City of Yorkton's Compost Program



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CITY OF YORKTON - ENVIRONMENTAL SERVICES



Outline

- Current Site
- History
- Programs
- What's Working/Challenges
- Future Steps

Our Site

- Located at the City of Yorkton landfill
- Approximately 10 acres
- Windrows



History

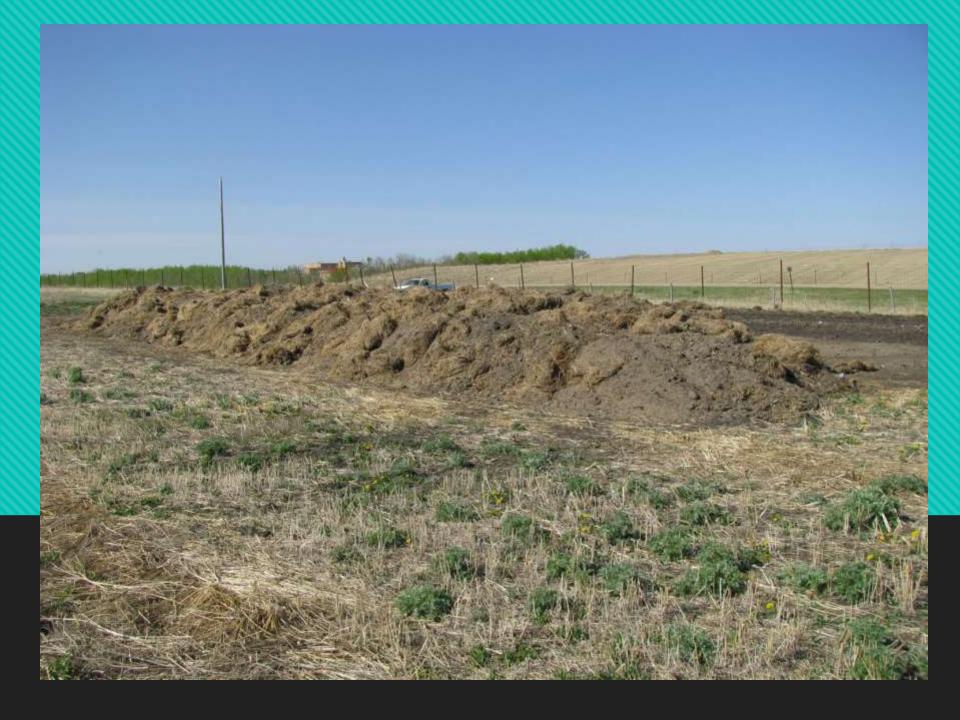
- In 2007, Environmental Services Department assumed the City's role in operations of Landfill/Recycling/Garbage Collection
- Canadian Federation of University Women, Saskatchewan Abilities Centre, Prairie Harvest formed a Committee
- January 2008, Saskatchewan Waste Reduction Council approached City for a 2 year "mentorship" in establishing or improving Compost Programs

Pilot Program with SWRC Spring 2008

- Site selection
- The Recipe "Greens" Nitrogen, "Browns"- Carbon keep moist
- Material for the program?
- Contact landscapers, Heartland Livestock?
- Flax straw and grass was received from Deer Park Golf Course and made into a windrow
- The windrow was moistened by applying bio-solids on a regular basis from the wastewater treatment facility
- The windrow was turned weekly using a pay-loader and temperatures were monitored daily

Our "First" Compost Pile





Tips and Guidelines

Here are some tips to remember when you begin composting:

- Add water to your composting pile on a regular basis
- Never include plant materials showing signs of disease
- Place larger materials at bottom of pile to allow air to circulate
- Try to use small pieces of material if at all possible
- Warm weather is better for your compost because internal temperature matters
- Avoid having too large a pile as it may interfere with the aeration
- It may be easier to use two compost piles, one for new material and one for ingredients already heating up inside



Making your own composting unit

Although you can go to the store and buy your own compost bin, you can also make your own at home. Here are some tips to follow:

- Make sure you have a lid that protects the pile from rain or snow. This also controls the moisture and it doesn't allow the smell to attract animals.
- You must put holes or vents somewhere in your compost bin. This allows circulation to run through the bin.





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Composting



Need more help? Just call 786-1780

Compost Pilot Program: Outcome

- Success!
- Built upon the existing program through trial and error used different materials including: Spoiled Grain/Fertilizer Spills/Gypsum spills
- Commercial and Industrial organizations contacted.
 - Canola plants startup
 - Heartland Livestock
 - Elevators/Oat processor
 - Bio-solids removed at the WWTP

Rows of Cattle Manure from Local Stockyard



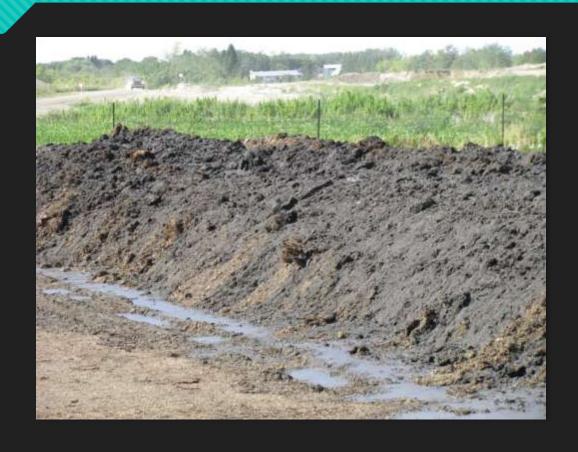
Addition of Grain By-Product from Canola Plants & Grain Storage Facilities



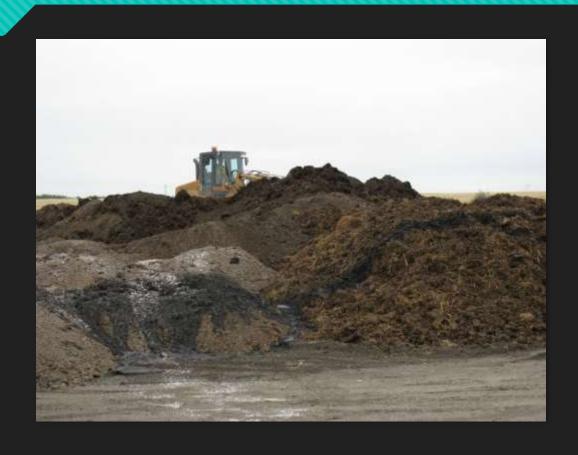
City Equipment Used for Bio-Solids Application



After Bio-Solids Application



Mixing and Turning of Compost Piles



Temperature Recording



Creating a Large Scale Compost Program

- Dedicate area for receiving compost materials
 - Away from homes/subdivisions
 - Estimate size
 - Access
- Identify manpower and equipment to handle input materials and monitoring of compost
 - Time/dedication to operate and monitor project and input material
 - Proper equipment, possibly screening of material
- Work with local business and industries with input source materials
 - Meet with your clients

Creating a Large Scale Compost Program (con't)

- Prepare rate structure for municipal bylaw for acceptance of input materials (\$150/hr payloader, \$100/hr for a truck/stockpiling material)
- Establish end use for compost product (added cost for screening)
- Contacts!

End Uses & Markets

- Final capping of the Landfill
- Compost Tea
- Public Works will use it for backfilling curbs/sidewalks; Soccer Fields at Logan Green
- Leisure Services Planters
- Other markets

Compost Material 2013-2017

Year	Cubic Yards	Tonnes
2013	23,000	43,000
2014	15,500	29,000
2015	17,000	31,000
2016	9,000	17,000
2017	8,400	15,500

What's Working!

- Product
- Helping Commercial/Industrial Sector
- Landfill Diversion
- Meeting the Committees mandate
- Creating an end cycle for some material
- Options for experimentation: Gyproc, Shredded paper
- Bio-solids disposal

Challenges

- Balanced mixture
- Site size/accessibility
- Contaminated loads/Monitoring
- End use of Product
- Odors
- Possibly rodents
- No residential program

Challenges con'td

- Material preparation i.e. screening
- Ministry of Environment & Ag Canada
- Flammable material
- Manpower























Future Steps

- Monitoring/testing
- Other potential sources
- Engaging the community & businesses
- Starting new piles/experimenting
- Determining final markets

QUESTIONS?

