

Municipal Perspectives on Waste Management

Presented by Mike Birett
(Region of Waterloo)

Agenda

- ✓ - intro
- ✓ - terms of reference
- ✓ - overview of Regional system
- ✓ - influencers/drivers
- ✓ - discussion
- ✓ - conclusion

Terms of Reference

✓ Waste Management:

- Hazardous: process, consumer products (HHW), site remediation, institutional (biomedical, radioactive)
- Non hazardous: residential, and industrial, commercial, institutional (IC&I)

✓ Performance Criteria

- meets the needs of local tax payers
- cost effective
- environmentally sound

Regional System

1.1 Budget

- ✓ \$15 million/yr operating
- ✓ \$60 million, 10 yr capital

1.2 Staffing

- ✓ currently 75 FTEs

1.3 Capital Assets/Liabilities

✓ Two active landfills

- Waterloo: began operations in 1972
179 acres licensed for landfill
current life expectancy of 2020
- Cambridge: began operations in 1973
83 acres licensed for landfill
closure pending around 2003

✓ Six transfer stations

- 337,587 vehicles received in '99

✓ Gas collection systems at both sites

- Waterloo: generates 4,800 ft₃/min
 - projected to produce 8.0MW
 - final commissioning under way by Toromont Energy
- Cambridge: projected to meet 10% of Courtice Steel's annual fuel needs
 - slated for start up in August
 - total revenues & air emission credits of \$100,000/yr

✓ Leachate collection system at Waterloo

- 38,300 m₃ pumped in '99

✓ Four inactive dumps

- monitoring, post closure care & development

✓ Materials Recycling Center

- 27,887 tonnes processed in '99
- revenues of \$2,922,673 in '99
- paper, tin, ferrous, glass, PET, HDPE, aluminum

✓ 2 open windrow composting operations

- Waterloo: 6 acres
- Cambridge: 4 acres

1.4 Operations & Programs

✓ Landfilling

- 418,403 tonnes landfilled in '89 & 147,219 tonnes in '95
- projecting 210,000 tonnes in '00 (commercial 60%)
- current tipping fee is \$45/tonne
- previously \$38.59/tonne in '88 & \$90/tonne in '92
- 120,400 households serviced
- est.'d collection & disposal costs of \$91/tonne
- est.'d capture rate of 69%

✓ Blue box collection

- 121,400 households serviced in '99
- multi res. program services 1,300 sites including 47,000 units (apartments, townhouses)
- approx. contract value of \$2,411,848/yr
- average net cost of \$92/tonne
- participation rate in excess of 95%

✓ Composting/yard waste

- 4,724 tonnes of leaves composted in '99
- 4,004 tonnes of yard waste composted
- 3,145 tonnes of wood waste
- 820 tonnes of leaves landspread

- 55,000 backyard composters distributed to date, diverting an estimated 6-8,000 tonnes/yr
- est'd capture rate of 50%

✓ Tire and metal recycling

- 1,551 tonnes recycled in '99
- CFC collection provided on approx. 800 units/yr
- est.'d capture rate of 15%

✓ HHW & used oil collection

- 313 tonnes collected from 8,822 households in '99
- est.'d capture rate of less than 5%

✓ Textile recycling

- partnership with Goodwill
- diverted almost 15 tonnes in '99
- est.'d capture rate of less than 1%

✓ Reuse programs

- partnership with Habitat for Humanity averaging 2 tonnes/month of C&D material
- partnership with OWME diverted 840 tonnes
- 54 tonnes of waste paint exchange in '99

✓ Roadside dumping

- approx. \$20,000 spent in '99 vs \$40,000 in '92

✓ EMS

Influencing Factors/Drivers

- ✓ Federal - CEAA, inventories (NPRI), ARET, sustainability action plans
- ✓ Provincial - healthcare, education, crime
 - MOE budget cut by in excess of 35%
 - consolidating & eliminating regs perceived to interfere with business (waste reduction regs aren't enforced)
 - env. priorities are: Reg 347, air quality, power industry
- ✓ Municipal - one tier government
 - maintaining balanced budgets

✓ Industry - cost of stewardship

✓ Public - Angus Reid Sept 01/99 poll:

Healthcare	53%	Poverty	20%
Education	41%	Environment	14%
Taxes	21%		

- 29% of Canadians would allow the environment to suffer to strengthen the economy (a 9% increase since '89)
- top environmental concern is air quality in terms of health impacts

Discussion

- ✓ How is the existing system performing?
- ✓ Where do we go from here?

Current Issues

- ✓ one tier government
- ✓ garbage flow and Cambridge closure
- ✓ B.B. and HHW stewardship
- ✓ changes in the waste stream (e.g., plastics)
- ✓ 50% waste reduction - WDO process
- ✓ household organics collection