Land Protection Division Updates



Staff Changes

Anne Marie Smith
Solid Waste Permitting

Jim Wilkins Hazardous Waste Permitting





Staff Changes



Keisha Cornelius Radiation Management

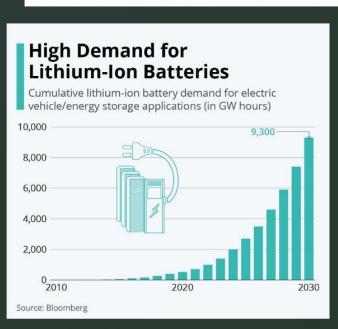
Energy Density of Lithium-ion Battery Packs, 2008-2020 450 400 350 250 150 140 90 555 0 2008 2010 2013 2017 2020

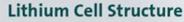
Source: Nitin Muralidharan, Ethan C. Self, Marm Dixit, Zhijia Du, Rachid Essehli, Ruhul Amin, Jagjit Nanda, Ilias Belharouak, Advanced Energy Materials, Next-Generation Cobalt-Free Cathodes – A Prospective Solution to the Battery Industry's Cobalt Problems , January 2022.

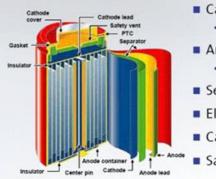
Hazardous Waste Updates

Lithium Battery Recycling

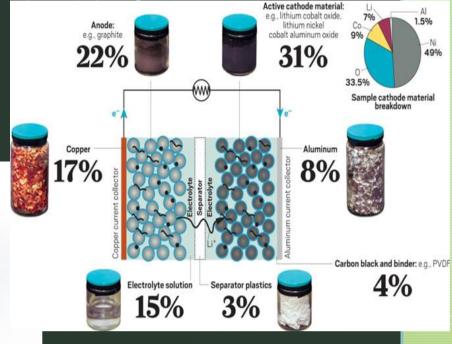
<u>14957.pdf (epa.gov)</u>







- Cathode
 - · Positive electrode
- Anode
 - Negative electrode
- Separator
- Electrolyte
- Can and terminals
- Safety vents



Hazardous Waste Lithium-lon Batteries

Generators

- Household -exempt
- Certain actions prior to recycling are exempt from permitting
- Process dependent
- Rechargeable and single use can be managed as universal waste

Destination Facilities

- Storage Prior to processing is key to whether permit is required
- Recycler that stores hazardous waste or universal waste before recycling (batteries, black mass, etc) requires RCRA permit
- Any storage more than incidental may trigger need for permit

Lithium-Ion Batteries Best Management Practices

Safety training

Isolating terminals with non-conductive tape or similar

Preventing damage

Storing in climate-controlled spaces with good ventilation

Storing in separate building away from flammables and people

Storing damaged, defective, recalled separately in appropriate containers

Advanced fire detection/suppression equipment

Frequent visual and thermal inspections

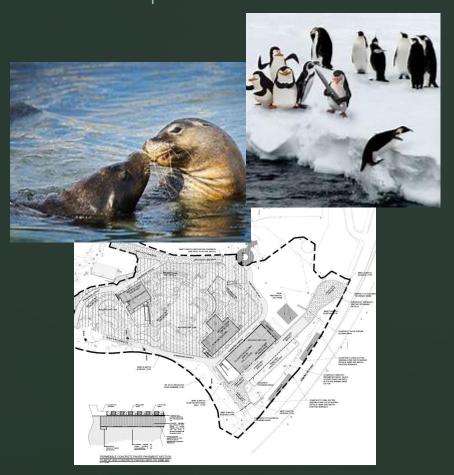


Solid Waste Updates

Used Tire Market Development Grant

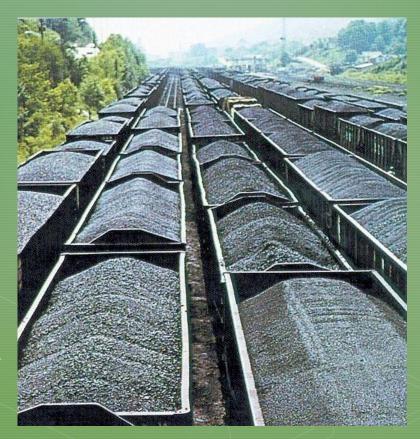
Composting Rules



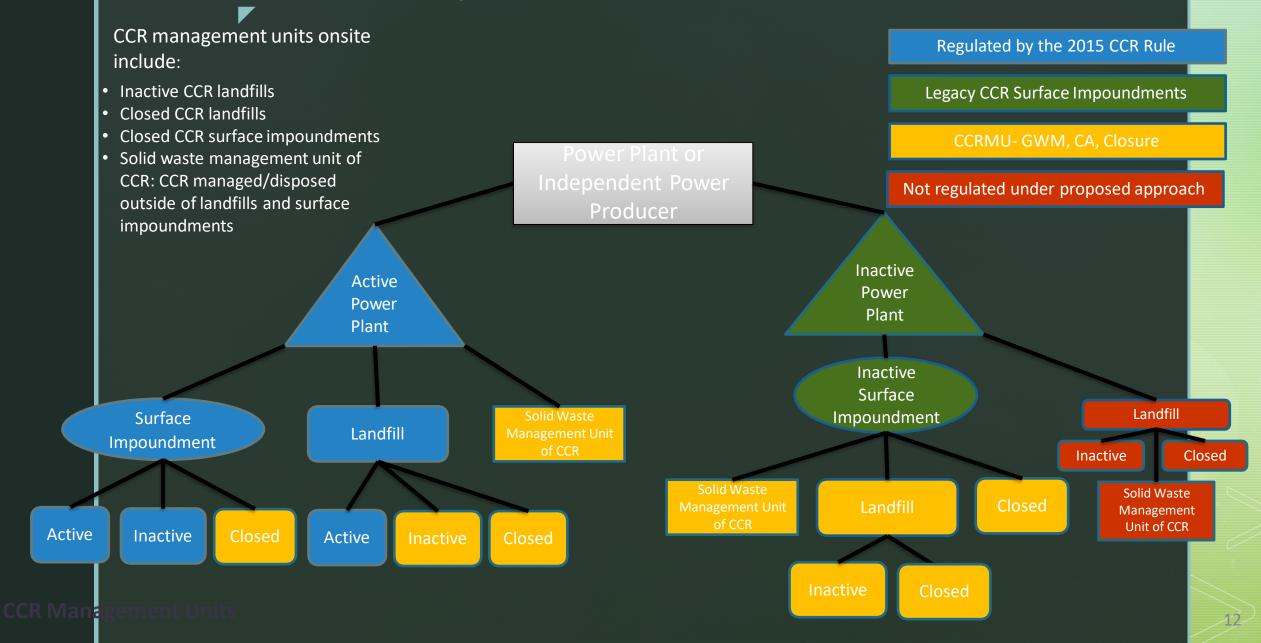


Coal Combustion Residuals Proposed Rule to Regulate Legacy CCR units

- Proposing to regulate inactive surface impoundments, and CCR management units (new) similar to parts of the 2015 CCR Rule
- Comment period closes July 17, 2023
- Facilities would have to inventory & delineate
 CCRMU and document findings on website
- DEQ would have to revise rules and seek EPA program approval to regulate any legacy unit under a state program



CCR Management Units at Power Plants



PFAS as CERCLA Hazardous Substance



PFOA and PFOS are proposed

Final rule scheduled for August 2023

ANPRM for 7 others under CERCLA

- PFBS, PFHxS, PFNA, HFPO-DA (GenX), PFBA, PFHxA and PFDA
- Comment period extended to Aug 11, 2023
- All seven are included in UCMR5

CERCLA Approach

Benefits

- Releases above RQ reported
- More data on prevalence
- Assessment and Cleanup by Responsible Party

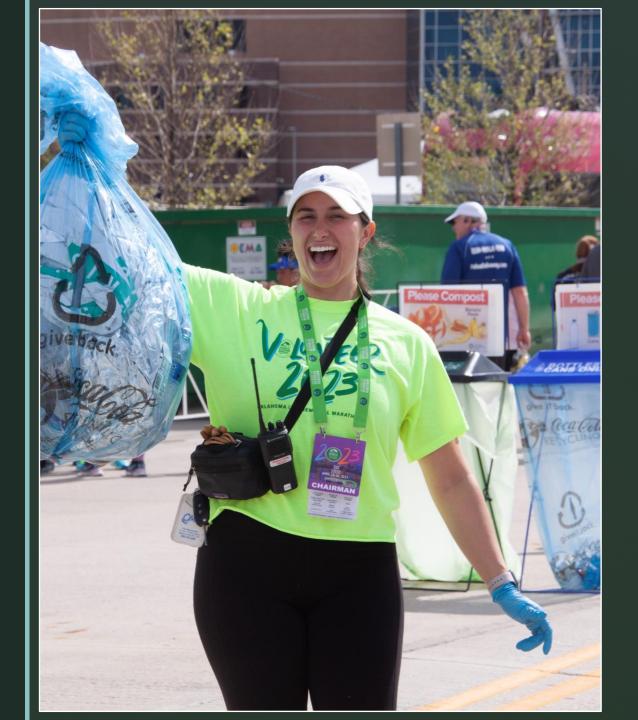


Concerns

- Disposal/treatment technologies
- Lab capacity
- Potential Severe Impact to Passive Receivers
 - PTWs, Landfills, Ag lands
- EPA's solution is enforcement discretion and settlement agreements
 - Enforcement discretion will not stop 3rd party lawsuits
 - Settlement agreements take time and are not easy
- Possible impact to Brownfields redevelopment
- Potential Disruption to Sanitary Services
- Economic Impacts

Event Recycling





Pounds Diverted

2021-2023

7,520 Recyclables

Compost 3,000

ONE Truckload Food Donation

144 Volunteers

Volunteer Hours 1390