ORGANIC WASTE AS A FUEL?

Memphis has a plan that can make it the nation’s first city to solve the solid waste disposal problem and, at the same time, provide a new fuel source for generating electricity.

Through the work of a Memphis State University reasearch team headed by Dr. John W. Smith, a plan has been researched and developed to economically turn huge volumes of munipical waste into fuel.

Every Memphian generates five pounds of solid waste daily or about 3.5 million pounds every day for this city of 700,000. About 32% of this waste is organic, about 7% is metal and glass makes up about 6.8% of this daily collection.

To turn raw trash into usable fuel, it will be mashed, sifted and washed at the processing plant, to separate organic material from metal and glass, using a “wet cyclone” separator. After separation the organic material, in wet slurry form, will be pipelined to a site near the steam plant where it will be dried using heat produced by discarded flammable liquids. The dried material can then be pumped under air pressure to the power plant and injected into the furnace along with coal.

Organic waste is just about as good as low grade coal as far as heat output is concerned. So besides the yearly savings on coal, researchers suggest as much as $1 million can be recovered through the sale of glass, aluminum ($200/ton), iron ($13/ton and nonferrous metals ($150/ton).

The plan has been submitted to the Memphis City Council for final approval and funding.