Expanded (Foamed) Asphalt for Reclaiming Roads

CMI Corporation has developed a viable and economic process that uses expanded (foamed) asphalt to reclaim deteriorated streets and roads. The process uses a reclaimer/stabilizer machine that pulverizes the existing surface while pushing a tank-truck loaded with hot asphalt. The asphalt is pumped from the truck to a reactor on the machine where a precisely controlled quantity of water at ambient temperature is added to the hot asphalt. Steam, created by the injected water, causes the hot asphalt to foam and greatly expand in volume. This mixture enters the machine's mixing chamber, where the pulverized material is coated and deposited as a windrow behind the machine. The windrow of coated material is then spread and compacted in the usual manner, and a thin chip-seal coat completes the process. A microprocessor controls the operation, using data entered from engineering specifications. The entire process is synchronized with the forward travel of the machine to assure strict compliance with engineering specifications. This asphalt expanding process more completely coats the materials than if straight or emulsified asphalt is used, yet the process uses less liquid material. Independent tests have shown pavement strengths comparable to those expected of newly constructed hot-mix asphalt pavements. While the ability to foam asphalt has been available for many years, this process is a refinement that ensures precise control of the technique, so that the pulverization, foaming, and mixing is accomplished within a very strict time frame (which is vital), with one machine, and with a single pass.

Contact:	James Rodriguez
Organization:	CMI Corporation
Address:	P.O. Box 1985
City:	Oklahoma City
State/Province:	OK
Postal Code:	73101
Country:	USA
Phone No:	405-491-2467
FAX:	405-491-2417
URL:	http://www.cmi.corp/com
Email:	jimr@ionet.net