Waste Tire Reuse Options for Landfills

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Overview

- Summary of waste tires in Colorado
- Tire-derived aggregate usage at landfills
- Advantages/disadvantages using tire-derived aggregate
- CDPHE assistance for landfills wanting to use tire-derived aggregate

Waste Tire Summary for Colorado

- 60+ million waste tires in storage (2013)
  - Three active monofills
  - Collection facilities (typically landfills)
  - Processors of waste tires
  - Illegal waste tire sites (unknown amount)
- Landfill ban for disposal of waste tires since 2011
- Monofills must stop adding waste tires to storage by 2018, and be closed by 2024

92% recycling/reuse rate for waste tires (2013)
- Tire-derived fuel
- Salvaged/used tires
- Alternative daily cover
- House Bill 14-1352
  - Became law on July 1, 2014
  - Several changes/modifications of waste tire laws
  - Currently going through stakeholder process to update regulations (Section 10)

What is Tire-Derived Aggregate?

- Tire-derived aggregate (TDA) is waste tires that have been processed to a specification to be used as a substitute for another material (e.g. gravel, dirt, etc.)

What are some common uses of TDA at landfills?

- Alternative Daily Cover
- Leachate Collection
- Gasification Collection
- Slope Stabilization
- Road Base
TDA use in landfills

Why use TDA in landfills?
- High permeability
- Cost savings
- Recycling (> 90,000 tires/acre)
- Waste tires already at landfills

Reasons not to use TDA at landfills
- Costs could be higher than currently available materials onsite
- Difficulty getting material due to location of landfill
- Not a sufficient supply of TDA for project
- Inexperience using TDA

How can CDPHE help?
- CDPHE’s Waste Tire Program Grants (con’t)
  - Market Development Fund
    - Tetra Tech Inc.
    - Dr. Dana Humphrey, PhD, University of Maine
    - Terry Gray, TAG Resource Recovery
    - Possible grant funding for project
    - Fund is repealed on January 1, 2018

How can CDPHE help?
- Illegal Waste Tire Cleanup Fund (con’t)
  - Legacy waste tire piles at landfills
  - Local cleanup of waste tires provide supply of TDA to landfill
Who should we contact to get started?

- Brian Gaboriau, Waste Tire Grants Administrator
  - Grant funding, technical assistance
  - 303-692-2097
  - Brian.gaboriau@state.co.us

- Shana Baker, Environmental Protection Specialist
  - Registration as an "End User", waste tire storage questions
  - 303-692-3305
  - Shana.baker@state.co.us

- Permits Unit of the Solid Waste Division
  - Approved for TDA usage

- Waste Tire Program Website: [https://www.colorado.gov/cdphe/wastetires](https://www.colorado.gov/cdphe/wastetires)

Any questions?