WASTECON and Beyond

December 6, 2022



Visits

- Otay Landfill Visit
- Mattress Recycling Council
- AMP Robotics
- Republic Services





Otay Landfill

- Permitted to handle approximately 6,700 tons of waste per day - 1.8 million tons annually
- Accepts Municipal Solid Waste, Commercial Waste and Non-Hazardous Industrial Waste
- 185 daily collection routes throughout San Diego County





Otay Landfill

- 230 acres of the Otay Landfill property is dedicated to non-landfill operations, including 25 acres dedicated for a vernal pool habitat project to protect native aquatic species
- 1,900 tons of recycled material processed each year
- Otay Landfill gas-to-energy (LFGTE)

 10-Megawatt facility fueled by landfill gas generates enough renewable electricity to power more than 13,000 homes





Otay Landfill Composting

- Contaminants have to be monitored.
- PFAS contact water captured
- Lots of close neighbors
- 300 Gortex facilities around the world.
- \$60 to \$85 per ton for organics
- 200 tons per day
- Eight operators
- Compost takes 8 weeks for 6 acres 3 phase system



Forward
WASTE PLANNING
2044

Otay Landfill Composting

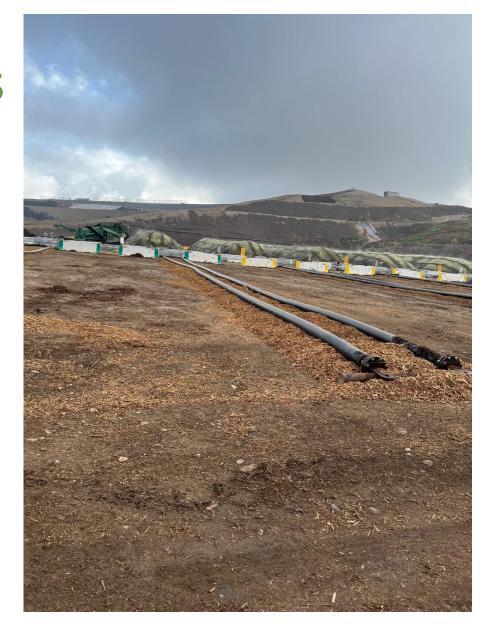
- Facility controlled on iPhone
- Monitor each pile for temp and oxygen
- Analytical testing on the final product
- Have to re-set bedding under piping every time there is a new pile
- Capital and site prep cost was \$5 million
- Fully solar operated





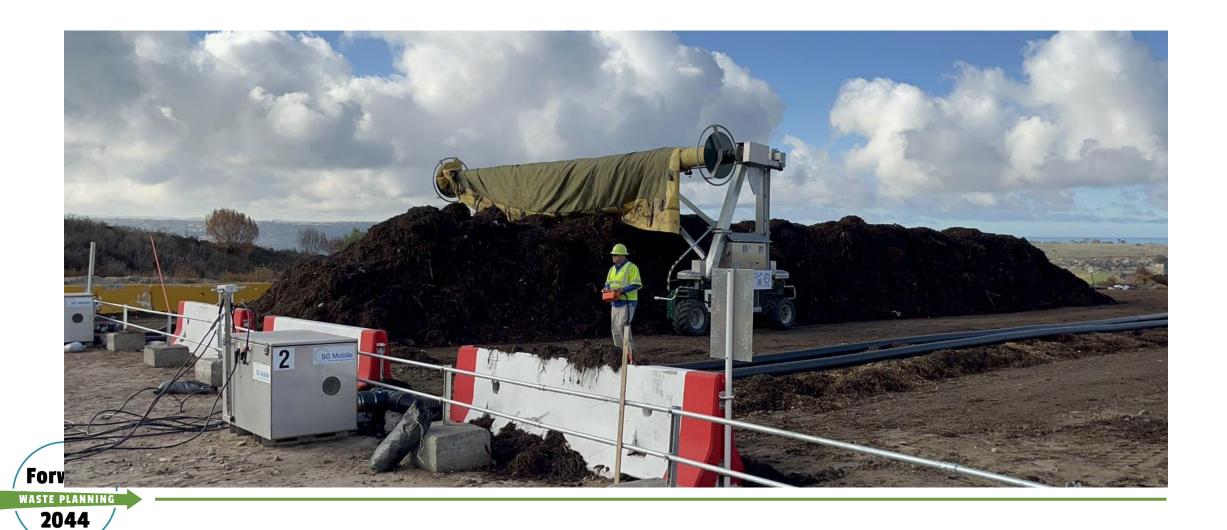
ASP Composting Operations







Gortex Cover Process





Mattress Recycling Council

- Non-profit organization
 - They provide for the transportation and collection at a solid waste organization facility.
 - Council provides support for legislative action and policy guidance
 - 4 states are currently participating. Iowa is not yet a participating state.
- In the California program
 - \$10.50 mattress disposal/recycling cost.
 - Currently, ~77% of a mattress collected and dismantled is being recycled.





AMP Robotics

- 5-year operational
- Robotics able to process:
 - C&D
 - Plastic films
 - #3-7 Plastics
 - OCC
- 80 picks/minute
- Success with robots picking 1-2 items
- Burden-depth recommended at 1 depth
- Real-time waste sort
- Audit system of waste sort







Republic Services

- Discussed opportunities for collaboration
 - Increase recycling diversion and commodity values
 - Landfill and transfer services
 - Services needed in Linn County
 - Composting operations
- Next steps: meet with local Republic Services staff and tour Agency facilities.





WasteCon 2022

- SWANA's Leadership Executive Summit
 Transforming the Waste Management Industry through
 Pioneering Leadership
- 100+ vendors

2044

- Team had in-depth conversations with various C&D shredding companies, waste-tracking software vendors, and Anaerobic Digestion facilities.
- 2 days of sessions
 - Valuable sessions on EPA grants, state of the industry presentations, safety summits, and new technology installations.
 - Team met with many facilities across the country to learn from their challenges and successes.

Questions?

