

# EVERYTHING ASPHALT

## Central Plant Recycling

*"Cold recycling can play a major role in the upgrade of secondary low-volume roads."*  
*Transportation Research Record N1106*



### Low Cost Paving with Recycled Materials

When an asphalt pavement or asphalt surface has reached the end of its life, it is usually milled off of the pavement before reconstruction. While the asphalt binder in these millings is normally age-hardened, the reclaimed asphalt pavement (RAP) can contain valuable road paving material. In some jurisdictions, RAP is stockpiled and even considered as a hazardous waste. In central plant recycling, the RAP is screened, crushed, sized and mixed with an asphalt rejuvenerator. The recycled mix can be transported immediately to a job site, or it may be stockpiled for later use. The RAP can be freshly milled, or it may come from a stockpile. The plant can be a fixed plant or a portable plant. The recycled material can be replaced on the original pavement or transported to a different road.

Central plant recycled mix is an ideal low-cost paving material for improving low volume, previously unpaved roads, poor quality roads, or shoulders. It is also an ideal use for accumulated RAP stockpiles. However, the RAP stockpile should be not contaminated with unwanted materials, and the RAP tested for suitability. Additional aggregate or other additives may also be blended in to correct the gradation or improve the mix. Cold plant mixtures can be dense-graded or open-graded. Cold-laid asphalt mixes may be used for surface, base or subbase courses. The structural capacity of recycled cold mix can be considered equal to that of conventional cold mix paving materials

The asphalt rejuvenerator used to recycle the RAP may be emulsified, cutback, or a soft asphalt cement, and it may have rejuvenerator oils, polymers or other additives; or it may be unmodified asphalt.

### Benefits of Central Plant Recycling

- Central plant recycling reuses existing aggregate and asphalt, reducing new raw material costs.
- The recycled mix is a low cost paving material for previously unpaved roads or other low volume roads.
- The versatile process may be done at a fixed plant or a portable plant near the jobsite.
- With the proper choice of materials, aged asphalt can be rejuvenated, and poor aggregate gradations can be corrected with added aggregate material.
- The recycled mix can be stockpiled for later use.
- There is excellent public acceptance of recycled materials.
- The recycled pavement can, itself, be recycled when its time has come.

### Martin Asphalt Products for Central Plant Recycling

<b>AES-300</b>	High float, anionic asphalt emulsion
<b>AES-300RP</b>	High float, anionic asphalt emulsion with rejuvenating oil
<b>MS-2, MS-1</b>	Anionic medium setting asphalt emulsions
<b>CMS-2</b>	Cationic medium setting asphalt emulsion
<b>CSS-1</b>	Cationic slow setting asphalt emulsion

### Martin Asphalt Makes It Easy

Through Martin Asphalt, you get **Everything Asphalt**—a full range of products for constructing, maintaining, recycling and rehabilitating your pavements. In addition, you receive technical assistance in selecting the right materials and application. The company's AASHTO Certified Laboratory makes sure the products meet your specifications. And your products are delivered both on spec and on time via Martin's Gulf Coast network of production plants, storage facilities and transportation fleet including ocean-going and inland barges, rail cars and tanker trucks. Contact us for more information on products for your stabilization projects.