

Burnsville Demonstration Project: Yard & Food Waste Co-Collection

Caleb Werth
Organics Program Coordinator

Resource Recovery Technologies
Bloomington, Minnesota

Project Overview

- Project started in April 2007
- Project to end December 2008 – extension for one year is possible
- Co-collection and composting of food and yard waste
- Participants are residents in River Hills Neighborhood in Burnsville, MN

Project Goals

- Increase recovery of organic material
- Simplify separation for residents by co-collecting yard waste and organic waste
- Develop a route the hauler can collect large quantities of organic material from
- Provide high quality organic material for the processing facility to compost

Project Partners

- City of Burnsville and Dakota Valley Recycling (overall project management)
- Waste Management (hauling)
- Resource Recovery Technologies (processing)

Co-collected Material

- Yard Waste
 - Grass clippings
 - Brush
 - Leaves
- Food/Organic Waste
 - Food scraps
 - Food soiled paper

Collection/Hauling

- Residents collect material using curbside yard waste cart
- Hauling occurs every week April thru November
 - Yard waste and food waste
- Hauling occurs every other week December thru March
 - Food waste only

Collection/Hauling cont.

- Biodegradable bags for organics
 - Provided to residents at no cost
 - Available for pick-up at Burnsville Maintenance Facility
 - Can be placed in cart along with yard waste

Contamination

- Small amount of contamination since the start
- Examples of contaminants include:
 - Bottles
 - Cans
 - Plastic
 - Planters
 - Bricks
 - Treated Wood

Processing

- Aerated static pile
- Follow process to further reduce pathogens (PFRP) – a time/temperature technique
- Grinding as needed
- Water added as needed
- Screening of finished compost

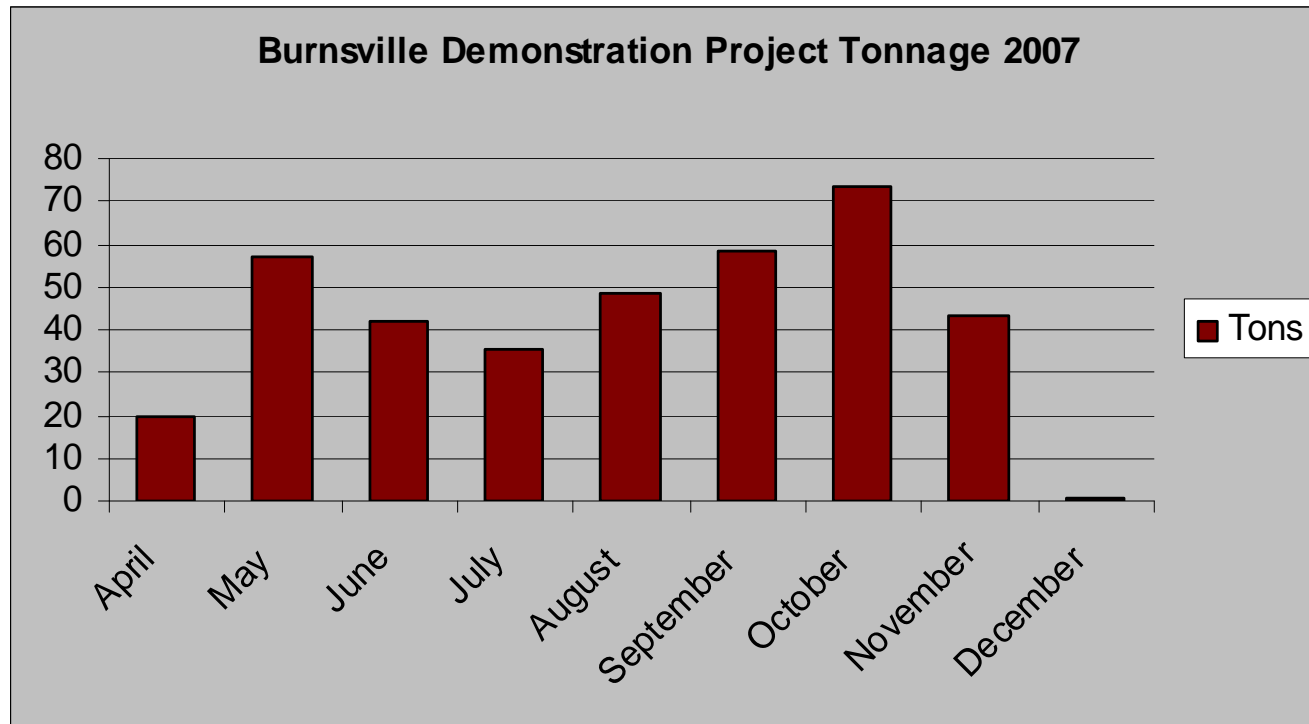
Monitoring

- Material quality
- Temperature
- Leachate
- Tonnage

Leachate Analysis

- Stormwater run-off samples are collected after a 0.25” rain event at a maximum of three times per year
- The following chemistries are analyzed:
 - pH
 - Nitrogen, phosphorus, potassium
 - Soluble salts
 - 503 metals (arsenic, cadmium, copper, etc.)
- All chemistries within allowable limits

Tonnage Analysis



Total as of December 2007: 377.79 tons.

Included 668 bio bags with minimal food waste.

Permitting

- Yard waste permit-by-rule and solid waste compost permit at Empire facility
- Variance from MPCA to co-compost on the yard waste area of Empire facility
- Current MPCA rule: source separated organics must be composted at a permitted solid waste composting facility

Lessons Learned

- No harmful leachate from piles
- Minimal odors using aerated static pile method
- Easier to process material since the food and yard wastes are already mixed together
- Low number of bio bags in loads despite residents picking up the bags

Questions

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Caleb Werth

952-946-6999

caleb.werth@rrtmn.com

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