

# Students operate abandoned sewage plant

Eledelen said that their plant pipes in daily about 500,000 gallons of raw sewage from a surrounding housing development and industrial operations in the Milwaukie area. Most of this sewage consists of approximately 99 percent water. The sewage is then piped to a preliminary treatment basin where the solids, such as gravel and other obstructive objects, are separated.

The effluent, referred to as run-off water from the plant, is then piped to a 215,000 gallon primary treatment tank where floatable sewage is then transferred to the digester and the sediment is transferred to the first of two aerators. From there, Eledelen said the effluent is piped to a mixing tank where the remaining sewage is mixed with air.

The sewage is consumed by biological organisms which feed upon it. When the impure sewage is consumed the organisms are exposed to air, which will cause them to die. More sewage is then piped in and the process resumes once again, Eledelen said.

"It's a natural and continual process," Barkman said.

The remaining effluent is then piped to Kellogg where it is treated even further, Eledelen said.

The remaining sediment is transferred to the digester where it creates methane gas. The natural fuel is burned to heat the

offices and provide optimum working temperatures for the digester, Eledelen said.

The sewage left over is then piped into tanker trucks and transferred to farms to be used as tree fertilizer or sent to sani-

tary landfills, Eledelen said.

"Laws state that human sewage cannot be used as fertilizer on food crops," he said.

As for mistakes, Barkman said, they are seldom and few and can be corrected by Kellogg several miles away.

"Students learn more from their mistakes," he said. "Overall, this group of students is on top of everything."

A well managed sewage plant will treat up to 98 percent of its sewage, Barkman said.

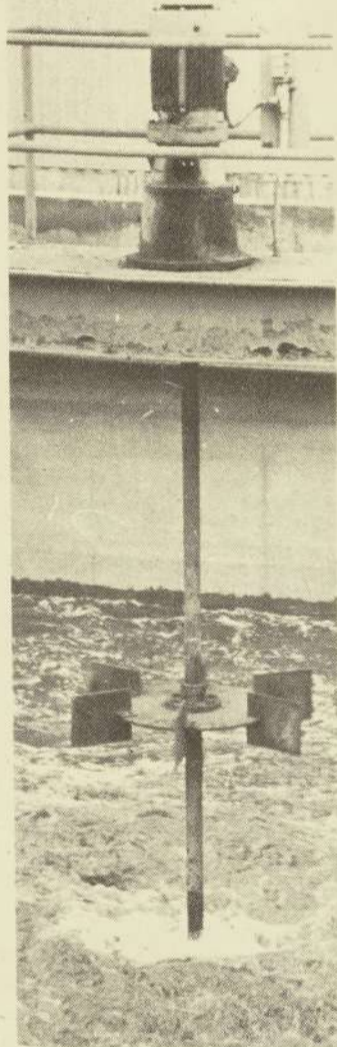
"Our plant is treating approximately 95 percent of the sewage and the other five percent is discharged into the river," he said.

Before, this sewage plant was discharging all its effluent into the river. The breakdown or decomposing process takes about 15-30 days in the river. "We can accomplish this process in a period of 6-8 hours at the plant," Barkman said.

Many of the students, after receiving their associates degrees, will then be employed as water/wastewater treatment operators for both private and public facilities.

"Four or five of my students will then go on to four year institutions to further themselves in environmental science and engineering," he said.

Students  
The main sewage treat-  
ment plant in 1975 as Milwau-  
kie treatment plant in  
the old one.  
Barkman, College de-  
partment of water/  
technology, said that  
year as well as 18  
students in his classes  
with the operation  
treatment plant.  
ity of the students  
second year students,  
treatment plant was re-  
1975, Barkman said,  
been operated by stu-  
practical experience.  
ity of the public to-  
ze water/wastewater  
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duals, said John Ele-  
student. What  
to recognize is that a  
amount of technical  
is required in order to  
treatment plants of to-



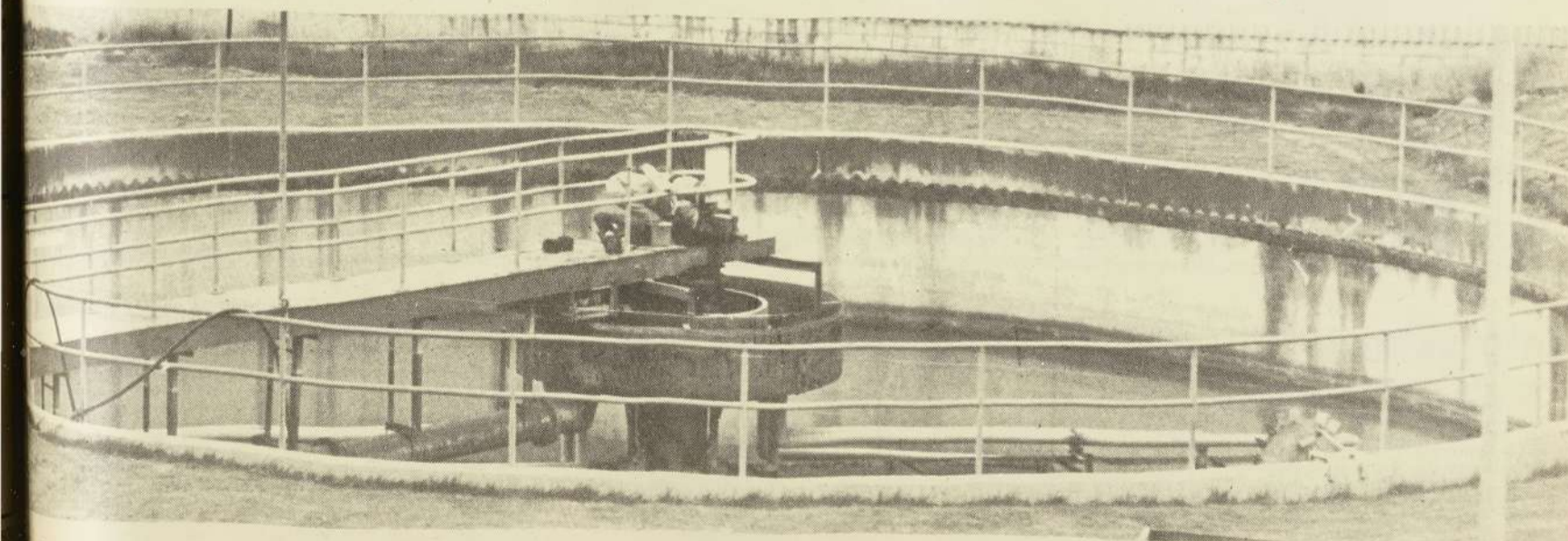
John Eledelen and Bob Blezinski (back to camera) explain processes involved within the clarification tank to Print reporter. Below, Bob Blezinski checks up on machinery

Photos by Ted McKenna



man, plant supervisor  
structor, explains plant  
practices.

eration tank mixes  
the effluent creating  
tification.



Community College

