



BUILDING BETTER COMMUNITIES
THROUGH SUSTAINABLE PRACTICES

Expanding the use of **Green Asphalt** in Colorado

Asphalt is the sustainable material for building pavements. It's smooth, so vehicles consume less fuel and produce lower emissions; it's quiet, so expensive noise walls don't need to be constructed; it's safe, providing excellent gripping power; and it's durable, so that the road never needs to be removed and replaced. It is also the most recycled material in the U.S. The asphalt Industry is proud of their efforts to be good neighbors, reduce their carbon footprint and become the leader in sustainability in the construction industry. To that point, the asphalt industry of Colorado recognizes three elements within our business that are low hanging fruit to further increase our already environmentally friendly process.

Streamline the use of Warm Mix Asphalt

Innovative technologies known as Warm Mix Asphalt / Workability Mix Additive (WMA) are making asphalt an even more sustainable material. Warm-mix technologies employ a variety of methods and materials; what they have in common is the ability to drastically reduce the temperatures at which pavement material is produced and placed on the road. The warm-mix technologies' temperature reductions have the obvious benefits of saving fuel, cutting emissions and speeding up construction to allow live traffic on the roadway sooner. What may be surprising to some is that they also have the potential for benefits in construction that may extend the paving season in cold climates, improve quality, and lengthen the lifespan of the pavement. Select agencies in Colorado allows for the inclusion of WMA additives to be used on individual projects, however, requires that duplicate mix designs be prepared and approved prior to construction.

POSITIVE ENVIRONMENTAL ACTION: *Allow for increased use of WMA and eliminate agency requirements for two separate asphalt mix designs for the same mix when WMA is proposed.*

SUSTAINABLE ASPHALT, NOW AND TOMORROW



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Expand the use of Recycled Asphalt

The asphalt industry reuses and recycles nearly 100 million tons of its own product every year, making it America's number one recycler. It is estimated that recycling of asphalt pavements (RAP) saves the American taxpayer \$1.8 billion per year. It also saves hundreds of acres of landfill space each year. Materials from other industries are routinely recycled into asphalt pavements instead of going into landfills. Some of the most common are rubber from used tires, glass, and blast furnace slag. Asphalt plants also recapture the fine mineral particles that are generated in the process of producing asphalt pavement material. This routine recycling of co-generated material helps to conserve natural resources. Most statewide agencies currently allows for the inclusion of RAP (approximately 20% - 25%).

POSITIVE ENVIRONMENTAL ACTION: *Allow mix design appropriate adjustments to incrementally increase the usage of RAP and implement new Balanced Mix Design Approach.*

Allow the use of Alternatives to Hydrated Lime

Additional products are introduced into asphalt mixes at the plant to help the liquid asphalt binder adhere to the aggregate and prevent premature stripping on the road. Some agencies only allows the use of hydrated lime for this process. The creation of lime is a high energy intensive process and a significant contributor of CO₂ to the atmosphere. There are liquid anti-strip chemical products that provide equivalent or better performance that are used by other states across the country. Colorado is one of the last few states that does not allow for the use of liquid anti-strip.

POSITIVE ENVIRONMENTAL ACTION: *Develop Approved Product listings for liquid anti-strip and allow for either lime or liquid products in mix designs.*

Additional Resources

www.pavegreen.com
www.asphaltpavement.org
www.safeasphalt.com

Contact

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