Member update KBI / Retriev Technologies
March 13, 2019
• Locations

Anaheim, California – TSDF, Part B Permit Cal EPA

Brea, California – xEV Strategies, supports HEV/EV battery customers.

Lancaster, Ohio – TSDF, Part B Permit Ohio EPA (Retriev Technologies)

Trail, British Columbia, Canada – TSDF Equivalent, Permitted by Ministry of Environment Canada. (Retriev Technologies)
• Facility Upgrades – Anaheim, California

- 4M dollar process improvement in Anaheim
- 16,000 Sq.ft. production enclosure.
- 50,000 cf/m FEF (fugitive emissions filter)
- Minimum of 200cfm negative pressure process control in area.
- Point source controls for all aspects of the lead battery recycling process.
- KBIs ambient air samplings shows magnitude below any current regulatory limit and approximately a tenth of any future proposed limitations for lead emissions.
Lithium Ion battery recycling is happening in North America.

RTI recycled their first lithium ion battery in 1996. Since 2000, RTI has processed and recycling over 13 million pounds of lithium ion batteries.

Trail, B.C. and Lancaster Ohio.

Current R &D project nearing completion results due within the next 30 days.

Addition to the backend of the recycling process.

Better separation of contained materials.
Increase value to customers.
Reintroducing materials back to supply chain.
Looking to the Future

- Enhancing current processes in North America.
  - Higher value yield.
  - Availability of materials.
  - Adopting closed loop models for Li Ion batteries in North America.
- Extending batteries useful life through 2nd use.
  - Brea, California facility xEV Strategies facility for 2nd use exploration.
  - Focus will be on energy storage systems.
  - Assess for some automotive applications.
Thank You