



Disposal Constraints and backlogs



Integrity, Innovation, Excellence



Agenda:

- Why the backlog?
- Regulatory body awareness
- Regulatory Response
- Exemptions/Extensions
- Extension Requests FY22
- When will the backlog lessen?
- Capacity Outlook
- Pro Tips



Why the backlog?



The perfect storm:

- 2019 and 2020 TSDF computer system hacks
- Covid and the work force reduction that it brought (transporters/TSD's)
- 2021 Winter freeze in the South (winter storm Uri – TX, OK, AR)
- 2022 Fire at WTI
- Unplanned shutdowns combined with planned events (including kilns)

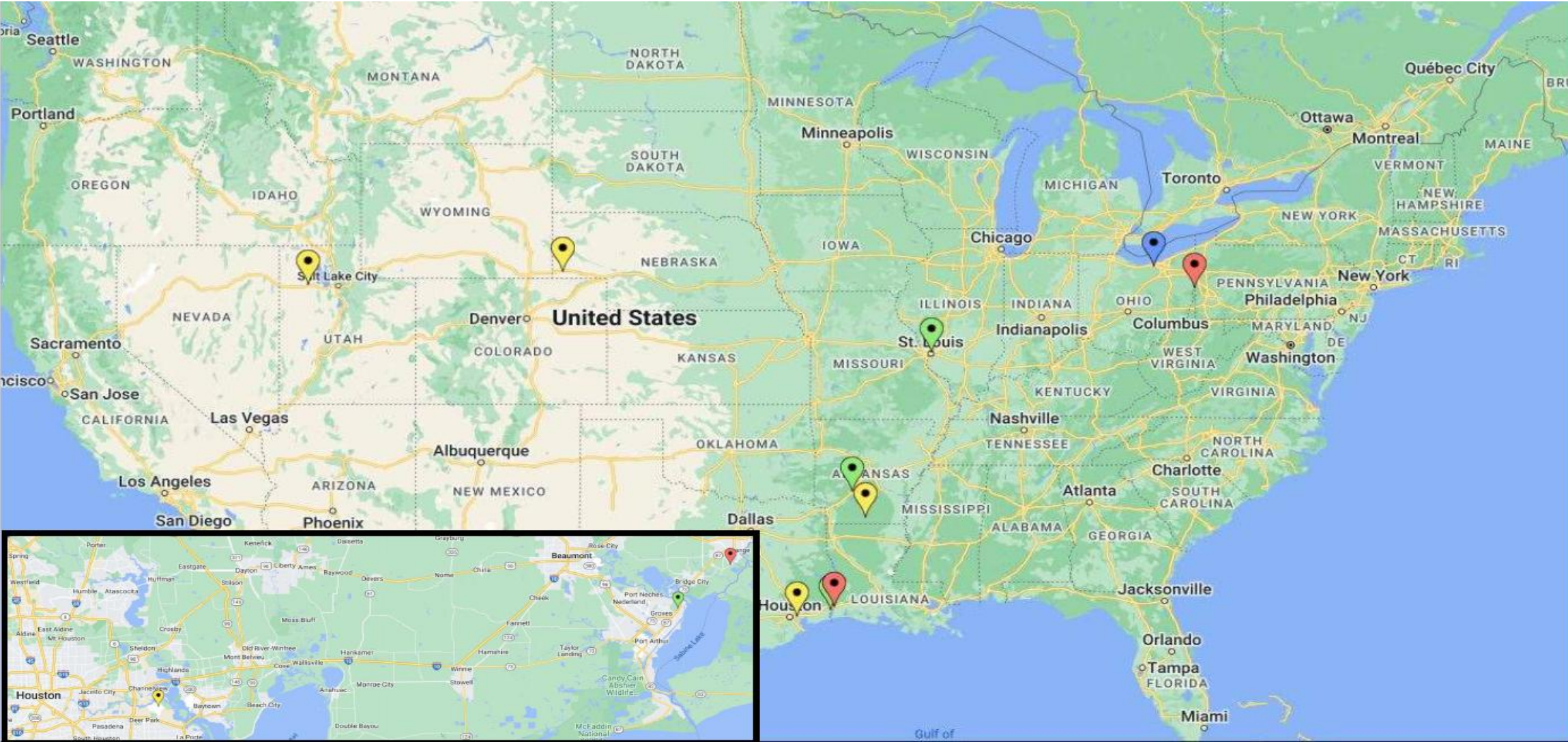
**Backlog - containerized waste

Other contributing factors:

- Captive incinerator shut down – redirecting their waste to open market
- Increasing waste volumes after Covid
- Facility maintenance shutdowns
- Growth of Petrochem industry
- Growth of Chip manufacturing industry
- Medical waste increasing
- Retail waste volumes growing – enforcement increasing



Incinerator Locations





Regulatory body awareness and response



- EPA Awareness – Early June 2021
- Inbound loads slowing well prior, eventually stopping
- Multiple feeds for incinerators
 - a) Containers
 - b) Bulk
- EPA published a memorandum August 10th, 2021 clarifying that the regs allow states and EPA regions to grant haz Waste generators multiple consecutive extensions to the Accumulation time limits if the generators meet the Conditions in 40 CFR 262.16(d) or 262.17(b).
- Memo largely reminding generators that existing regulations Have mechanisms for requesting storage time limit extensions of up to 30 days. Extensions are typically granted for unforeseen, temporary, or uncontrollable circumstances



Are generators having success getting exemptions/extensions for 90/180 day storage?



Short answer... Yes, 30 day extensions at a time.

SQG's:

- 180 (270 in excess of 200 mile transport – Self implementing)
- Retain supporting documentation

LQG's:

- 90 days (30 day extensions with proper justification – letter from disposal providers, etc)
- Be aware of existing provisions
- Utilize TSDf's permitting already in place (365 days)
- EPA has indicated that TSDf's may store waste longer if permit allows this type of storage activity, as long as they don't exceed permitted storage capacity. (modify permit, or temp authorization via existing regulations)

Pharmaceutical waste:

- Currently there isn't a mechanism under 40 CFR part 266 subpart P to request an extension to the one-year accumulation period for hazardous waste pharmaceuticals.

EPA webpage addressing FAQ's regarding "The Backlog of containerized Hazardous Waste Needing Incineration"

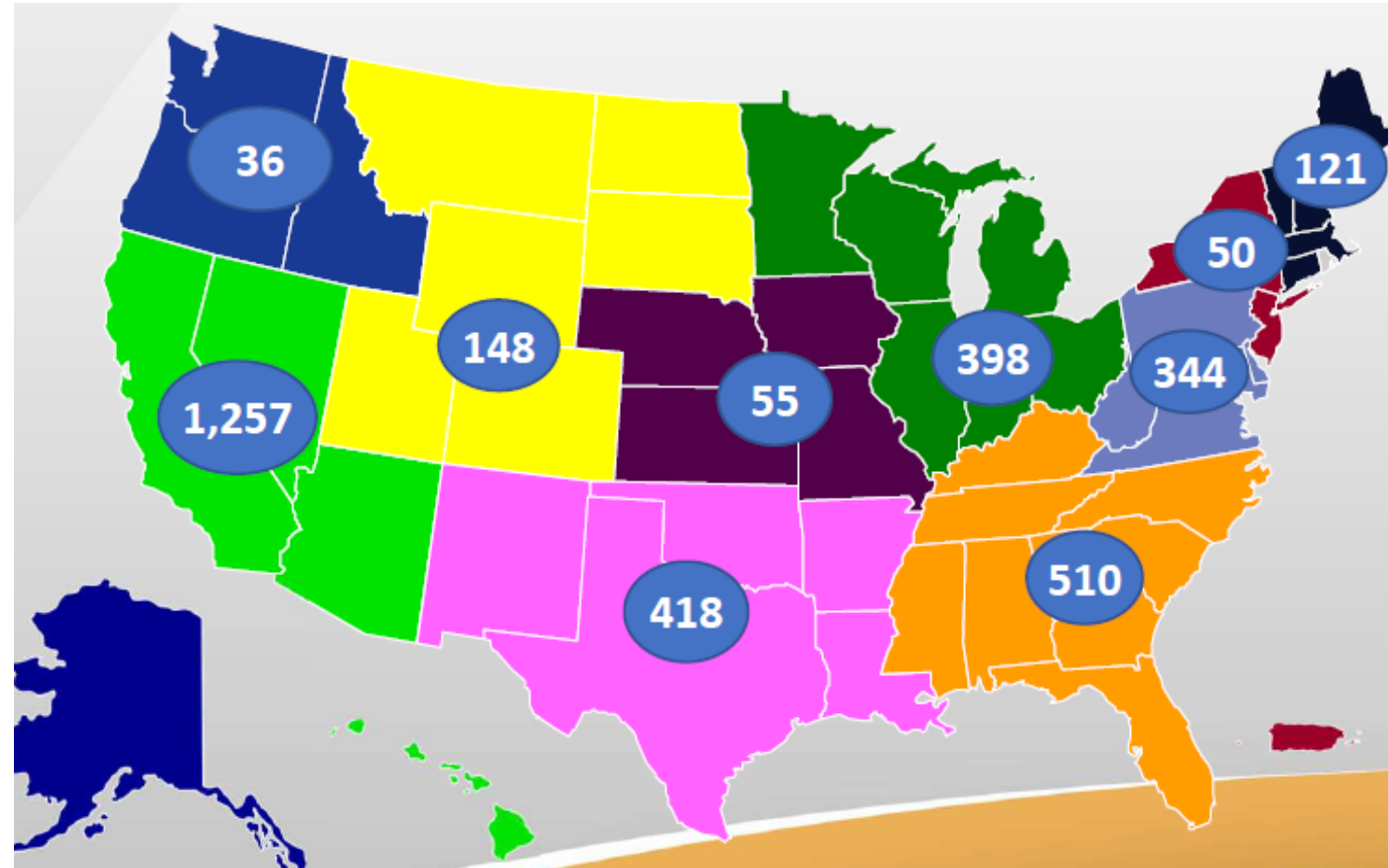
- [The Backlog of Containerized Hazardous Waste Needing Incineration | US EPA](#)





Storage time extension requests:

- Map shows number of extension requests processed by each EPA region (FY22)
- 45 States responded
- Total requests: 3,337
- 37 of 45 States issuing multiple extensions



Will the backlog challenges alleviate/will they lessen soon?

- **Have they alleviated?**
 - It depends...
- **Will they lessen soon? (not likely)**
- **Strong Push for on-shoring of manufacturing partially due to:**
 - **Supply chain issues**
 - **Geopolitical risks (escalating tension with China, Ukraine factories switched to defense production)**
 - **CHIPS Act of 2022 – bring tech manufacturing back to the US**
 - **Tax Cuts & Jobs Acts 2017- lower corporate tax rates and other incentives to operate in the US**
 - **Health Care- Economic Development & Aging Population- projected 70 new hospitals to be constructed in the next 10 years increasing pharma waste >1M lbs over next 7 years**





Capacity Outlook

- **Several Captive Incinerators Closing**
 - 3M Cottage Grove MN closed redirecting 30,000 tons of waste annually into the already strained market
- **New facilities not expected to provide much long-term relief**
 - Clean Harbors will open a second incinerator in Kimball, NE- late 2024/Q1 2025.
 - Veolia will open an incinerator in Gum Springs, AR - Q1 2025
- **Waste generation from manufacturing and other sources increasing**
- **EPA estimates on incineration and overall national capacity have focused on supply, and have not considered demand trends.**



Questions?



Question: Why do bees have sticky hair?

Answer: Because they use a honeycomb...



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