

COLORADO

Department of Public Health & Environment

2014 Annual Report to the Transportation, Public Health and Joint Budget Legislative Committees and the Solid and Hazardous Waste Commission

Submitted July 1, 2015

Colorado's Waste Tire Program — Status of Waste Tire Recycling in Colorado



Executive Summary

Calendar year 2014 marks the eleventh year the Colorado Department of Public Health and Environment (the department) has compiled data related to waste tires, waste tire funds and grants and the status of Colorado's Waste Tire Program. Waste tire processing facilities continue to process tires into different tire-derived products that are used as tire-derived fuel by cement kilns, as alternative daily cover at landfills and as fencing and windbreaks, among others.

Additionally, the department continues to work with Tetra Tech and stakeholders to promote/ facilitate tire-derived product markets in preparation of the End Users Fund sunsetting on January 1, 2018. Steps that have been taken to promote waste tire market development include the first Colorado Waste Tire Market Development Conference that was held in June of 2014 and two technical trainings in May of 2014 for civil engineering use of tire-derived products in landfill applications and state and local transportation projects.

This 2014 calendar year annual report on waste tire recycling in Colorado is being transmitted to the following Colorado General Assembly Committees and Solid and Hazardous Waste Commission as required by House Bill 14-1352 and Sections 30-20-1404(2)(e)

(I), 30-20-1404(7) and 30-20-1406(4), C.R.S. The statute requires the department to issue a report to the committees of reference on or before July 1st each year and the report must include the following: information on the waste tire fee, the status of a priority abatement list for illegal waste tire disposal sites, an update of waste tire grant fund programs and the department's and Colorado Department of Transportation's findings regarding tire-derived aggregates. The total number of waste tires recycled in the state is also included to gauge the generation, management, flow and end use market. This information is submitted to the department pursuant to the Regulations Pertaining to Solid Waste Sites and Facilities (6 CCR 1007-2, Sections 10.3.5, 10.5.6, 10.6.7, 10.7.7, and 10.8.7).

The department gathers this information through annual reporting forms from waste tire processing, collection and storage facilities, waste tire haulers and end users of tire derived products, from new tire fee return forms submitted by retailers of new motor vehicle tires and new trailer tires, from fund and grant applications (processor/end user, illegal waste tire clean up, waste tire recycling incentives and waste tire fire prevention) and through law enforcement/waste tire inspection grant reporting.



COLORADO

Hazardous Materials & Waste Management Division

Department of Public Health & Environment

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Additional Information

Solid Waste and Materials

Management Program

This report and additional information not reported here are available on the Colorado Department of Public Health and Environment website. For more information, please visit: www.colorado.gov/cdphe/wastetires

Cover Photos (left to right, top to bottom): Various sizes and colors of landscape mulch made by a local waste tire recycler; football field made from waste tires as rubber infill; tire shreds used by a cement kiln as an alternate fuel; tires illegally disposed of at a site in Larimer County; "brush truck" purchased by a local fire agency under the Waste Tire Fire Prevention grant to combat hard to reach waste tire fires in forested areas; Representative Max Tyler giving the keynote address at the 1st Annual Waste Tire Market Development Conference held June 2014 in Greenwood Village.

Waste Tire Generation, Management and Flow

Colorado continues to generate waste tires at a rate higher than the accepted national industry that predicts standard а generation rate of one waste tire/ person/year. According to data submitted to the department by waste tire processors, end users and collection facilities, waste tire monofills, and waste tire haulers, 5,974,368 waste tires were generated in Colorado during calendar year 2014. Although this is 38,413 fewer waste tires than the 2013 generation rate, or less than 1%, it is a generation rate of 1.12 waste tire/person/year. This waste above average tire generation rate can be attributed to an improved economy and increased collections of waste tires by haulers.

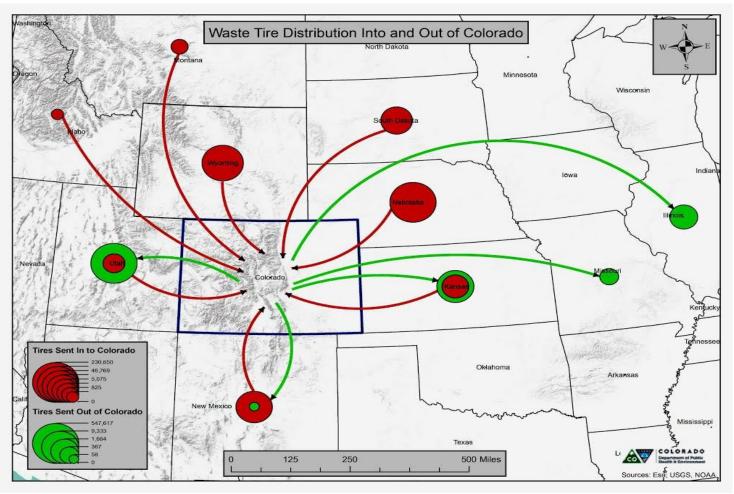
Waste tires are received from and sent to neighboring states map below). Colorado (see received 506,550 waste tires from eight states, with Nebraska and Wyoming each sending more than 200,000 waste tires into the state. Colorado generated waste tires were also sent to five out of state waste tire facilities, with 98% of the 559,037 waste tires going to a Utah recycling facility.

By the Numbers

In 2014, 100 percent of the

5,974,368 waste tires generated in Colorado were salvaged or recycled. The total number of waste tires salvaged or recycled, including those brought into Colorado from surrounding states, was 6,480,918. The net result was that all of the waste tires generated only in Colorado during 2014 were recycled or salvaged, while 93 percent of the total number of waste tires generated (Colorado generated waste tire plus waste tires received from neighboring states) were recycled or salvaged. Therefore, we are recycling/salvaging our own waste tires, but need to improve the recycling/salvaging rate to include waste tires shipped to Colorado

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Regional Waste Tire Influences

Waste Tire Update

Continued from previous page...

from nearby states. A normal waste tire generation rate (one waste tire/person/year) plus outof-state tires would have translated into a recycle/salvage rate of 103 percent.

Figure 1 (Page 6) provides an annual comparison of Colorado's waste tire recycling and salvaging rates of waste tires generated in Colorado and out-of-state waste tires for the last seven years. The waste tire recycling and salvaging rates increased in 2009 when the recycling/salvaging rate moved up sharply to levels above 90 percent. Recycling/salvaging rates continued to remain above 90% since 2009, with a decline in 2013 and 2014 in the total recycle/salvage rate due to the "unprecedented increase" of waste tires generated in 2013 and 2014 and the continued increase of waste tires from surrounding states coming into Colorado registered and permitted facilities for storage, processing and reuse. Additionally, two of the largest monofills just began recycling operations in 2014 and will be processing greater numbers of waste tires in 2015.

Figure 2 (Page 6) captures the top 10 direct use and end use markets for waste tires in calendar year 2014. Of the 10 direct/end use markets identified, the top five remained unchanged from 2013. The top five direct/ end use markets in 2014 were 1). tire-derived fuel by cement kilns; 2). Resale of salvage tires for reuse or retreading; 3). Tire shreds as alternative daily cover at solid waste landfills; 4). Tire bales as fencing and windbreaks; 5). Waste tires processed into crumb rubber for use in roadways and molded products.

Figure 3 (Page 7) reflects the number of waste tires recycled salvaged and versus the generation rate in Colorado. Since 2011, the amount of waste tires recycled or salvaged has outpaced the generation rate. This remained true until 2013 and 2014 where the recycle/salvage versus tires generated in Colorado rate was equal or close to equal.

Figure 4 (Page 7) represents the number of waste tires added to waste storage inventories since 2008. In 2012, no additional waste tires entered waste tire storage inventories, in contrast to 2013 and 2014, where there was an increase of storage inventories with the majority of these tires going into monofills. In 2014, the waste tire storage inventory increased by 483,117, with 455,589 waste tires going to monofill facilities and 27,529 going to temporary storage at waste tire processing and collection facilities. Most of the waste tires going into storage were brought into Colorado from neighboring states.

Waste Tire End Use Outlook

Calendar year 2014, like 2013, was a transition year as waste tire monofills and processors continued to prepare their operations to process waste tires in a greater number and use technologies that will diversify end markets. One of the larger monofills started removing waste tires from their inventory to process waste tires into tirederived fuel to be used in a second Colorado cement kiln. This will continue as the monofill plans on processing all incoming waste tires and pulling waste tires from monofill storage to process into

tire-derived fuel. Additionally, pyrolysis, which was introduced into Colorado in 2014 by another large monofill, is still an up and coming technology that will recycle greater quantities of waste tires. These two operations, along with other processors who are diversifying their waste tire end use and tire -derived product markets, means that Colorado is on its way to meet the goal of recycling all of the waste tires generated in Colorado and waste tires brought in from other states and removing waste tires from storage inventories. In fact. business projections indicate that one million more waste tires will be end used in 2015 and an additional two million waste tires will be end used in 2016.

Benefits of Waste Tire End Use - Tire-Derived Fuel

Energy Savings Energy savings from using waste tires as tire-derived fuel was equivalent to the energy use of 17,090 homes in a year ¹

Natural Resources Conserved Replaced the use of 100,562 metric tons of coal¹

Greenhouse Gas Emissions Avoided 187,305 metric tons of carbon dioxide emissions prevented, which equates to avoided annual emissions from 40,000 cars¹

¹US EPA Greenhouse Gas Equivalencies Calculator (updated April 2014)

Processor & End User Fund / End Users Fund

Under the Processors & End Users Fund, funds for the beneficial use of waste tires were available to both Processors and End Users. Monthly reimbursements are based on approved tons and available funding. Processors were eligible for reimbursements when the processed waste tires were made into a tire-derived product and the Processor had end used the tire-derived product themselves or the tire-derived product had been sold for an end use and moved off-site. An End User was defined as a person who uses a tire-derived product for a commercial or industrial purpose.

From January 2014 through June 2014, \$750,399 was reimbursed for 20,297 processed approved tons and 20,706 end used approved tons.

Due to the passage of House Bill 14-1352, as of July 1, 2014, the Processors & End Users Fund was changed to the End Users Fund. These funds are available for the beneficial use of waste tires and tire -derived products to End Users, Retailers, and Processors. Monthly rebates are based on approved tons and a set \$40 per ton rate (30-20-1405 C.R.S.). An End User is defined as a person who uses a tirederived product for a commercial or industrial purpose, or uses a whole waste tire to generate energy or fuel, or consumes or uses a tire-derived product in its final application or makes a new material that is sold. A Retailer is a person who sells a small quantity of tire-derived product to a customer. A Processor is eligible when they sell their tire-derived product to an out-of-state End User.

In 2014, seven new applicants participated in the End Users Fund. The type of tire-derived product ranged from tire-derived fuel to playground materials. A total of 7,578.8 tons were approved for new applicants in 2014, equaling 673,671 waste tires (see chart below).

New Business Applicants & Type of Tire-Derived Product	Amount That Received a Rebate in 2014 (tons)
Tire-Derived Fuel (2)	6,755.1
Alternative Daily Cover (1)	268.8
Molded & Construction Products (1)	238.1
Tire Bales for Windbreakers (1)	205.8
Landscape & Playground Material (2)	111.0
Total: 7 New Business Applicants	Total: 7,578.8

5

In 2014, the Colorado Office of the State Auditor ("OSA") conducted a performance audit of the Processors and End User Program. The OSA reviewed all aspects of the program, including how applications are reviewed and processed, how the department calculated reimbursement payouts, how the department maintains documentation and how the department determines if the program is having a positive impact increasing the amount of Colorado waste tires being end used. The OSA made several recommendations to improve the overall management and effectiveness of the program to benefit Colorado waste tire markets. With the submittal of this report, all OSA recommendations have been implemented including developing internal SOPs, updating the waste tire registration form and changing regulatory language. To review the performance audit report visit the OSA website at: www.leg.state.co.us/OSA/coauditor1.nsf.

Recycling Incentives

The Recycling Incentive Grants incentivizes the use of Colorado waste tires in public projects to promote tire-derived products around the state. Projects include playground surfacing, athletic fields and infill for existing recycled turf surfaces.

During 2014, 11 recycling incentive grants were completed. \$415,893 was spent, using 88,181 waste tires (see chart below).

Organization	Funds Spent on Project	Tires Used (approx.)
Town of New Castle	\$4,320	1,067
Academy School District 20	\$50,000	15,644
Ken Caryl Ranch Metropolitan District	\$44,292	9,843
Douglas County School District (2 separate projects)	\$98,670	25,719
Roaring Fork School District	\$20,817	3,558
Pueblo County School District 70	\$45,030	9,422
Town of Bennett	\$11,700	2,000
Burlington School District RE-6J	\$41,064	6,084
Town of Swink	\$50,000	7,022
Woodland Park School District	\$50,000	7,822
Total:	\$415,893	88,181

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By the Numbers: Overview of Waste Tire Activity

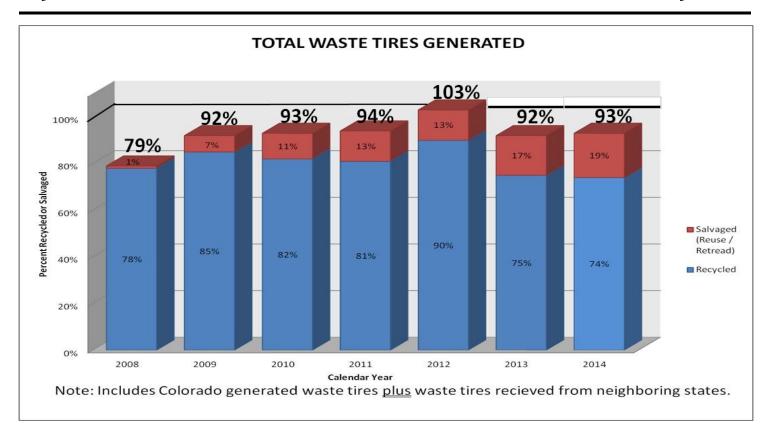
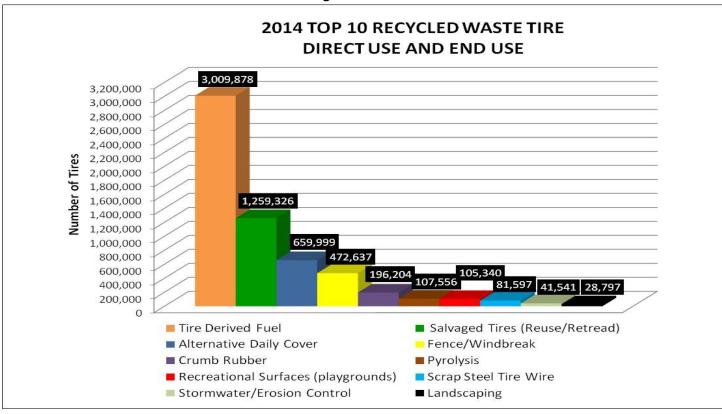
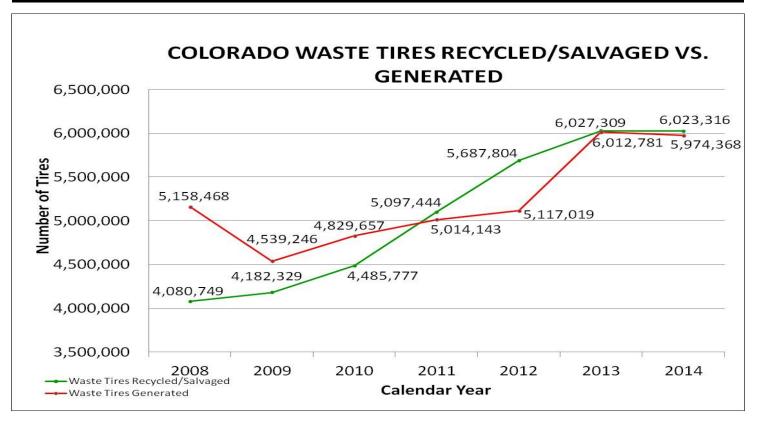


Figure 1







By the Numbers: Overview of Waste Tire Activity

Figure 3

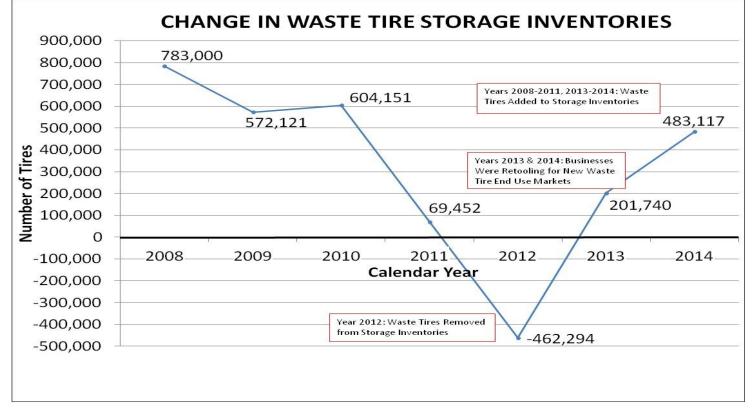


Figure 4

Waste Tire Fire Prevention Grants

The purpose of the Waste Tire Fire Prevention Grant is to assist fire departments, fire districts and other first responder fire entities with the purchase of equipment and supplies to use at waste tire fires in Colorado. The equipment and supplies are used for the prevention, preparation, response to and/or handling of waste tire fires. County, municipal, state, federal, and special government agencies and volunteer fire departments, fire districts and first responder fire entities may apply for funding.

During 2014, fifteen grants were completed in two grant cycles and the total amount awarded was \$388,612 (see chart below).

Grantee Name	Funds Spent on Equipment	Equipment Purchased
Brighton Fire Rescue District	\$6,484	Fire suppression foam and foam eductors
Colorado Springs Fire Department	\$25,000	Foam trailer and fire suppression foam
Elizabeth Fire Protection District	\$31,840	Fire suppression foam, foam/water operations monitor and nozzles
El Paso County Sheriff's Office	\$11,661	Air monitoring meters, nozzles and hose
Hanover Fire Department (awarded 2 grants for grant cycle 1 and grant cycle 2)	\$66,880	SCBA mobile compressor and storage system and hose
Hudson Fire Protection District	\$17,248	Hose
Jefferson County Sheriff's Office	\$41,433	Fire vehicle cab and chassis ("brush truck")
Kiowa Fire Department	\$17,971	Hose
Lefthand Fire Protection District (awarded 2 grants for grant cycle 1 and grant cycle 2)	\$102,000	Fire vehicle cab and chassis ("brush truck"), foam/water operations monitor, portable water tank, hose and nozzles
Rio Blanco Fire Protection District	\$3,816	Fire suppression foam
South Adams County Fire Department	\$4,189	Air monitoring meter
City of Thornton Fire Department	\$3,705	Fire suppression foam and foam eductor
Ute Mountain Ute Fire/ Rescue	\$56,385	SCBA mobile compressor and storage system, fire suppression foam, foam/water operations monitor and nozzles and hose
Total:	\$388,612	

Waste Tire Inspection Grants

In 2014, the department conducted a pilot project with Pueblo City & County Health Department (Pueblo) to conduct waste tire facility inspections on behalf of the department. Pueblo conducted inspections of waste tire generators (e.g., retail tire shops), waste tire haulers, waste tire grant recipients and possible illegal waste tire sites to ensure that these facilities were in compliance with existing waste tire laws and regulations.

During the first year of the grant (January 2014 -June 2014), Pueblo conducted 56 inspections (including follow-up inspections). Common issues identified were facilities that failed to register with the department, incomplete manifests, improper waste tire storage and failure to post decals onsite. The total amount spent from January 2014 through June 2014 was \$10,914.72.

Based on the positive results of the pilot project, the department has expanded the grant program statewide. The department continued its contract with Pueblo for fiscal year 2015 (July 2014 - June 2015) and recently signed an agreement with the West Central Public Health Partnership, which includes Delta, Montrose, Gunnison, Ouray, San Miguel and Hinsdale counties. The department will continue outreach to local health agencies and other governmental agencies to expand the program.

Illegal Waste Tire Cleanup Grants

The Illegal Waste Tire Cleanup Grant provides funding for the cleanup of illegal or abandoned waste tire sites. The department works with counties and municipalities to ensure the sites fit the definition of "illegal" or "abandoned."

Eight cleanups in five counties were completed in 2014. The total cost was \$776,350 with a total of 111,608 illegal or abandoned waste tires removed (see chart below). Cleanup project costs can vary among sites depending on where the cleanup site is located, the site's topography and if tires are above ground or buried.

Grantee Name	Funds Spent for Cleanup	Tires Removed
Ouray County	\$657,367	74,668
Larimer County	\$67,773	21,044
Archuleta County	\$6,676	1,617
Routt County	\$28,796	7,137
El Paso County (4 sites)	\$15,738	7,142
Total:	\$776,350	111,608

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With the passage of House Bill 14-1352, the department can now enter contract agreements directly with cleanup contractors. This eliminates the need for counties and municipalities having to select and fund the cleanup contractors prior to receiving reimbursement from the department. The required up front funding by local governments caused projects to be delayed or not initiated due to funding issues.

The department is developing a statewide abatement list of illegal waste tire sites. This list will be reviewed to determine the feasibility of using cleanup funds to abate the site.

The department has developed an online form for local governmental agencies to report potential illegal waste tire sites within their jurisdiction. The "Illegal Waste Tire Stockpile Identification Form" collects information so the department can conduct follow-up inspections to determine if the site is illegal, the number of tires on site, the potential public health risks and if enforcement action is needed.

department has contacted The several organizations to identify illegal waste tire sites. These organizations include Colorado Counties, Inc., the Colorado Municipal League, the Colorado Department of Parks & Wildlife, the Colorado Department of Transportation, the Colorado Environmental Health Association, the Colorado Association of Code Enforcement Officials, local county land assessors and local county health agencies. The department also has an online complaint form that the general public can submit to report potential illegal waste tire sites.

The department has identified six potential illegal waste tire sites (see chart below). The number of tires reported range from a few hundred to nearly two hundred thousand. The department will inspect each of these sites in 2015 and compare the findings against pre-determined ranking criteria to determine appropriate next steps.

Location (City & County)	Estimated Number of Waste Tires
Livermore, Larimer County	193,000
Evans, Weld County	1,000
Littleton, Douglas County	100,000
Bayfield, La Plata County	500
Sterling, Logan County	10,000
Hooper, Saguache County	5,000

Waste Tire Market Development Fund

The purpose of the Market Development Fund is to assist in developing markets for tire-derived products made from waste tires.

Waste Tire Program Goals

The overall goal of the Waste Tire Program is the development of sustainable markets for the end use of waste tires and tire-derived products. The sustainable markets need to be driven by the free market economy and not dependent on any subsidy.

With the sunset of the End Users Fund in 2018, the state will be moving from a subsidy-based system to a free market system. The department, through the Market Development Fund, is working on several initiatives to assist the state during this transition.

The following are performance measures to determine the effectiveness of the program in promoting sustainable waste tire end use markets in the state:

- Conduct at least four outreach events to promote the Waste Tire Program and/or market development opportunities each year.
- Conduct ten percent more technical assistance outreaches with both existing and new companies over the 2014 baseline.
- Maintain a recycling rate of over 100% or greater of Colorado generated waste tires and waste tires brought into Colorado from other states and waste tires in storage and stockpiles.
- Track the numbers of new end uses and tons consumed by the new end uses.

2014 Summary

In 2012, the department hired Tetra Tech Inc. to create the Colorado Waste Tire Market Development Plan. Upon request of the department and the former Waste Tire Advisory Committee, the plan has specific recommendations to meet the goal of recycling 100% of all newly generated Colorado waste tires and to reduce and eventually eliminate waste tires currently being stockpiled. The plan is a roadmap for the department to move the Waste Tire Program forward and meet these goals. The final plan was completed in May 2013 and is available on the department website: www.colorado.gov/pacific/cdphe/wt-market-development-fund.

Tetra Tech Inc. was awarded \$207,000 in 2013 and \$206,630 in 2014 to assist the department in implementing many of the recommendations in the market development plan. Some of the initiatives include holding a waste tire market development conference, technical trainings on the use of

Waste Tire Grants/Waste Tire Legislation

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tire-derived products in highway projects and landfills, technical assistance with both current and potential end users of tire-derived products and with the assisting development of statutory and regulatory changes for the program.

Market Development Conference

In June 2014, the first annual Waste Tire Market Development Conference was held in Greenwood Colorado. The Village. conference provided the latest and best information on regional markets, market development and technologies trends. and beneficial end uses for waste tires. Presentations at the conference covered topics including civil engineering applications, highway construction with tire-derived aggregate, playground sports and molded surfacing, products. rubber asphalt and tire-derived fuel.

Over 80 people attended conference including the Waste Tire Processors. Retailers and End Users: regulators; state transportation officials; landfill operators: dealers: equipment and industry consultants. Colorado Representative Max Tyler, who co-sponsored House Bill 14-1352, was the keynote speaker.

The conference was preceded by a regional state regulators meeting. Nine states plus the EPA Region 8 office attended to discuss current regulations; enforcement techniques; subsidy programs; regional markets, operators and haulers; market development and trends and barriers; technologies; and beneficial end uses for waste tires.

Technical Assistance

The department, in partnership with Tetra Tech, conducted technical assistance with existing and potential companies who are either looking to locate their waste tire operations or their expanding existing operation in Colorado. Many of these companies inquired about issues such as waste tire availability, current markets, business incentives and registration and permitting requirements. The department meets with these companies regularly to advise them on registration or permitting requirements and what department programs could be beneficial to them. Tetra Tech assisted through providing advice, researching market barriers or opportunities and/or conducting an onsite visit to meet with the company and review their current or proposed operations. The industry type and number of these technical assistance meetings included: waste tire processors (3); crumb rubber products (1); molded products (2); tire derived fuel (3); pyrolysis (5); state agencies (2); non-profit organizations (3).

The methods and number of technical assistance were phone conversations with 22 current/potential companies, followed up with 4 site visits, holding 7 meetings and 2 technical document reviews.

Trainings and Pilot Projects

Tetra Tech and the department held a day long training course in May 2014 on the uses of tirederived products for civil engineering projects. The training was attended by 35 people including several Colorado Department of Transportation and Regional Transportation District employees.

In 2009, the department awarded funding to the Colorado Department of Transportation under the Advanced Technology Grants program (grant repealed). The grant project was to determine the feasibility of using waste tires in asphalt pavements in the state. Two pilot test sections and one control section were constructed and observed over a five-year period. The two pilot test sections were built using two crumb rubber modified asphalt processes (Wet Process and Terminal Blend Method).

Results concluded that the two pilot sections did not perform well compared to the control section based on durability, energy usage and overall costs. Additional testing will be needed to determine if the use of waste tires in asphalt is a viable option in Colorado. A copy of the final report can be reviewed at www.codot.gov/programs/ research/pdfs.

Waste Tire Legislation

The passage of House Bill 14-1352 updated and further consolidated Colorado's waste tire management and recycling laws. The department held five stakeholder meetings to update the waste tire regulations because of the new law. The Commission promulgated the implementing regulations in November 2014, and the new regulations took effect on January 14, 2015. Calendar 2014 was a year of change for the Waste Tire Program (the program). Major changes included the program becoming responsible for collecting the \$1.50 waste tire fee and the addition of three new staff members.

Waste Tire Fee

On July 1, 2014, the collection of the \$1.50 waste tire fee on the sale of each new tire transferred from the Department of Revenue (DOR) to the department. The program and the DOR met multiple times to facilitate a smooth transition. This resulted in the DOR notifying waste tire fee remitters through written and web correspondence that collection of the waste tire fee transferred to the department and providing program contacts for waste tire fee questions. Additionally, the program sent information to current and potential waste tire fee remitters about the change and their new waste tire fee account number. A Waste Tire Fee Bulletin was also included to provide additional waste tire fee information. The program also worked with the Hazardous Materials and Waste Management Division's web coordinator to set up an online payment system for paying the waste tire fee. The program encourages waste tire fee remitters to pav the fee online, and approximately twenty-five percent (25%) of the 1,496 retailers paying the waste tire fee used the online payment system in 2014.

From July 1–December 31, 2014, there were 1,496 retailers paying the waste tire fee. Program staff educated tire retailers about the waste tire fee requirements through compliance inspections, technical assistance outreach, and phone and email correspondence. The total tires sold and amount of waste tire fees collected are indicated below:

Month (2014)	Tires Sold	Amount of Waste Tire Fees Collected
July	361,118	\$541,677
August	362,195	\$543,292
September	396,356	\$594,534
October	479,587	\$719,380
November	579,473	\$864,710
December	395,405	\$593,108
Total:	2,574,134	\$3,856,701

Program Update

The program was fully staffed at the end of 2014 with the addition of three new staff members. Program highlights included:

- Working with stakeholders to revise the waste tire regulations.
- Contracting with local governments for the cleanup of illegal waste tire piles.
- Contracting with and training a local health department to conduct waste tire inspections.
- Holding the 1st Annual Waste Tire Market Development Conference.
- Providing a civil engineering projects training course.
- Visiting a leading commercial pyrolysis operation in Rome, Georgia to learn more about pyrolysis.

With the addition of new staff, the program increased its outreach by providing regulatory information to the waste tire community and local governments. Waste tire outreach efforts included staff presenting at the March 2014 Code Enforcement training in Commerce City and the October 2014 Colorado Solid Waste Association of America Annual Conference in Estes Park. Also, in collaboration with the Western States Project, program staff presented at the August 2014 Grand Junction and October 2014 Alamosa trainings for local government staff on the waste tire program, regulations and grants. conducted forty-five Program staff waste tire inspections and compliance visits. Additionally, waste tire staff logged approximately 400 hours in 2014 answering and responding to waste tire related phone calls and emails, with 330 of the 400 hours occurring July – December 2014. The surge of calls and emails the last six months of the year was due to the transition of the waste tire fee collection to the department from the DOR.

Program staff continued to process waste tire registrations. The program issued 1,003 waste tire registrations in 2014. This is a jump of over 400% compared to 2013 and due in part to the waste tire facility three-year renewal period beginning in 2014. At the end of 2014 the department had the following number of registrants:

- Waste tire generators: 1,834
- Waste tire haulers: 102
- Waste tire end users: 42
- Waste tire collection facilities: 27
- Waste tire processors: 20
- Waste tire monofills: 3

Colorado's Waste Tire Program: Building Markets for Tomorrow

In June 2014, the first annual Waste Tire Market Development Conference was held in Greenwood Village, Colorado. The conference provided the latest and best information on regional markets, market development and trends, technologies and beneficial end uses for waste tires. Topics included civil engineering applications, highway construction with tire-derived aggregate, sports and playground surfacing, molded products, rubber asphalt and tire-derived fuel. Vendors also had the opportunity to exhibit and display their products.





Conference presenter, and Tetra Tech Team Member, Dr. Dana Humphrey presenting on tire-derived aggregate.



Rubberosion's vendor exhibitor's booth. Eight vendors exhibited their products.



Conference attendees networking in the vendor exhibit area.