KDHE Bureau of Waste Management

Waste Reduction and Local Assistance

Kansas
Department of Health and Environment

Our Mission: To protect and improve the health and environment of all Kansans.

The Curtis State office building

RECYCLING

Annual Composting, Recycling, and HHW Conference

The KDHE sorting crew

2012 “SnapShot” Waste Characterization

KDHE staff worked in pairs and needed to pay attention to ergonomics and hydration.

What recyclables are being recovered?

Recycling Surveys

The **Kansas Organization of Recyclers,** in cooperation with the KDHE Bureau of Waste Management, is trying to learn more about **curbside recycling programs** across the state of Kansas.

Bi-Annual Recycling Surveys – Please fill one out.

In addition to the annual survey, Kdhe contracted KOR to survey for curbside recycling programs, so if you did not get that survey, please contact Spencer at KOR > www.KSKOR.org

We need your help!
Help us in getting a better look at what curbside programs exist in our Kansas communities. **Thank you!**

Grant Opportunities

CPI Grants have not been offered since Round #16 (2008) – those contracts expire Dec. 31, 2013

KDHE (Fall) Waste Tire and Green School Grants
KDHE (Year-round) Abandoned tire clean-up
KDHE (Year-round) Dump clean-up assistance and expertise

We will have information on other Opportunities like the KAB Bin Grants (March deadline)

Coke, Pepsi, Funding factory, etc…..
And Dr Pepper Snapple Group has donated $300,000 to Keep America Beautiful to put recycling bins in public parks. (April deadline)

Download the “APP”

Public space recycling
“For Peace and Good Luck!”

The anti-triangle!

“Not recoverable garbage”

EXIT Disclaimer

Promote Training Opportunities

Webinars offered by the EPA (SMM) Sustainable Materials Management

2012

- Universities and the **Food Recovery Challenge**
- **Food Donation**: Feed People Not Landfills
- How to Negotiate Your Contract with **Waste Haulers**
- Green **Purchasing**
- Tools for Federal, State, and Local Governments
- Greener Packaging –Reusable Transport Packaging into Your Supply Chain
- **Sustainable Food Management:** Food: Too Good to Waste

2013

- Getting those BIG office Buildings to Recycle!
- **Rubberized Asphalt:** Innovative Sustainable Technology
- Food Management at Federal Facilities

Promote Training Opportunities

Webinars offered by the NRC http://nrcrecycles.org/events/

- **Sustainability Efforts** in the Healthcare Industry – Part I: Focus on Plastics
- Food Service **Source Reduction** and Recycling
- Understanding Domestic and Global Recycling Commodity Markets – How are **Recycled Material Prices** Determined?
- Recycled Materials in Transportation Projects – Use of Recycled Rubber
- Recycling in **Life Cycle Analysis** – How Important is it?
- Food Recovery Efforts in North America
- **Biodegradable** Plastic Resins – Debunking the Myths
- Complementing **Anaerobic Digestion P**rojects with Composting Operations
- Measuring the **Economic Impact** of Organics Diversions and Product Manufacturing
- A look at **E-Scrap Legislation** in the United States
- **PET** Thermoform Recovery in the United States
- Reverse Supply Chain – Part II

"New" Kansas Interactive Recycling Manual"

“Guides”

Guide 001 Kansas Recycling Programs | 2011

If you are new to the business of recycling, read “**Starting or Running a Recycling Program**” This will provide the answers to:

- What is recyclable?
- What is the processing of recyclables?
- Are there state laws that I should know before I start?
- What kind of collection and drop-off strategies should I use?
- Keys to working with the media
- Material types and the plastic recycling codes
- Who can help me get started and provide funding? See also the guide for small businesses and agriculture

Maybe you have a program already and would like to read about **Operations** or **Occupational Hazards and Safety Planning** Running a recycling program will involve **employee training** in equipment use such as forklifts and balers. It could involve **developing a volunteer network** or **organizing an event**. Perhaps you would like to overview the **costs and financing options** establish performance measures and benchmarking, or review routing and vehicle/driver needs, and learn more about equipment trends, and prices

A city or county program may be thinking about changing **collection strategies**, researching the benefits to automated curbside collection with volume-based trash collection versus residential recycling drop-off and commercial cardboard programs? or need to search the **Kansas Recycling Directory** to learn who is accepting materials and how to best measure them. Measuring Recycling: A Guide for State and Local Governments (EPA)]

Individuals, municipalities, and businesses can join the **State Organization of Recyclers** and connect to other people interested in these topics.

and "Keys"

Key 027 Plastic Resin Codes | 2011

Information in this guide from The Plastics Division of the American Chemistry Council (ACC)*

Plastic resin codes

Usually located near the top, the deposit amount refers to refunds available in certain states. Refundable deposits are required in some states and put the costs of recycling on the producers and consumers of the beverages.

The second number you should look for on a plastic bottle is a number within the **recycling triangle** on the bottom of the bottle. The number here identifies the type of material that was used when producing the bottle. Some numbered plastics are not always accepted in recycling collection programs.

1 -- PET (Polyethylene terephthalate)

- PET is used in the production of soft drink bottles, peanut butter jars. PET is clear, tough, and has good gas and moisture barrier properties. Commonly used in many injection molded consumer product containers. both food and non-food containers and strapping.
- PET can be recycled into fiberfill (Polyester) for sleeping bags, carpet fibers, rope, pillows, tote bags, clothing, film and sheet, food and beverage containers, strapping, fleece wear, luggage and bottles.

2 -- HDPE (High-density polyethylene)

- HDPE is found in milk jugs, butter tubs, detergent bottles, motor oil bottles. Unpigmented bottles are translucent, have good barrier properties and stiffness, and are suited to packaging products with a short shelf life. HDPE has good chemical resistance. Pigmented HDPE bottles have better stress crack resistance than unpigmented HDPE bottles.
- HDPE can be recycled into trash cans, traffic cones, detergent bottles, shampoo, conditioner and motor oil bottles; pipe, buckets, crates, flower pots, garden edging, film and sheet, recycling bins, benches, dog houses, plastic lumber, floor tiles, picnic tables, fencing.

Helpful links

Key 012 – Biodegradable vs Compostable

Decision Making

If a product is sent to a landfill, and not disposed of in a municipal composting or recycling facility, it is still part of the waste stream no matter what it's made from.

•Compostable plastics may end up in landfills, or on land and water (not in a composting environment)

•Some may not degrade in these conditions.

Strategies

•Purchase "compostable" service ware for disposal in municipal and industrial compost sites.

•Combine compostable plates, napkins, serving ware together with food waste and soiled cardboard in a compostable bag.

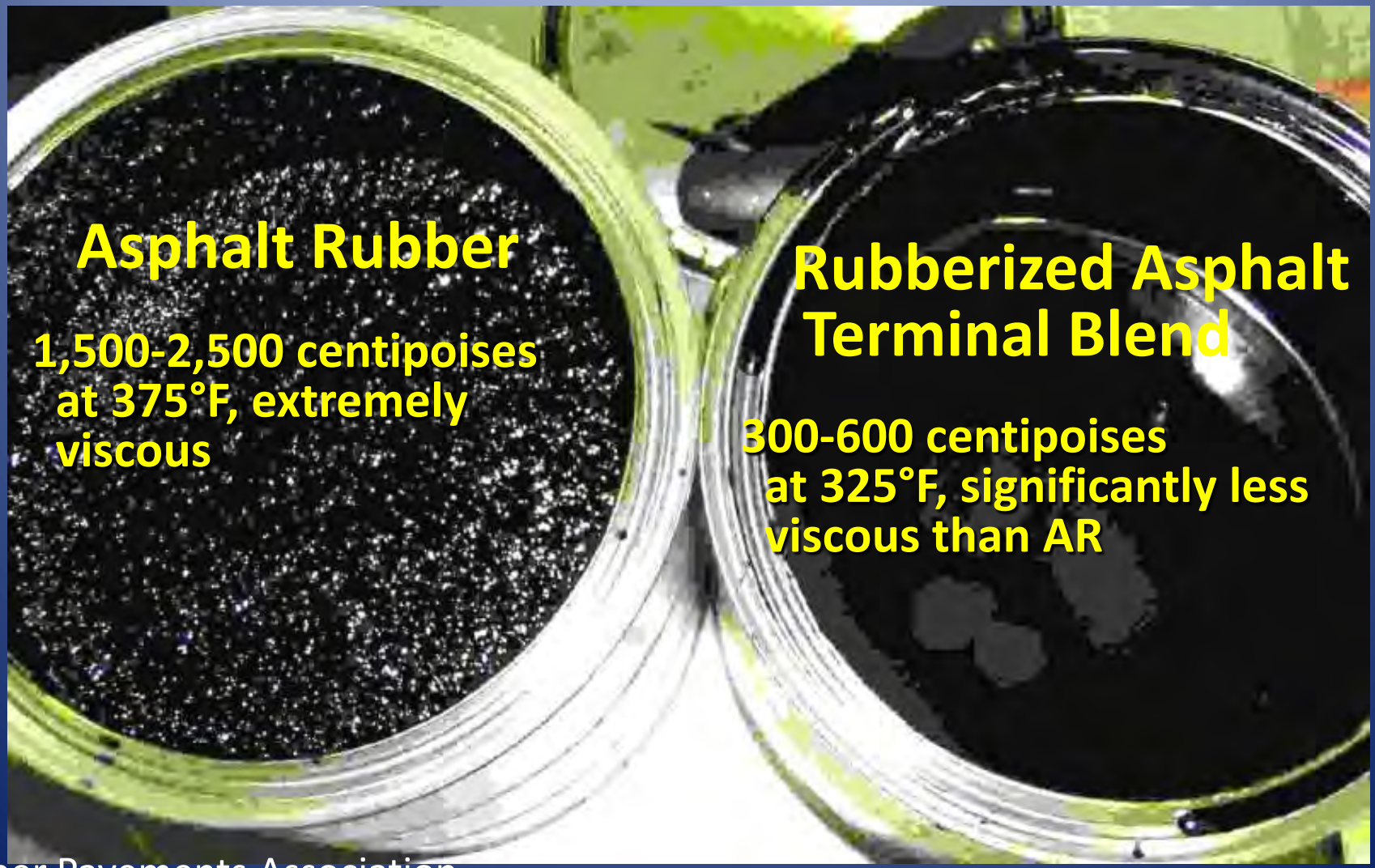
LINKS

Biodegradable Products Institute (BPI)
www.astm.org ASTM D6400 and ASTM D6868

WORK to Expand Tire Markets

- Promoting Use of Waste tire products in civil engineering and transportation
- Encourage demonstration projects with tire-derived aggregate.
- Sponsor a seminar or training.
- Invite to a discussion of Rubberized Asphalt use in Kansas.

Asphalt Rubber vs. Terminal Blend



Food Waste

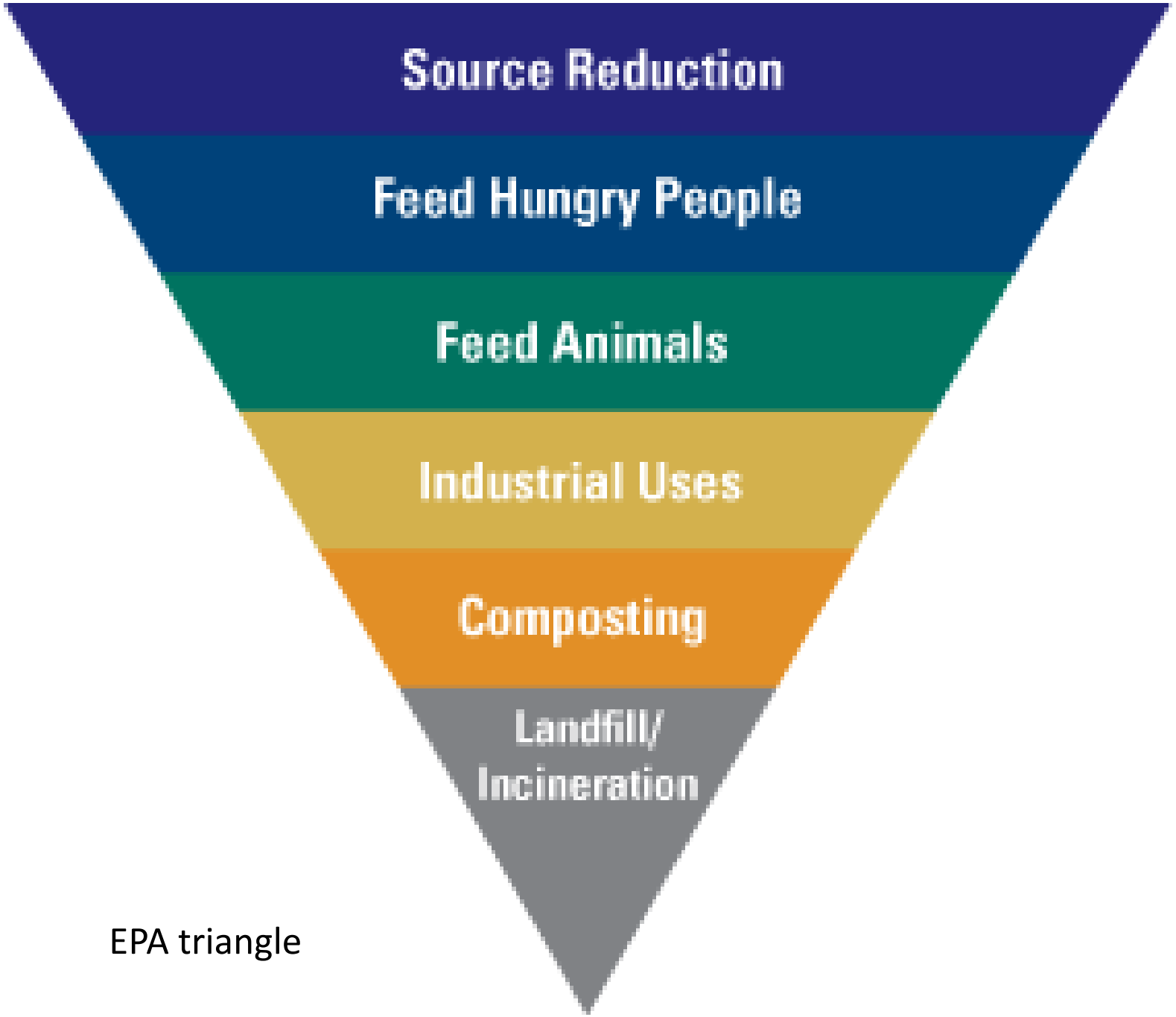
- In the United States alone, we waste about five million tons of food just between Thanksgiving and New Year's - that's enough to fill 125,000 18-wheelers, which would stretch from Chicago to Seattle!

  www.foodtank.org

- Offer regional workshops in food waste reduction.

Promote Commercial Food Scraps composting

Pre consumer food waste



EPA triangle

Fast food cups and containers.

Empty Containers Recycling

Using the Pesticide Container recycling program –
Collect only triple rinsed jugs, caps and labels intact.

KDHE Pesticide “sweep” – empties??

Agricultural Plastics Diversion to recycling (NOT Burning!)

Teaching generators that open burning of plastics creates toxic fumes and runoff . All plastics can be recycled.

PVC pipes
AUG 18 2011

Many Grain Tarps in western KS

the price is right….

Some “efforts” made to collect

ReUse Markets

- **Remember Damon? (with Repurposed Materials out of Denver that spoke at the KOR Conference) See all inventory at : www.repurposedmaterialsinc.com**
- Do you know about the ReUse Alliance?
- Do we want to form a Directory? Or a Kansas Chapter of the ReUse Alliance?.
- (Thrift stores, Tool library, Office Surplus)

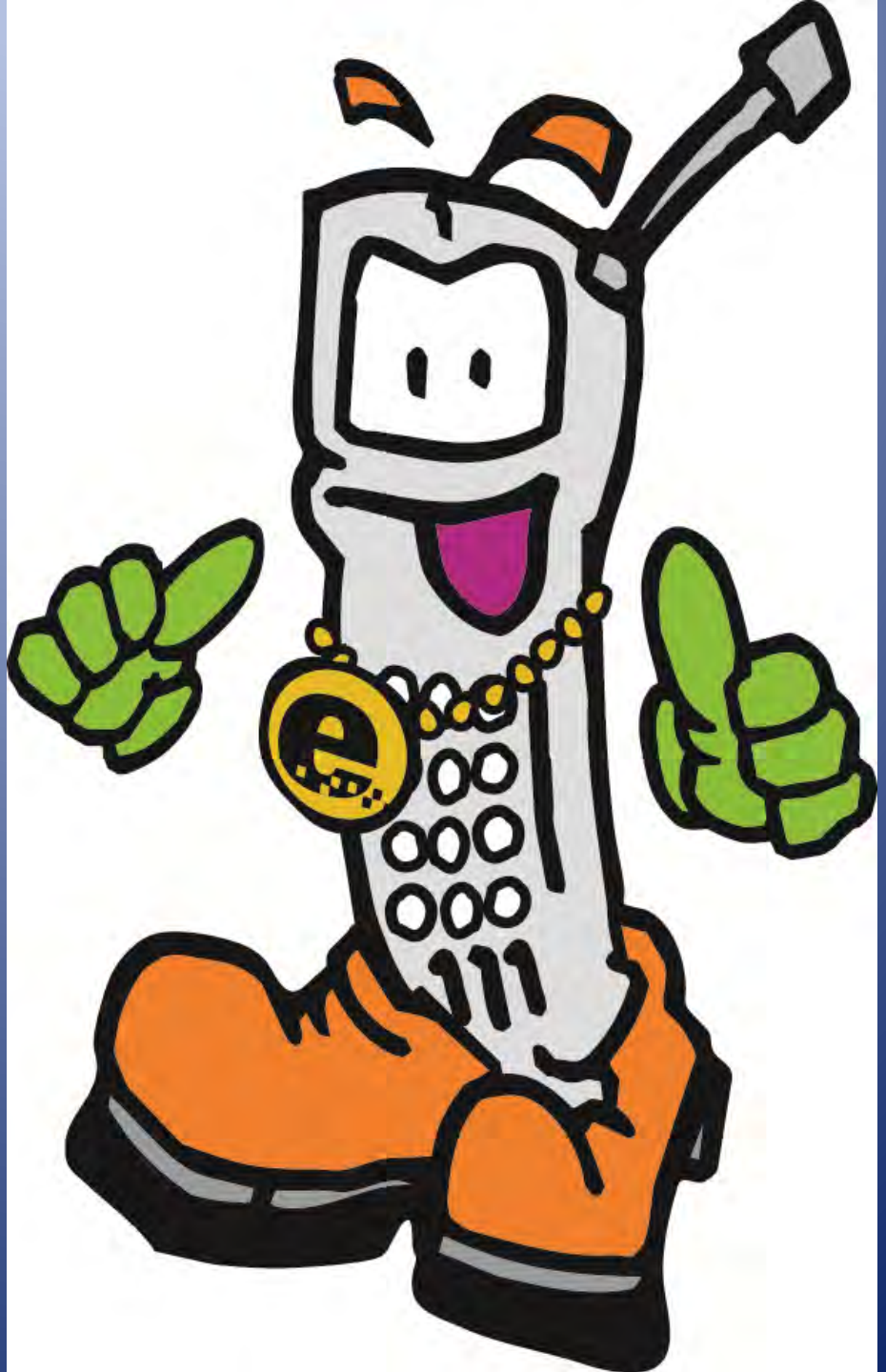
Collecting plastic grain tarps and ag bags

Unique Challenges

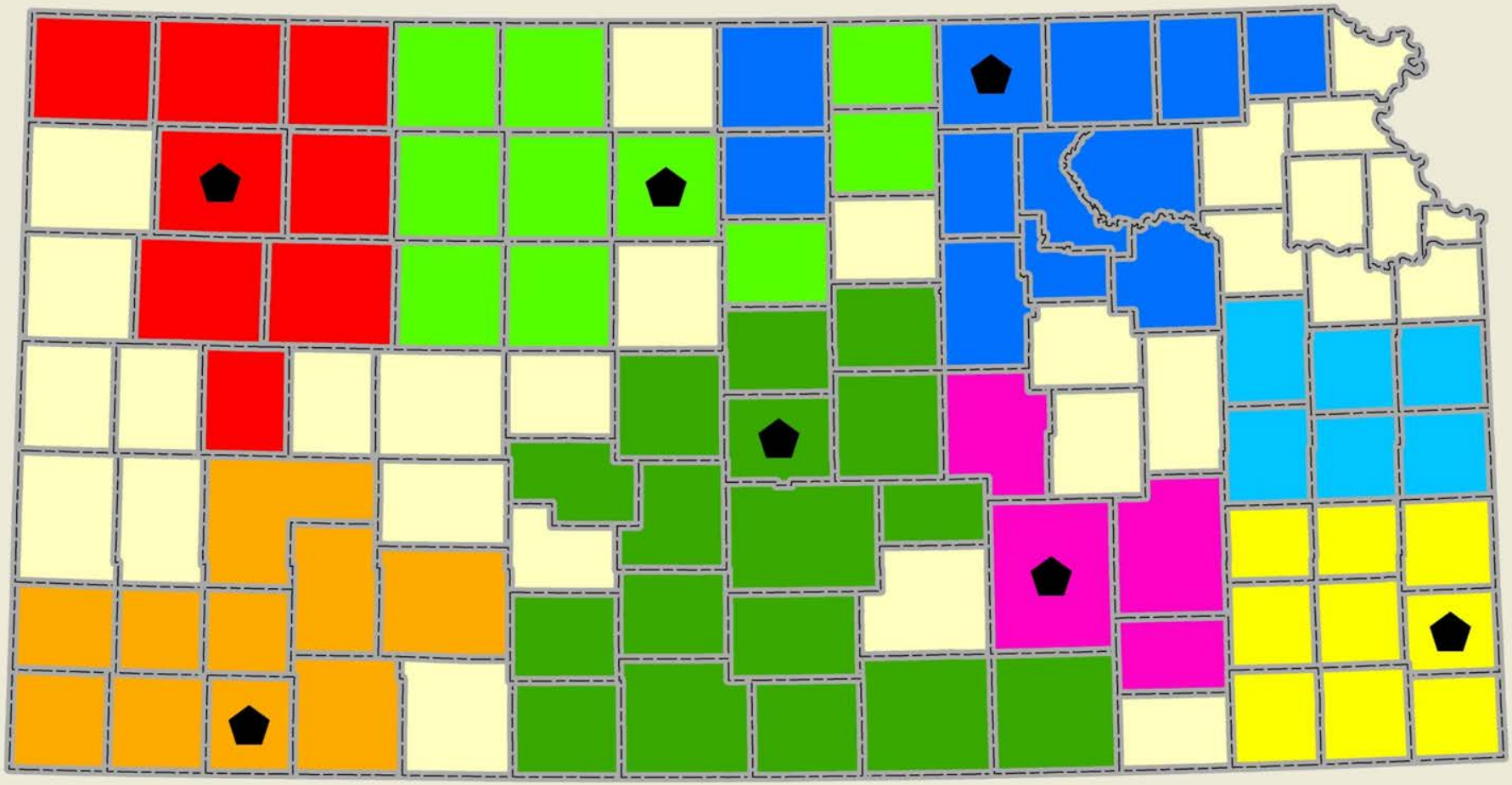
Leading discussions about windfarm **lifecycle of materials** and the **Challenges to local landfills** that have already received wind turbine blades

Kansas is facing new recycling challenges – wind turbine blade pieces at the landfill. – virtually indestructible.
Solutions include producer responsibility.

Electronics recycling can generate revenue



Electronics Waste
CRTs – Cathode Ray Tubes – Twin Valley Developmental



Grant Funded collection centers 2010

KDHE Outreach efforts

Reuse opportunities or not really ?

Rare earths metals or toxics?

Cathode Ray Tubes - CRTs

Console televisions are “CRTs”

CRT Initiative Program Results: 392 tons

TOTALS	Crt's	Weight	KDHE $
• Butler County	5,862	259,737	$ 30,000.00
• Rice County	5,303	237,054	$ 30,000.00
• Clay County	1,971	93,439	$ 14,015.85
• Lake Region	1,579	72,727	$ 10,909.05
• Seward County	1,368	46,204	$ 7,654.80
• NWKRRO	790	34,607	$ 5,191.05
• SEK Recycling	487	24,476	$ 3,671.40
• Jackson County	339	15,930	$ 2,389.50
• City of Olathe			

Municipal collection events

When will it be OVER?
LIFE

KDHE Online resource www.KSEwaste.org

Do you need help expanding your program?

Harder to Recycle Materials:

- Fiberglass
- Porcelain
- Mylar film
- Tyvek
- Corks
- Milk Cartons
- Polystyrene

www.Earth 911.com

Regional efforts

ReUse - ReStore

Demolition and building material ReUse

Tire Derived material
Turning tire treads into other products

Approved Products List

Variety of Products

BARRIER-BLOK

Landscaping

KDHE SFY2012 Waste Tire Grant Program
Product Registration FORM (Page One)

*****This form is to be completed by the manufacturer or authorized representative, NOT the distributor or vendor.**

Due to the difficulty in evaluating larger or complex projects, please provide as much information about your product as possible for our files. The committee must be able to quickly evaluate the environmental or health benefits of such projects.

Product Manufacturer: LTR Products

Charity Cherry 918 605 6935 918 367 9598
Contact name | Phone number | Fax Number

100 Old Trail Rd Bristow OK 74010
Address | City | State/ZIP

ccherry@libertytire.com www.libertytire.com
Email | Web address

----------Product info – For additional space, Use last page of this form. ----------

Product name:	(Please use one sheet per product)	Product Warranties:	Yes	NO	Number of years
4-PUS		*UV Coated?*		X	
% of waste tires?		*Coloring added?*		X	
Product size: Mat of crumb size (mesh, sq. ft. etc.)		*Warranty on color?*		X	
		Warranty on functionality?		X	
Athletic field/Playground/Other Surfacing:		**Installation provided?**		X	XXXXXX
Date tested for ASTM 1292		>>>>> If so, is Installation guaranteed?			
Date tested for ASTM 1951		>>>>> Is Installation training provided?			
99.9% wire-free?	(yes)/no	Are Installation materials provided to the customer?		X	

Packaging type/ size:	Weight	Cu. Ft. Volume	Number of tires
(Supersac)	2000		
(Bag)	50 lb		
Other			

I certify that these specifications, guarantees and warranties apply to this product and are applicable until officially updated with the Kansas waste tire grant program.

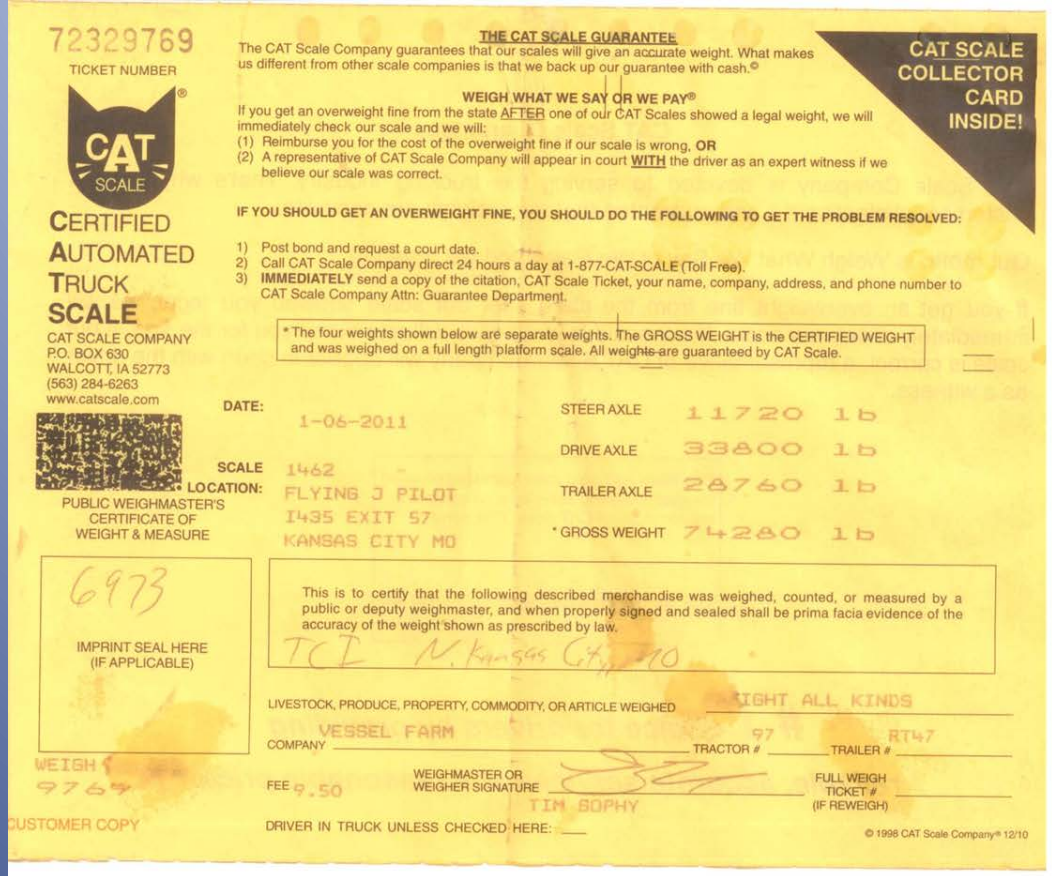
Charity M Cherry — Sales - OK
Print Name of Authorized Representative — *Title*

Charity M Cherry — 10 21 11
Signature of Authorized Representative — *Date*

Product Registration

Vendor Audits

Vendor Registration



72329769
TICKET NUMBER

CAT SCALE

CERTIFIED AUTOMATED TRUCK SCALE

CAT SCALE COMPANY
P.O. BOX 630
WALCOTT, IA 52773
(563) 284-6263
www.catscale.com

PUBLIC WEIGHMASTER'S CERTIFICATE OF WEIGHT & MEASURE

THE CAT SCALE GUARANTEE

The CAT Scale Company guarantees that our scales will give an accurate weight. What makes us different from other scale companies is that we back up our guarantee with cash.©

CAT SCALE COLLECTOR CARD INSIDE!

WEIGH WHAT WE SAY OR WE PAY®

If you get an overweight fine from the state AFTER one of our CAT Scales showed a legal weight, we will immediately check our scale and we will:
(1) Reimburse you for the cost of the overweight fine if our scale is wrong, **OR**
(2) A representative of CAT Scale Company will appear in court **WITH** the driver as an expert witness if we believe our scale was correct.

IF YOU SHOULD GET AN OVERWEIGHT FINE, YOU SHOULD DO THE FOLLOWING TO GET THE PROBLEM RESOLVED:

1) Post bond and request a court date.
2) Call CAT Scale Company direct 24 hours a day at 1-877-CAT-SCALE (Toll Free).
3) **IMMEDIATELY** send a copy of the citation, CAT Scale Ticket, your name, company, address, and phone number to CAT Scale Company Attn: Guarantee Department.

* The four weights shown below are separate weights. The GROSS WEIGHT is the CERTIFIED WEIGHT and was weighed on a full length platform scale. All weights are guaranteed by CAT Scale.

DATE: 1-06-2011

SCALE 1462

LOCATION: FLYING J PILOT
I435 EXIT 57
KANSAS CITY MO

STEER AXLE	11720 lb
DRIVE AXLE	33800 lb
TRAILER AXLE	28760 lb
* GROSS WEIGHT	74280 lb

6973
IMPRINT SEAL HERE (IF APPLICABLE)

This is to certify that the following described merchandise was weighed, counted, or measured by a public or deputy weighmaster, and when properly signed and sealed shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

TCI N. Kansas CT, KS 10

LIVESTOCK, PRODUCE, PROPERTY, COMMODITY, OR ARTICLE WEIGHED RIGHT ALL KINDS

COMPANY VESSEL FARM TRACTOR # 97 TRAILER # RT47

WEIGH # 9769

FEE 9.50

WEIGHMASTER OR WEIGHER SIGNATURE TIM SOPHY

FULL WEIGH TICKET # (IF REWEIGH)

CUSTOMER COPY

DRIVER IN TRUCK UNLESS CHECKED HERE: ___

© 1998 CAT Scale Company® 12/10

Proof of Kansas Tires

Reaching all corners of the state

Get caught materials

KDHE Outreach Campaigns for Recycling

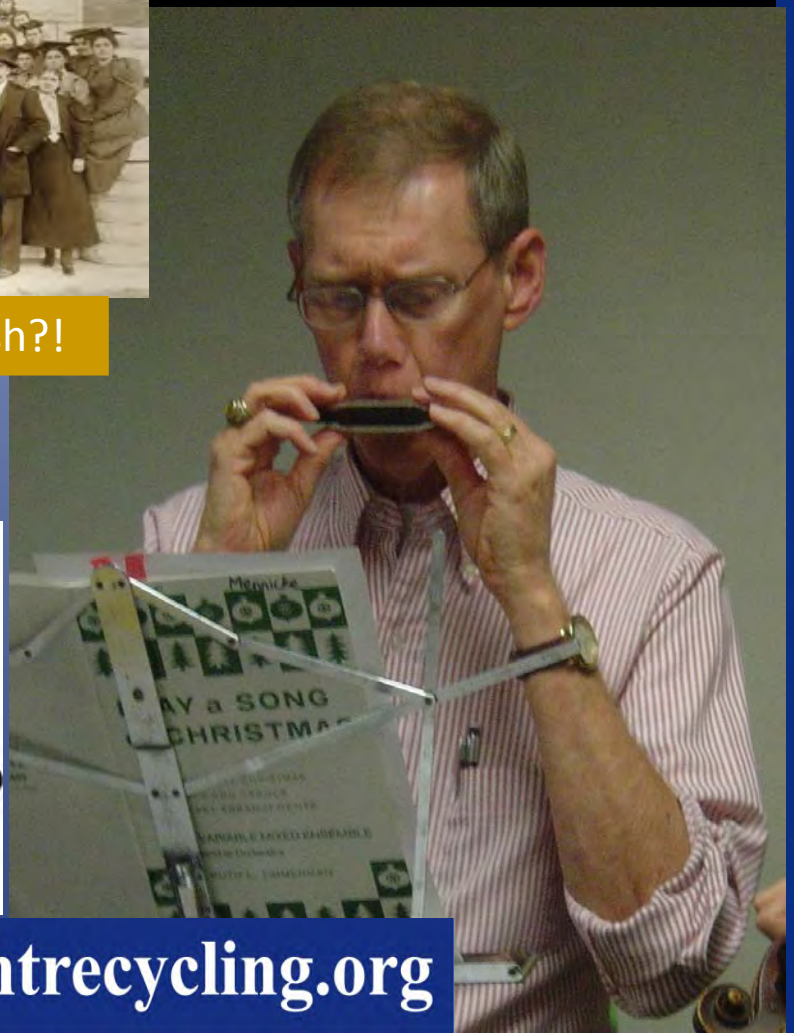
Bin loan program

Video capabilities

Poster Campaigns

Got Rubbish?!

Joe, you WU Shock, you…..



www.getcaughtrecycling.org

Get Caught Recycling!™

Local Celebrities

Work with the permit unit on compliance issues

Grant program
equipment resale

When communities need help - Call Rodney
for available funding for tire clean-up projects

Orphan Tire clean-up program

http://www.kdheks.gov/waste/forms/

- This program does not allow reimbursement for tire "amnesty" programs or any other public drop-off event.

- Permitted waste tire transporter and disposal or recycling facility
- Monthly reimbursements
- To receive reimbursement, a county or city must provide written certification that the waste tires were only accumulated from illegally dumped or abandoned tires

State Tire Programs surveyed

- The Hawaii Legislature has required the department to convene a tire task ……so they asked the other states what they do…..

- **HI -** Hawaii. Retailers may include a disposal fee to the final price of the tire.

- Many states responded:

Kansas and west

KS – Kansas $0.25 per tire	**There are no provisions in Kansas law for retailers. K.S.A. 65-3424 allows KDHE to pay for the cleanup of abandoned tires. We have chosen to do this through the cities and counties.**
NE- Nebraska **$1 per tire sold**	**•The money that comes to the State is used for amnesty collection events and a grant program (similar to KS)** •The retailer will charge whatever fee they want to manage the waste tire
UT -Utah and WY Wyoming	**Do not have** a scrap tire program
CA - In California the Tire Fee is $1.75	CalRecycle receives $1.00 and the Air Resources Board received 75 cents.
WA - Washington State **$1 per tire**	**Funds dedicated to waste tire projects: amnesties, pile removals, illegal dumping, education/outreach, etc.** Tire retailers must fund their own waste tire collection/recycling/ disposal costs as part of their business operations

State survey of tire programs -East

SC - South Carolina **$2 per tire sold**	•Retailer gets .06 plus $1 if they send the old tire to a permitted recycler •State Dept. of Revenue $1 •The county gets 44-cents per tire - (Or $1.44).
KY- Kentucky does have a **$1 per tire fee**	**Used for cleanups and also for market development.** Our legislature and others confuse the fee with disposal cost of the old tire.
TN- Tennessee collects **$1.35 per tire** All counties are required to have at least one site where the citizens can bring tires	•$0.10 is kept by the dealer •$1.25 to the Solid Waste Management Fund…then the division pays the county $1.00 per tire for all tires sent to beneficial end use •$0.25 covers administrative costs and clean-up of (tire dumps)

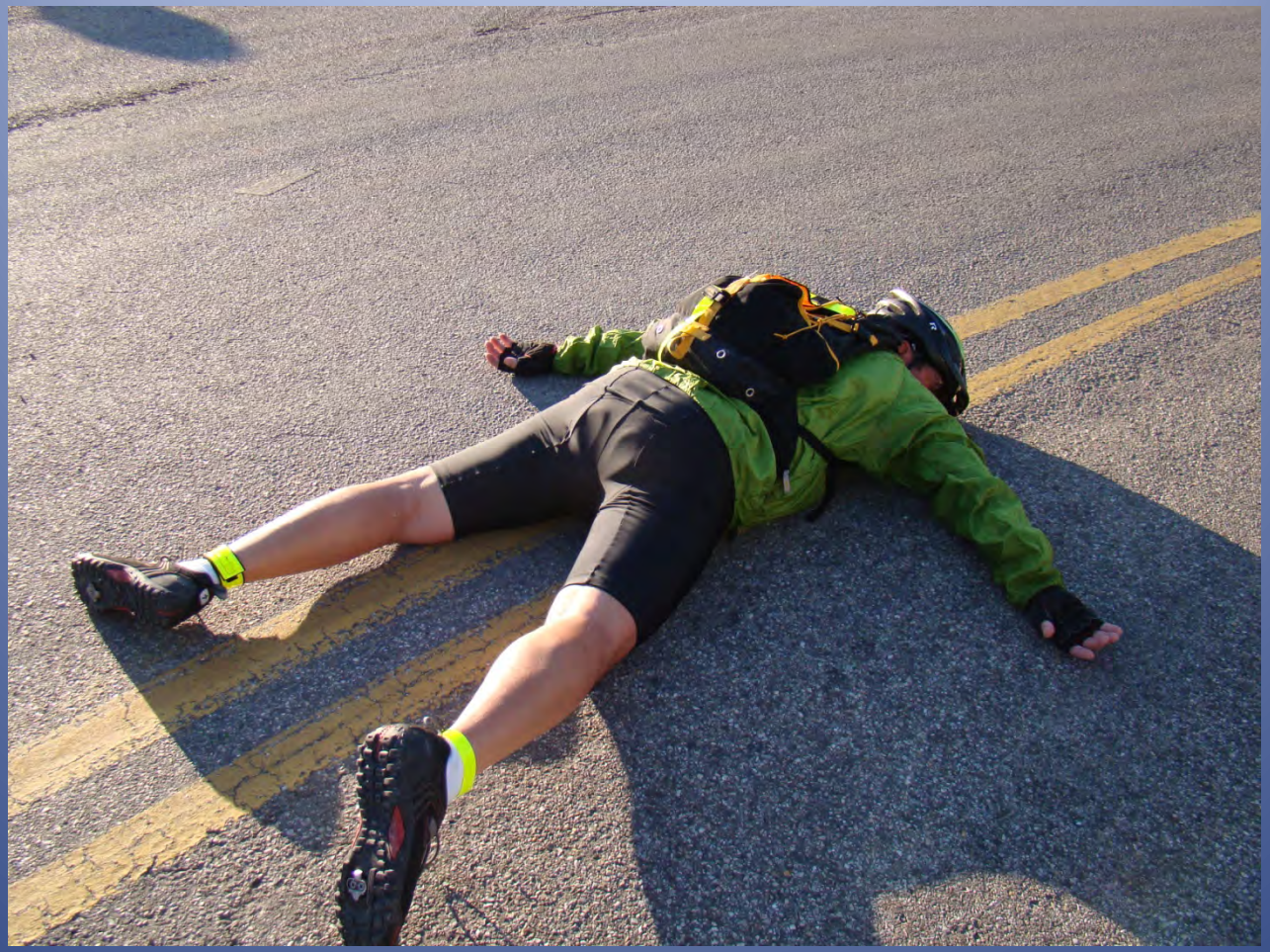
State Survey - Northeast

MD- Maryland **$0.80 fee on tire sold**	•Funds used by Maryland's scrap tire program to pay for the regulatory program **(licensing and reporting program, compliance and enf. activities, inspections, cleanup of sites, demonstration projects, etc.**) •Tire dealers may charge customers separately for tire disposal costs.
CT – Connecticut -**tire tax eliminated** in 1997	• Retailers charge for the disposal of tires • Most Transfer Stations currently • **ReEnergy Tire-to-Energy facility which incinerates over 10 million tires from all over New England to generate electricity.**
NY- New York State **$2.50 per tire**	Fund to pay **for cleanup of illegal tire stockpiles, developing technology to recycle tires**, etc.

Kansas Don’t Spoil it calendar contest

KDHE Bureau of Waste Manageme
kdheks.gov/wast
800-282-979
Get on the
Recycle
Cycle

Earth Day Events



We tried spandex-modified asphalt on the recycle cycle project!

Questions