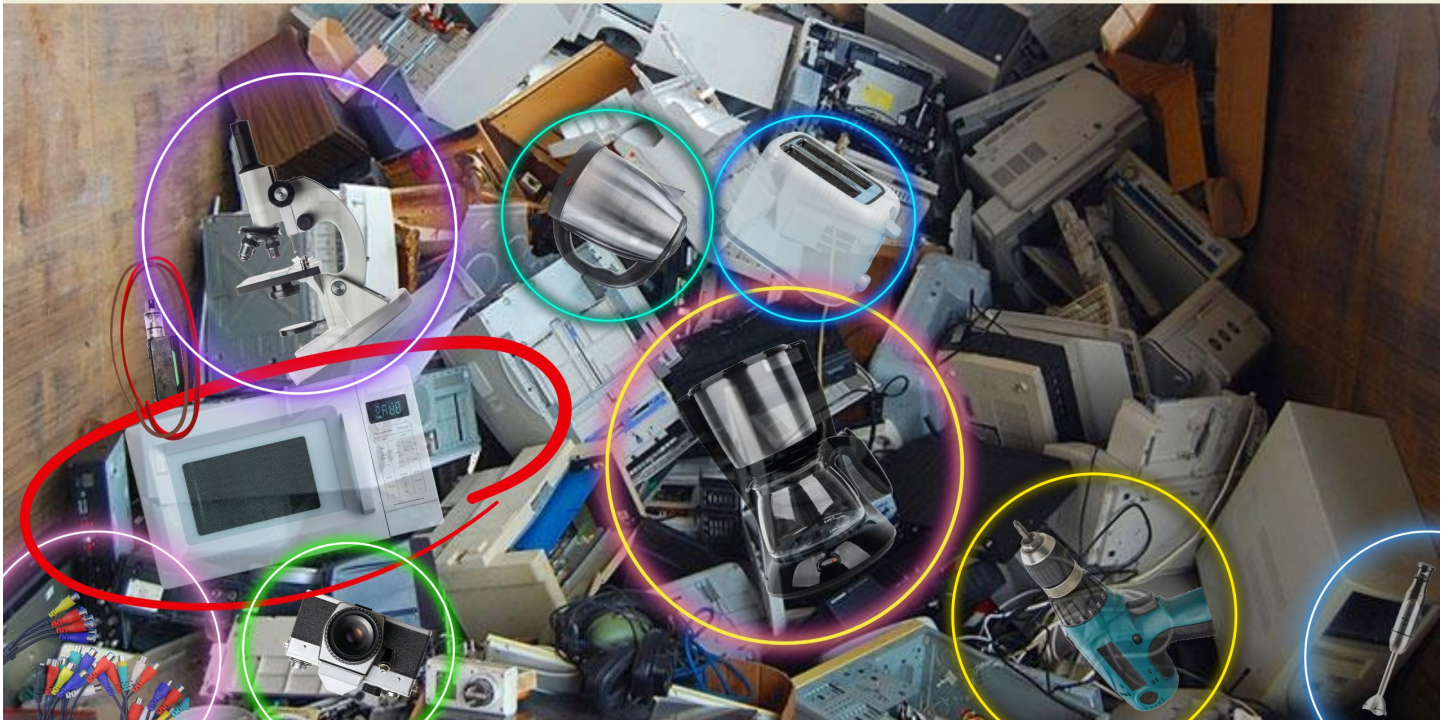
Act smart, fast and let's not let the summer flood ruin our environment!
To submit questions for our future editions of **REVITALIZATION RHODE** click [here](#).

ENVIRO Q&A By: Lisa Brice

1. Which musical instrument is the most environmentally friendly and yet contains CO₂?
2. What is the difference between weather and climate?
3. What is a wind turbine's favorite color?
4. What do you call a TV show discussing renewable energy?
5. What does an environmentally conscious inmate want?

- ANSWER KEY
NO PEEKING!
1. An air guitar.
 2. You can't weather a tree, but
 3. Blew
 4. A Solar Panel
 5. A Solar Cell

E-Waste Answer Key



Brownfields Answer Key

