

Catching Fire



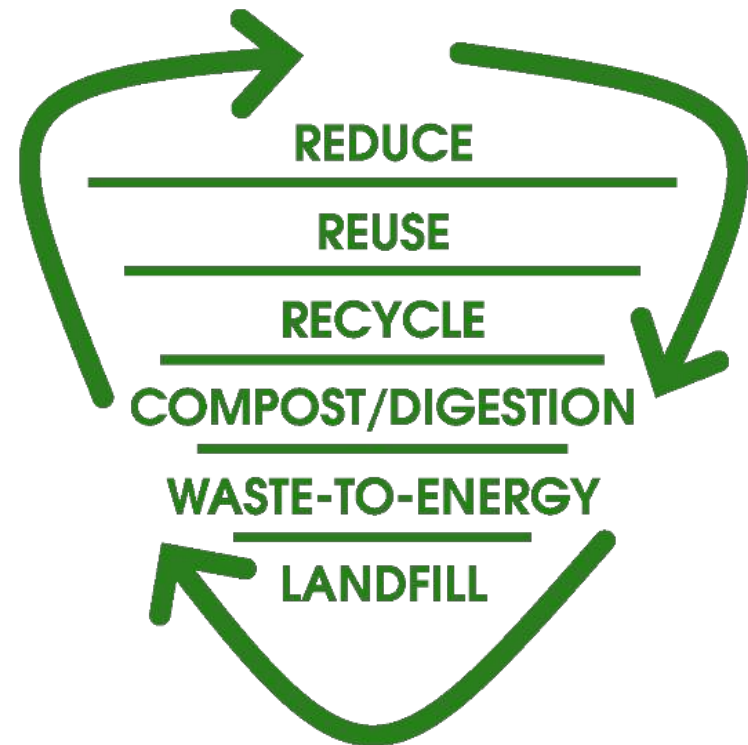
**Reducing
the Risk of
Facility
Fires**

**Kevin Roche
ecomaine**

ecomaine

Our Mission

ecomaine provides comprehensive, long-term solid waste solutions in a **safe**, environmentally responsible, economically sound manner, and is a leader in raising public awareness of sustainable waste management strategies.



ecomaine's Facilities & Programs

71 Communities
~400,000 people

Facilities:

- Single-Sort Recycling
- Food Waste Recovery
- Waste-To-Energy Plant
- Landfill/Ashfill

Programs:

- Reaching 40,000 residents a year through Tours & School Presentations



An Industry “Under Fire”

Fire at recycling facility causes plume of smoke in Fort Myers

Posted: 10:43 AM, Oct 04, 2019 Updated: 1:09 PM, Oct 06, 2019
By: WFTX Digital Team



9NEWS.com

WATCH LIVE On 411-4541 61° Denver, CO



Plume of smoke visible for miles after fire erupts at north metro area recycling facility

The fire was at Recycling Connections, located in an industrial area in Henderson.

Author: Allison Syle
Published: 2:18 PM MDT September 16, 2019
Updated: 2:21 PM MDT September 16, 2019

10 BOSTON Home News Weather The Investigators Find NBC Boston ... LIVE TV 80° Connect

Local Top Video US & World Sports NBC10 Boston Sports Live Politics New Hampshire Primary Responds The Wellness Report Tech Check Auto Scene

Massive Fire Breaks Out at North Andover Recycling Facility

North Andover Fire Department asks people in area to stay inside with windows closed while fire continues to burn

By Kaitlin McKinley Becker

Published Aug 20, 2019 at 7:47 PM | Updated at 11:28 PM EDT on Aug 20, 2019



BREAKING NEWS BREAKING NEWS

BREAKING NEWS MAJOR FIRE AT RECYCLING FACILITY NORTH ANDOVER

11:01 73°

The fire raged Tuesday night at a recycling facility in North Andover, requiring departments from multiple towns in Massachusetts to respond. (Published Tuesday, Aug. 20, 2019)

Old Spice Body Wash for Men, Moisturize ...

★★★★★ 68

\$19.88 vprime

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Find 10 in your area

Channel 10 on most providers Channel 15, 60 and 8 Over the Air

10NEWS

WATCH LIVE On 411-5570 74° Knoxville, TN

Fire at Knoxville recycling center extinguished, evacuation order lifted

As the fire burned out of control on Wednesday, a huge plume of black smoke was visible across Knoxville.

Author: WDR Staff
Published: 12:00 PM EDT May 1, 2019
Updated: 12:17 PM EDT May 3, 2019

KNOXVILLE, Tenn. — **UPDATE (5/3/19 - 10:00 a.m.):** The massive fire that broke out at Fort Loudon Waste and Recycling on Wednesday afternoon is now extinguished, Knoxville Fire Department spokesperson DJ Corcoran confirmed to 10News.

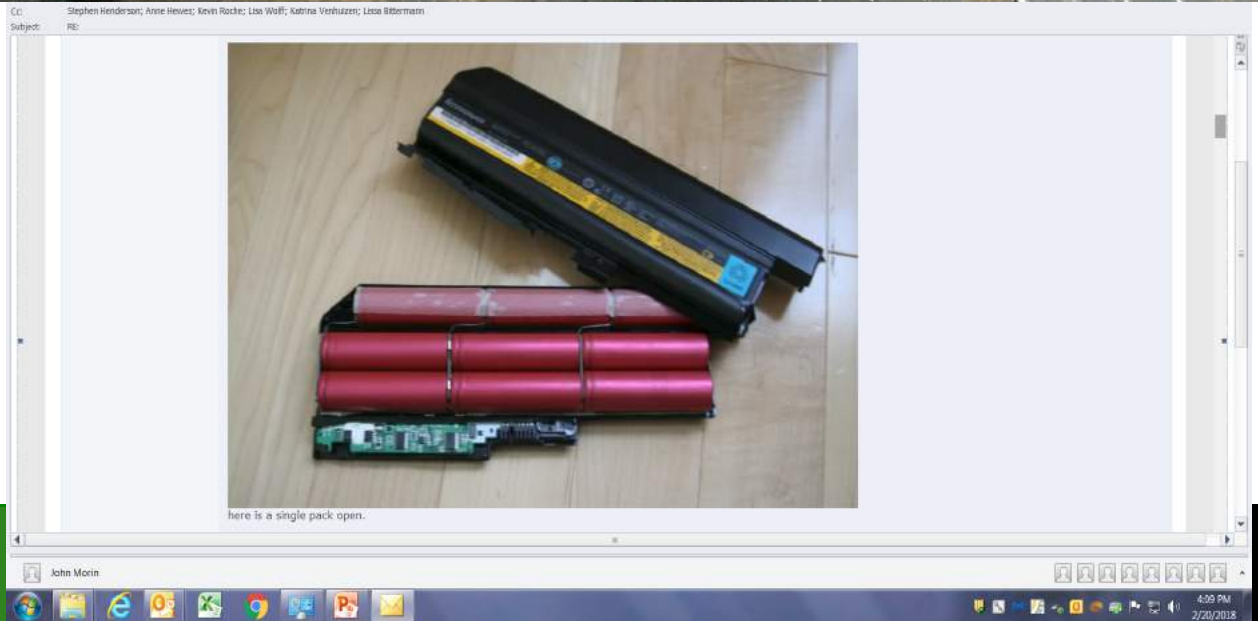
Crews are continuing to work on hot spots on the property to make sure the fire does not rekindle.

Corcoran said they are still concerned that if winds pick up today, the fire could rekindle, so fire crews are taking precautions to make sure the surrounding areas around hot spots there are doused.

UPDATE (5/3/19 - 6:00 a.m.): The Fort Loudon Waste and Recycling fire site was still smoking Friday morning. Crews have made significant progress. What was once a massive cloud of dark smoke has been reduced to white haze in the area, but the Knoxville Fire Department plans to stay on the scene of the recycling center for several more days looking for hot spots.



LI 18650 battery – 18 mm in diameter and 65 mm tall







Change was Needed



Detect & Respond Early

- Adding thermal camera technology in all high risk areas to improve coverage for early warning detection.
- Notification – Set temperature thresholds that will alarm staff.
- Staff can view and respond with inspections, water cannons, and/or trigger deluge systems.
- Most importantly, staff can respond remotely (and safely).

TEMPERATURE

Av: 82.3°F

Min: 73.6°F

Max: 175.2°F

Thermal Cameras will monitor for “Hot Spots”



Fire Suppression Cannon in Action

ECOMAINE FIRE SUPPRESSION



Water Cannon - Shower mode





Controls Allows for Quicker & Safer Response



At the water
cannon...



... or remotely from our Waste-
to-Energy Plant's Control
Room

Responding by Remote Control





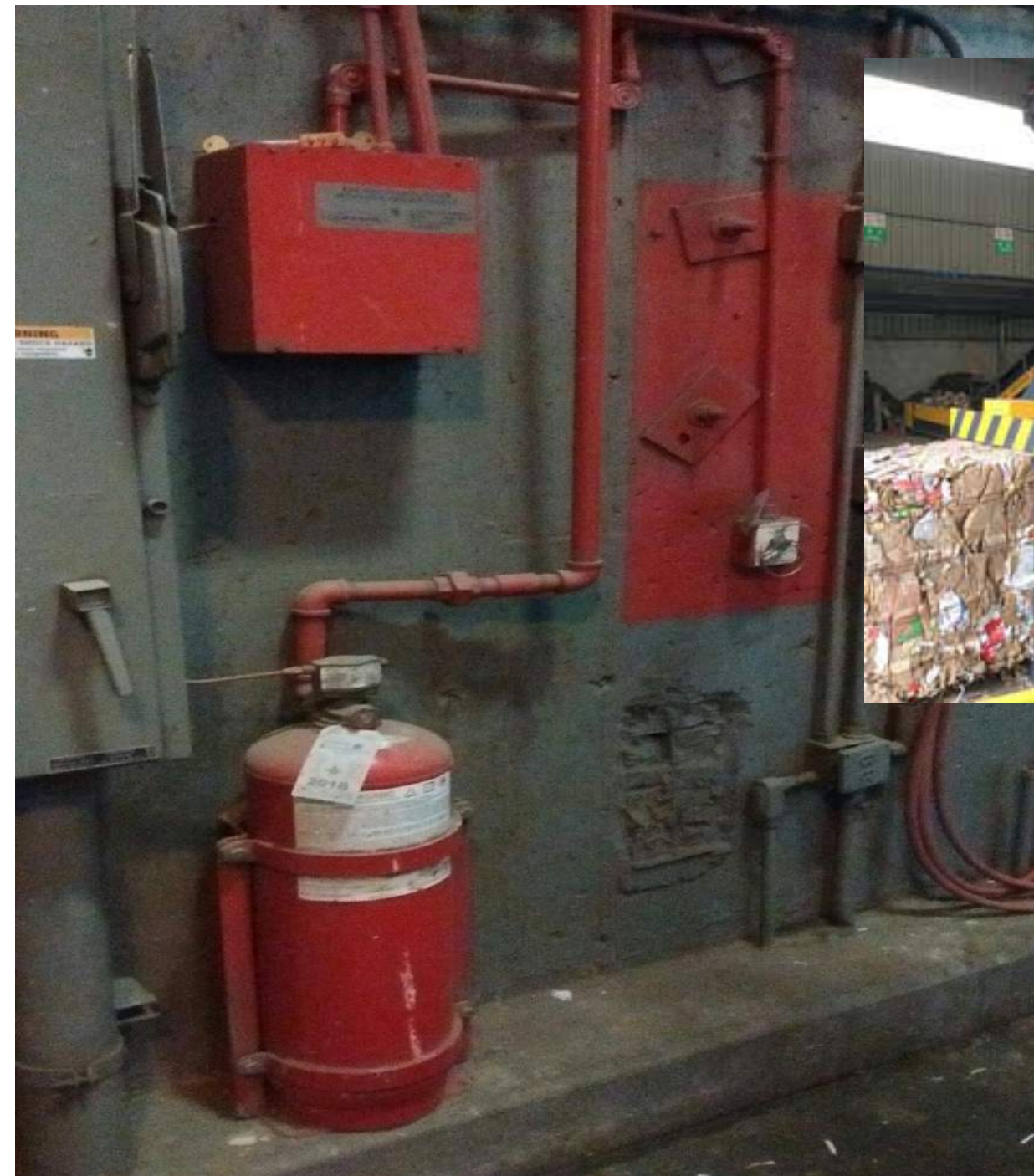
Growing Pains



TIPPING
FLOOR
DELUGE

HAZARD

DRUM
FEEDER
DELUGE



Protection for Balers - Manual
Water Deluge and Automated
Dry Chemical

**Water deluge
over paper
star screens**



Keeping an Eye on our Safety and Resources



Cost

Thermal Cameras (8),
Alarm, Detection & Installation: \$148k

Water Cannon & Installation: \$96k

Total: \$244k

Catching Fire – Reduce the Risk

Thank you!

Kevin Roche
CEO
ecomaine

