CITY OF LETHBRIDGE

Municipal Solid Waste Characteristics

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LETHBRIDGE

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DO WE HAVE WHAT IT TAKES?

Residential

Commercial

Multi-Family
PROGRAM OBJECTIVES

• Are customers compliant with waste by-law

• Is our education effective?

• What goes into the bin?
PROGRAM PILOT
PROGRAM PILOT
PROGRAM PILOT

Arrgh...

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PROGRAM EVOLUTION
COMPLIANCE WITH WASTE BY-LAW
COMPLIANCE WITH WASTE BY-LAW
COMPLIANCE WITH WASTE BY-LAW
COMPLIANCE WITH WASTE BY-LAW
EFFECTIVENESS OF EDUCATION
EFFECTIVENESS OF EDUCATION
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RESIDENTIAL GARBAGE COMPOSITION

- 47.4% Organics (Compostable)
- 26% Recyclables
- 27% Waste

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COMMERCIAL GARBAGE COMPOSITION

Major Chain Grocery Store

Ice Rink and School

Health Care and Social Housing

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COMMERCIAL GARBAGE COMPOSITION

- Industrial
- Construction
- Retail
- Office
- Institutional
- Healthcare & Social Assistance
- Accommodation & Food
- Other
COMMERCIAL GARBAGE COMPOSITION

Health & Social Services
- Food & Accommodation
- Institutional
- Office
- Other
- Retail

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COMMERCIAL GARBAGE COMPOSITION

Waste Categories - Audit ICI 2011

- Total Recyclables: 31.3%
- Total Residuals: 24.4%
- Total Organics: 28.1%
- Total Construction and Demolition Materials: 7.2%
- Total Special Care Wastes: 6.3%
- Total Uncategorized Wastes: 2.7%
HOW TO DO AN AUDIT?

Sample size and sample weight

- Organics: 4 samples at ~100 kg each
- Papers: 9-10 samples at ~100 kg each
- Bulk items: ~100 kg each
- Glass: ~100 kg each

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RECOMMENDATIONS

Staff
SUMMARY

• Waste audit data will help you to understand what you are dealing with in your waste
• Waste audits are easy and cost effectively to do internally (~$300/ sample)
• 10 samples at 100 kg per audit are sufficient
• 3-4 audits per year to account for seasonal variability
• Do audits every 2-3 years if no significant program changes occurred
• City of Lethbridge has good data
SOURCES

• White Paper - http://www.albertatechfutures.ca/
• CCME Recommended Waste Characterization Methodology, 1999
• Provincial Waste Characterization Framework, Alberta, October 2005

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