

## RECLAIMED ASPHALT PAVEMENT (“RAP”): STOCKPILE EMISSIONS AND LEACHATE

The hot-mix asphalt (“HMA”) industry is America’s biggest recycler. More than 90 million tons of asphalt pavement is reclaimed each year during widening and resurfacing projects, and of that total, more than 80 percent is reused. More than 92 percent of the nation’s highways and roads are surfaced with asphalt. RAP is incorporated into new pavements, shoulders, and embankments. Recycling is a vital part of the asphalt pavement industry, as it creates great benefits for the general public.

- RAP has economic benefits for taxpayers, as well as environmental benefits. Using RAP results in lower costs because less virgin material is used.
- Research conducted for more than three decades has proven that recycled pavements offer the same durability as pavements constructed with virgin materials, but with significant cost savings to the public and private consumer.
- Milled RAP has the additional benefit of being ready to recycle without extensive processing.
- RAP reduces the amount of new petroleum products and aggregates used in building pavements.
- Until recycling became widespread in the 1970s, RAP was disposed of in landfills. Thanks to recycling, government savings have been in excess of hundreds of millions of dollars, and space is not taken up at our landfills.

Recycling of asphalt pavement is a well-accepted practice throughout the United States that conserves our precious natural resources while allowing highway agencies to deliver quality pavements to the traveling public in a cost-effective manner.

It is well understood that RAP stockpiles will help lower fugitive dust emissions. For example, the Australian government identifies that RAP piles will lower fugitive dust emissions (PM10) by approximately 70 percent as compared with virgin aggregate piles [see [http://www.npi.gov.au/handbooks/approved\\_handbooks/pubs/fasphalt.pdf](http://www.npi.gov.au/handbooks/approved_handbooks/pubs/fasphalt.pdf)]. Per EPA’s AP-42 Emissions Factors, using RAP as a cover for aggregate piles would also be effective as a fugitive dust control mechanism [see <http://www.epa.gov/ttn/chief/ap42/ch13/final/c13s02-4.pdf>]. Similarly, RAP is often used to suppress dust on unpaved roads. In addition, there is no evidence that shows emissions from HMA production, using RAP, are any different from emissions using virgin materials.

Regarding runoff or leachate from RAP, it is well documented that leachate or runoff from RAP storage is not problematic [see [http://www.floridacenter.org/publications/townsend\\_98-2.pdf](http://www.floridacenter.org/publications/townsend_98-2.pdf)]; for additional references, see the World Health Organization’s CICAD, No. 59 (Sec. 6.1) or contact NAPA]. In fact, RAP is commonly used as clean fill material in highway construction.

NAPA believes that vital natural resources are preserved by the wise and appropriate use of reclaimed asphalt pavement. We support and encourage thoughtful approaches to environmental protection, and we believe that RAP is an important tool for environmental stewardship.