



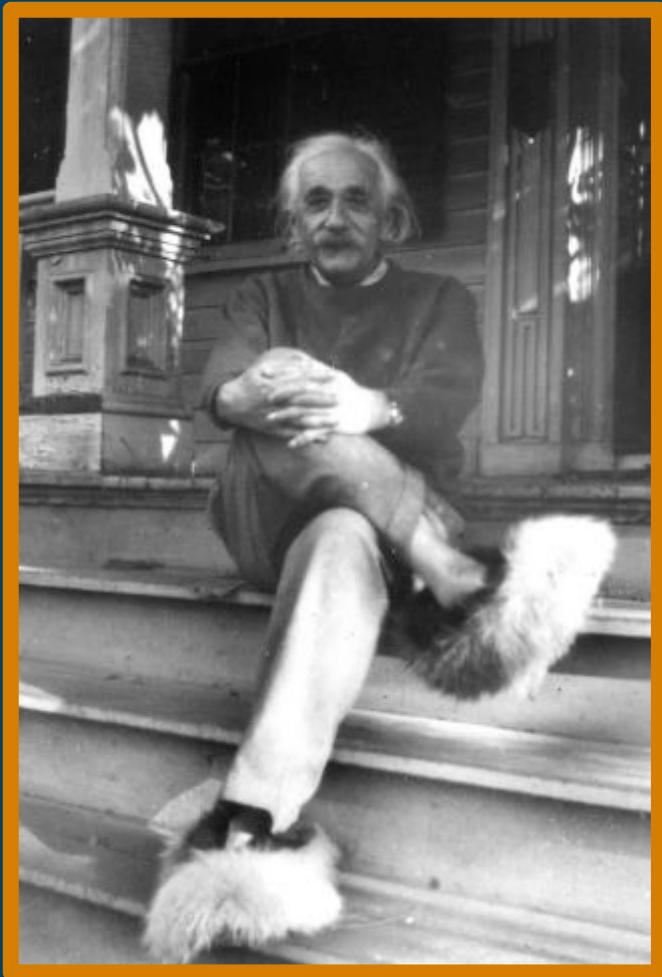
TETRA TECH

COMPOSTING IN WINTER



ISSUES AND OPTIONS

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I have reached
an age when if
someone tells
me to wear
socks, I don't
have to.

Albert Einstein



CAN YOU COMPOST IN WINTER?

- Why not?
- What's stopping you?

ISSUES

- Stuff freezes
- Hard to add water
- Difficulties to turn & mix
- Piles are colder – composting slows
- Screening is challenging
- Employee & equipment production is lower
- Safety



Winter Impact on Limiting Factors

- Bulk density – typically lower
- Moisture content – typically drier
- PFRP temperatures – ambient temperature influence
- C/N Ratio – can be lower nitrogen content



Windrows and Curing

- Inside hot
- Outside cold (frozen)
- Turning inside out
- Use snow for moisture
- Longer to compost and cure
- May need to kickstart in spring

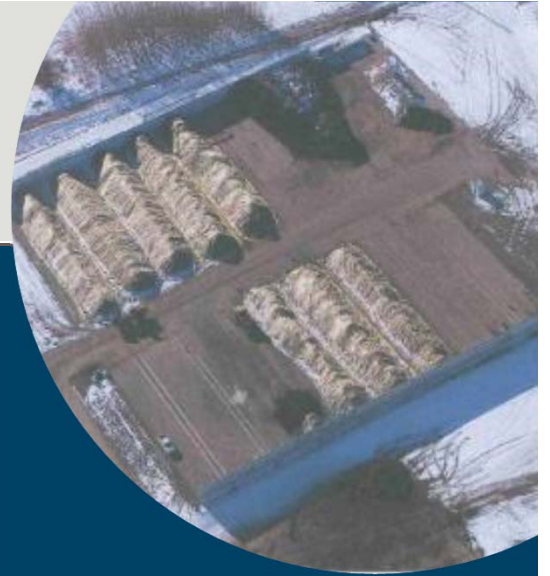
Mass Bed

- Similar issues as windrow
- Large beds retain heat



Aerated Static Piles





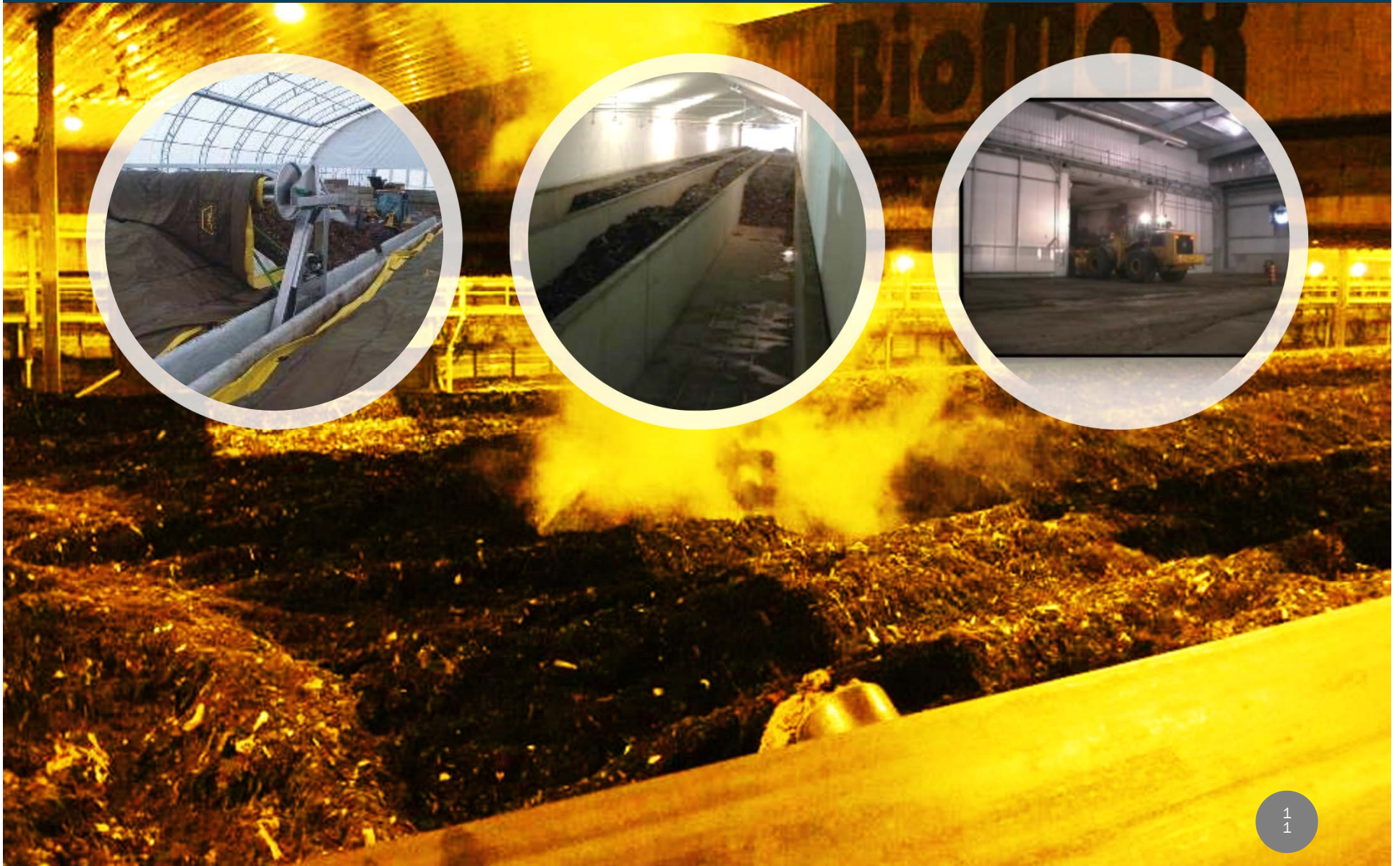
Membrane Covered Aerated Windrows



Membrane Covered Aerated Windrows Winter Options



GETTING OUT OF THE COLD



Winter Screening

- Starting Engines
- Hydraulics
- Belts and rollers
- Compost freezes to screens
- Colder it is – harder it is
- @ -30 – don't bother



Yellowknife Example





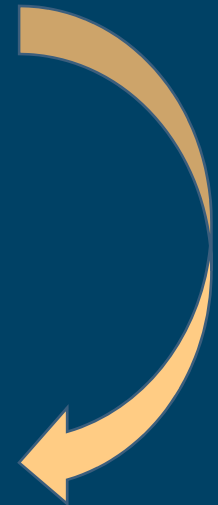
Iqaluit Example



City of Whitehorse Example

- 20 Years
- SS0
 - Residential
 - ICI
- ASP
- Year Round
- 1 yr to produce
- High Quality
- Bagging plant
- \$30 - \$40 per tonne market value

Feedstock





Aeration

Curing, Screening, and Bagging





So? Can You Compost in Winter?

- Of course you can.
- What's stopping you?



A FINAL
THOUGHT

Learning is experience.
Everything else is just
information”



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Jim Lapp

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