

Frequently Asked Questions About Asphalt Rejuvenation

Q: When did the city start the asphalt rejuvenation program?

A: Prior to beginning the asphalt rejuvenation program in Boulder in 2013, City of Boulder staff reviewed the product's safety information and also discussed the results of similar programs with staff from other cities in the Denver area. Based on these reviews, city staff made the decision to pilot the program. It was determined that pavement treatment with Reclamite was an effective pavement preservation technique based on test results and visual inspection of the pilot streets and the decision was made to expand its use in 2016 (120,000 square yards) and in 2017 (190,000 square yards).

Q: What product is used for asphalt rejuvenation?

The City of Boulder uses a product called Reclamite, an oil-based emulsion. As applied, the product does not contain detectable levels of polycyclic aromatic hydrocarbons (PAHs), a class of chemicals that occur naturally in coal, crude oil and gasoline. While there may be a lingering odor from the product, this does not mean that there are harmful levels of PAHs or other substances. (For more information about PAHs, please visit the <u>Centers for Disease Control and Prevention</u> website.)

City of Boulder staff has visited every street that has been treated with Reclamite and did not notice any distinct odor after sand was applied (typically 45 to 60 minutes after the product was distributed), although we recognize that people's sensitivity to smells varies. It is also possible that odors from other sources, such as wildfires or work on nearby construction, could make it difficult to pinpoint whether smells are coming from the Reclamite or another source.

Q: What are the benefits of asphalt rejuvenation versus other pavement maintenance techniques?

Asphalt rejuvenation with Reclamite is one of several tools the City of Boulder currently uses for pavement preservation, along with chip seals, slurry seals and crack sealing. Many of these treatments are complementary and are not necessarily exclusive for a particular street. All pavement preservation treatments are employed with the goal of extending streets' lives with lower cost treatments before costlier repairs, such as street resurfacing or pavement reconstruction, are required. The following table shows the cost comparison of asphalt rejuvenation using Reclamite, chip seal and resurfacing:

Method	Cost Per Lane-Mile	Cost Per Lane-Mile Per Year
Reclamite	\$7,750	\$1,550 (assumes 5-year life)
Chip Seal	\$21,100	\$2,110 (assumes 10-year life)
Resurfacing (overlay)	\$105,000	\$8,750 (assumes 12-year life)

It should be noted that any form of construction or pavement management results in some environmental and traffic impacts. Asphalt rejuvenation generally has less impact to vehicle traffic during installation than other preservation treatments; however, it has presented challenges for bicycle traffic that staff will address in future years. The city will also continue to monitor the performance of treated streets and the treatment's effectiveness.

Q: What can the city do to minimize impacts to drivers, cyclists and pedestrians who use streets that have been treated?

A: Staff recognize that asphalt rejuvenation has an impact to people who use the streets. Sand is applied shortly after the Reclamite is applied to minimize tracking of the Reclamite, but staff recognize that the mix gets onto surfaces such as bicycles and the undercarriages of cars. Prior to future treatments, city staff will work to provide advanced notice and additional signage so that people can use alternative routes to the extent possible. Staff will also do additional street sweepings as needed to get rid of the sand. Please use extra caution when driving, riding or walking in any construction area.