best management practices WASTE REDUCTION



Overview

Roughly 11 million tons of asphalt shingles are discarded each year in the U.S. After years of hauling shingles to local landfills, Mike Griffin of Griffin Waste Services decided there had to be a better way. Mike partnered with Handle Safe Systems, LLC and APAC-Atlantic, Inc. to develop a process by which asphalt shingles from roof replacement projects were recycled into hot mix asphalt paving materials. This effort is initially diverting over 320 tons per month, or over 3800 per year, with the goal of diverting over 800 tons per month from local landfills and onto more productive applications.

Recycling Logistics



Because reroofing projects are usually independent of other general remodeling projects, tear off shingles are typically transported as a separate dumpster load from other construction and demolition waste. This transportation efficiency makes post consumer shingles one of the most sensible

demolition materials to recycle. Also, the need for sorting is limited to a few basic materials on the job site, and shingles are heavy, so the tonnages diverted from the landfill add up quickly.

Minor amounts of shingles on houses today contain asbestos because shingles manufactured between the early 1960's to the late 1970's were sometimes manufactured with asbestos fibers. To ensure that no asbestos gets recycled, Mike Griffin is trained, certified and able to personally inspect samples from each load of shingles with a polarized light microscope.

Once a load of shingles is cleared for recycling, the shingles are taken to the Handle Safe Systems facility where they are sorted one more time and ground down into a uniform size by a grinder called "the beast." The material is then hauled to APAC-Atlantic, Inc. for use in hot mix asphalt road surfacing projects.

A Beneficial Raw Material to Hot Mix Asphalt

Recycled asphalt shingles contain the same materials that are needed in asphalt paving materials: asphalt, aggregate, and strengthening fibers. Each batch of recycled asphalt shingles prevents the need for virgin materials, saving money and saving resources. For more information on this program, see www.wncroofstoroads.com.



Type of Facility: Waste Hauler



Recycles:

Asphalt shingles Metal Cardboard

Monthly Recycling Stats:

320 tons per month asphalt shingles

Contact Information:

Mike Griffin Griffin Waste Services www.griffinwaste.com 828-281-4549

Waste Reduction Partners