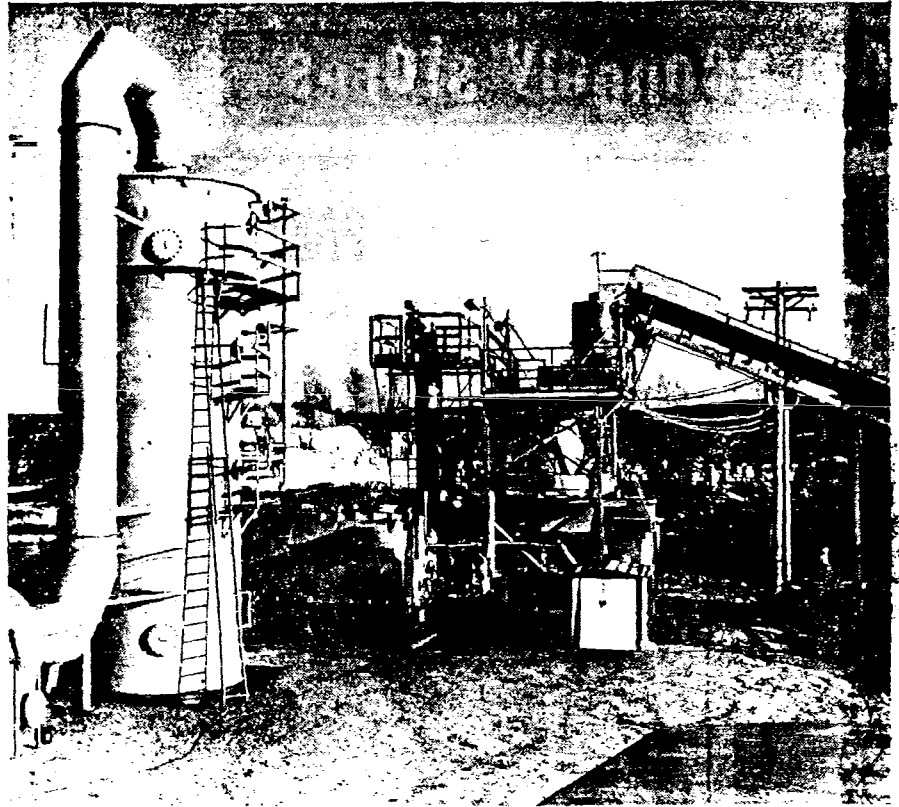




Experimental incinerator operated by a subsidiary of Monsanto Co. at West Lake Quarry. (Post-Dispatch Photo)

Trash Becomes Gas Through New Process

By ASA E. BRYAN
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A subsidiary of Monsanto Co. is testing a plan to reduce trash to a harmless, odorless gas. Officials of the St. Louis County Health Department are watching its progress closely. The subsidiary, Enviro-Chem Systems, Inc., with offices at Monsanto's world headquarters here, has erected a plant near the Westlake Quarry in Bridgeton.

As garbage, old shoes, frozen food wrappers and other litter is brought by private hauling companies to the land fill operated by the quarry, Enviro-

Chem uses part of it to test its approach to burning solid wastes without polluting the air.

Pyrolysis Process

Solid wastes are first placed in a giant shredder. Metals are removed, and the remaining composition is sent through a process called pyrolysis.

Pyrolysis is the burning of a substance in the absence of oxygen. Company officers liken what happens during the process to the disintegration of a piece of food if left in an oven too long.

The final step is the re-

production of gas during pyrolysis.

All that is left after the burning of the trash, spokesmen for Enviro-Chem say, is dirt, rocks or glass that were present in the original composition. These by-products can be used, they say, for land fill.

Enviro-Chem is exploring the possibility of using the hot gases emitted as a source of power.

Company officers say that their process is capable of handling waste materials made of plastic. Many conventional incinerators, they point out, cannot burn plastic because they generate excessive smoke.

D. L. Chan-nan, director of the solid pollution control department of Enviro-Chem, said that a decision would be made this year as to whether to try to market the company's process.

"We're encouraged by what we've seen so far," he said.

The capacity of the experimental plant is 500 to 1000 tons of refuse a day, Chan-nan said, however, that much larger plants could be built.

H. Clifford Mitchell, assistant commissioner for environment for the St. Louis County Health Department, is also pleased.

"It looks very good from the limited information we have at this time," he said.

St. Louis County residents approved a \$5,900,000 bond issue in 1965 for the construction of two incinerators. Citizen opposition to the sites selected by the county, however, has stalled construction. Trash today is disposed of in land fills.

An estimated 600,000 tons of trash is generated by households in St. Louis County each

year, if trends continue, the volume will grow. Between 1920 and 1965, the daily average of refuse generated by an American grew from 2.55 to 4.5 pounds.

The United States Public Health Service estimates that by 1970 daily refuse production per person will be 6.5 pounds.

Trash haulers in St. Louis County say that with many commercial incinerators having been closed down in compliance with air pollution control ordinances, it will be difficult to find places to dispose of trash in the future.

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