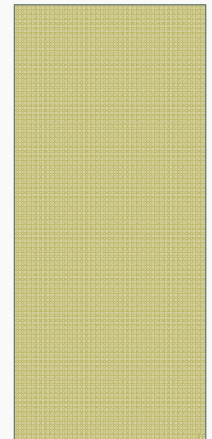


COMPOST FIRES

JIM LAPP, CANADIAN REPRESENTATIVE
SWANA



COMPOST FIRES HAPPEN



FIRE FIGHTERS CALLED OUT TO COMPOST FIRE AT LANDFILL

CITIZEN STAFF / PRINCE GEORGE CITIZEN

APRIL 19, 2016 09:12 AM

Firefighters were called out Monday night to deal with a fire that broke out in a **compost pile** at the Foothills Regional Landfill.

The high winds made it difficult to get to the seat of the fire and there was a concern the embers could be blown into the main garbage area and ignite a fire there, Prince George Fire Rescue assistant chief Dxxxx Pxxxx.

Heavy equipment was used to remove the four other piles that surrounded the pile that was burning. The **cause** was "**naturally occurring.**"



HAMILTON FIRE CREWS EXTINGUISH MULTIPLE-ALARM BLAZE AT CITY COMPOST CENTRE

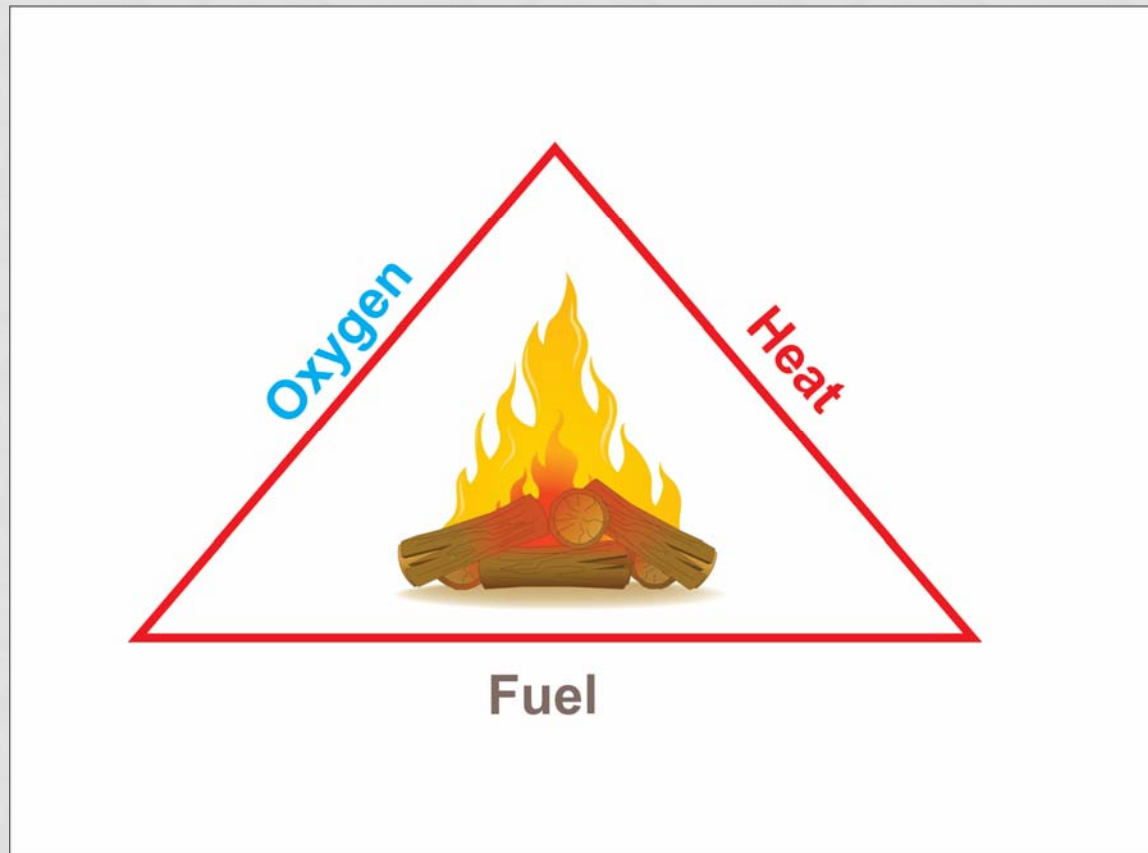
- Aug 31, 2014

More than **30 firefighters** on Sunday battled a multiple-alarm fire at a city centre housing **compostable waste**. Because of the material burning, there's a **lot of smoke and heat**, so the crews found it difficult to get into the building to knock the fire down.

- "The smoke carries a distinct **green-bin pungency**"
- "It **smells like crap**"



FIRE TRIANGLE



WHAT STARTS COMPOST FIRES

- Lightning strikes ?????
- Heat from equipment ✓
- Sparks from welding ✓
- Cigarette butts ✓
- Wildfires ✓
- Arson ✓



“SPONTANEOUS COMBUSTION”



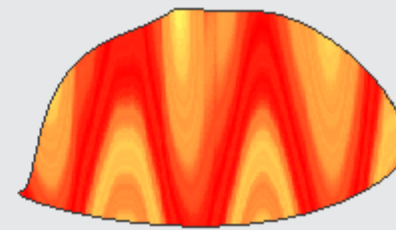
biological

70-80°C



chemical

Rapid temperature
rise



ignite

150°C to 200°C

TEMPERATURE PROFILE

Ignition Temperature



WHAT CONDITIONS

- Large piles retain heat
- Relatively dry pile
- Wet and dry spots
- Low air flow
- Time



WHAT WILL HEAT & BURN

- Un-cured compost
- Green wood piles with fines
- Shredded green wood
- Mixed green & white wood chips
- Compost with wood chips



SMOLDERING INSIDE PILES



OPEN FLAME

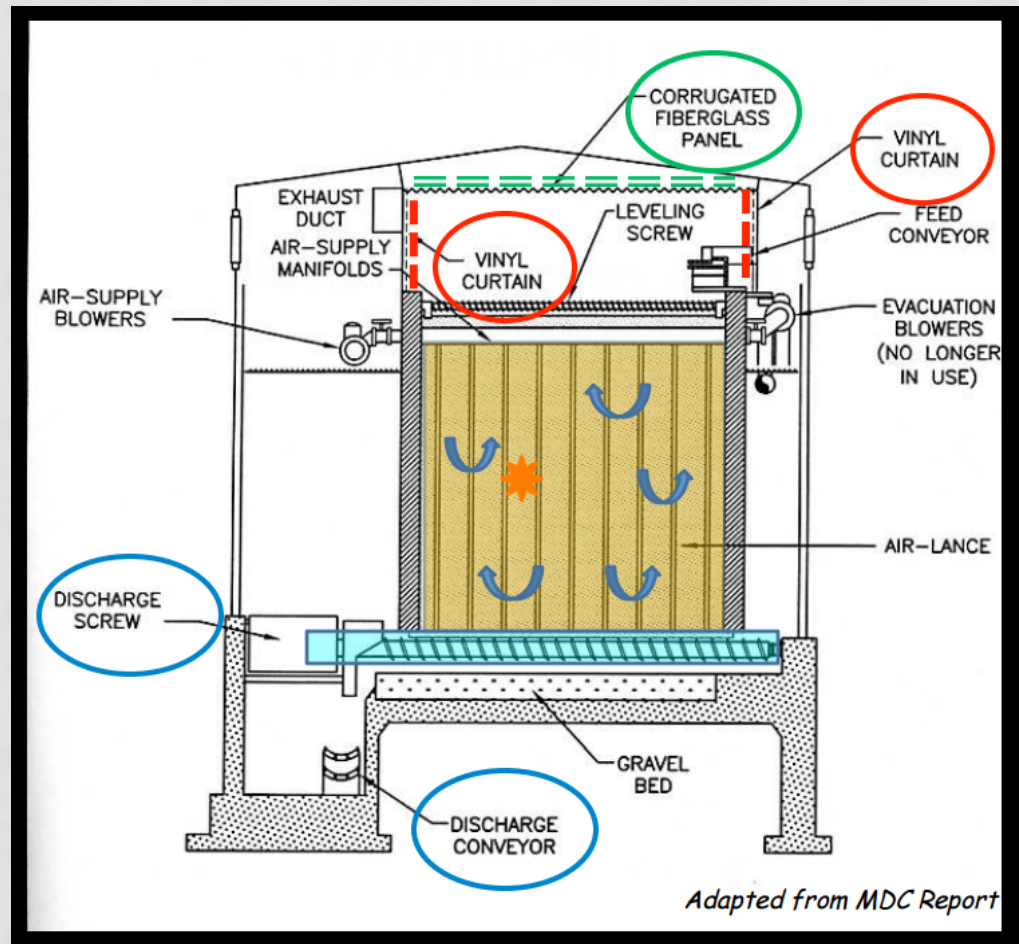


IN-VESSEL



HARTFORD COMPOST FACILITY

FROM BOB RYNK, 2000



PREVENT



Avoid big piles



Windrows



Water (>35%)



Mix & aerate

MONITOR



PUTTING OUT A FIRE



POURING ON THE WATER



ISOLATE



EXCAVATE, SPREAD AND DOUSE



Remove cooler outer material first

COORDINATE WITH FIRE DEPT.



FIRES HAPPEN BE SMART ABOUT IT

- Prevent
- Monitor
- Respond



SHAMELESS PLUG FOR SWANA

- 8,500 members
- Experienced resources
- NLC Crisis Committee
- Training & Education

