

Also included in the project is a shop building addition of automatic chlorination, underground sprinkling system, and paving sludge beds and driveways.

Concludes Project

This project concludes building and remodeling which was first started in 1958 and '59. Then the entire plant received a new face and modern equipment. It cost \$300,000. Money was not available at that time for the laboratory.

The remainder of the present project are items, which through the past five years, have been found necessary.

The city plant is rated one of the best in the state for a city of Moscow's size, according to Stokes. It is a two-step treatment plant capable of handling wastes from 20,000 people.

The original plant was built in 1939, but it was greatly enlarged in 1955. Now two 34-inch pipes connect Moscow with the plant. The system is built to receive a maximum of 3½ million gallons of flow every 24 hours.

There are times, now, however, when an average of four million gallons is registered, Orrin Crooks city sewage commissioner, states.

The two-step operation is a system of settling tanks and rock bed filters. The first half of the process takes raw sewage from the city and channels it through a settling tank, 55 feet in diameter. Then the refuse is sent to a sludge thickener and finally to a large tank which looks like a miniature grain storehouse. This is the digester. All throughout this first segment of the process solids are forced out of the mixture.

From the digester, the solids are directed to one of four sludge beds. The liquid wastes take another route.

Liquid is then channeled through one of two rock bed filters. This starts the secondary part of the process. Here algae work the waste particles that are suspended in liquid or in solution.

Next the liquid goes into another settling tank and finally into the creek. At this last settling tank, the liquid is merky, but not poisonous or dangerous. Not too long ago, a visitor to the plant went skin diving in the secondary tank. He reported it was fine for diving except that the water was cloudy and he could not see under the water.

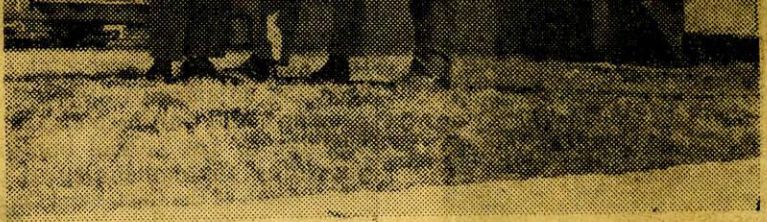
Both a spare primary and secondary settling tank are operational if needed in emergency.

When the water finally reaches the creek, it tests about 95 per cent pure, Stokes said. Part of the water that passes out of the plant is used to irrigate the lawns.

The proposed laboratory is needed, according to Stokes, to provide a way for checking each stage of the process. Failure in one area of the plant may not be detected until damage is done, Stokes explained.

The laboratory will make operation of the plant more economical, according to Stokes.

Federal aid will help meet part of the construction costs. A federal grant was obtained from a fund provided for helping state sewage improvement projects. In 1958, the government contributed \$105,000.



NEW LAB — Orrin Crooks (center), city sewage commissioner, shows Arthur Van't Hul, state sanitation engineer (left), plans of the proposed chemical laboratory. Looking on is sewage plant caretaker, Charles Laherty. The threesome is standing where the center of the laboratory will be. In the background is the present plant office.