

Container Glass Recycling System Development in Kansas City



MORA Meeting • June 2007

Review

- Boulevard Brewing's interest in glass recycling:
 - Product stewardship - ~8,000,000 bottles in KC
 - Collapse of glass recycling infrastructure in KC
 - Consolidation in container manufacturing
- 2006 grant from MARC to study glass recycling system development concepts for our area

Concepts for Recovering Container Glass

- Returnable container system
 - Requires “beverage” manufacturers to re-use containers

Pro's

- Way it used to be
- Industry standard bottles

Con's

- Shipping inefficiency on return
- Glass required to be heavy-weight
- Chemical use for cleaning returned bottles
- Resistance from entire chain

- Recycling

Recycling Glass Makes Sense

- Glass manufacturers realize energy savings of 1-2% per 10% of cullet used in their batch mix
- Sand is an abundant resource – landfill space is not!
- A thorough cost analysis of a new returnable container system would likely show it to be significantly more expensive than an efficient recycling/cullet processing system

Making Cents out of Glass Recycling

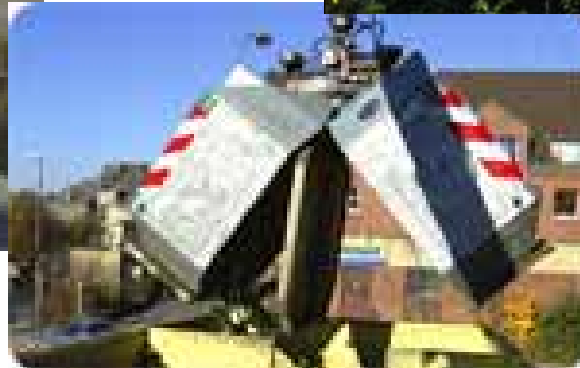
- Collected material needs to be directed to highest value use
- Collected materials must be processed beyond coarse sorting to meet manufacturers requirements
- Collection and processing efficiencies are imperative



Making Cents (cont.)

- Collection Efficiency
 - Current model (single stream) doesn't work for glass – contamination of higher value materials
 - European “neighborhood” model has much higher collection and processing efficiencies due to residents performing initial hauling and sorting work
 - Abitibi Paper Retriever model provides the incentive necessary for high level of sustained participation
 - Must include commercial accounts in program (est. 60% of glass waste)
 - Include multi-family due to relatively high density

Making Cents (cont.)



Making Cents (cont.)

- Processing Collected Materials
 - Removal of ceramics (coffee cups, plates, etc.) is imperative
 - Removal of metals, trash, food waste, labels also very important
 - Design process to meet cullet customer requirements

Making Cents (cont.)

- Directing Materials to Highest Value Use
 - Local fiberglass manufacturers are the highest value use for materials we collect
 - Nationally, container glass manufacturers represent highest value for cullet but freight from KC compromises net for local operations
 - Aggregate and other such uses are a good way to dispose of substandard cullet

Conclusion

- Develop a shared vision with key parties/partners – local government, private industry, community leaders and champions
- Invest in new collection and processing infrastructure
- Get the word out

